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The perennial dissatisfaction of urban upbringing

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ABSTRACT

This study provides new evidence to the urban malaise (unhappiness) hypothesis. A new key finding is added: Urban upbringing is associated with lower happiness levels later in life. This outcome is above and beyond the effect associated with living currently in a city. Strikingly, the negative effect of urbanicity in one's youth is about as strong statistically, and practically (effect size), as the effect of urbanicity given one's current place of residence. In addition, our findings show that there may be a happiness benefit to growing up on a farm. The present study is inspired by Lederbogen et al. (2011) who showed that growing up in a city has a negative lasting effect in a person's life. We also find interactive effects: people who grew up in larger areas but live in smaller areas have lower levels of happiness than those who grew up in smaller areas and continue to live there. There is also an interactive effect with age: older people are happier if they grew up on a farm. These results aim to stimulate discussion by challenging the mainstream pro-urban view that people are happier in cities. This study is based on U.S. data, thus our results may not generalize to other countries or historical contexts.

The urban malaise thesis is longstanding. Early sociologists theorized, observed, and documented urban malaise (Park, 1915; Simmel, 2012; Tonnies & Loomis, 2017; Wirth, 1938). The classic paper, "Urbanism as a Way of Life" (Wirth, 1938) articulated this phenomenon in detail, arguing that urbanization in the United States accounted for the acuteness of its social problems. Wirth (1938) proposed the theory of urbanism as a point of departure for future sociological research. The interest in urbanism and well-being[2] was however, short-lived, and the topic was mostly abandoned by sociologists in the 1970s after a series of works by Fischer (1972, 1973, 1975, 1982).

While sociology has overlooked this line of research in recent years, other disciplines continue taking various perspectives on the topic and focusing mostly on urbanicity or the size of places. A consensus has emerged confirming the early sociological studies: people have lower levels of happiness in cities[3] (Balducci & Checchi, 2009; Berry & Okulicz-Kozaryn, 2009, 2011; Morris, 2019; Morrison, 2011; Morrison, 2015; Okulicz-Kozaryn, 2015; Okulicz-Kozaryn & Mazelis, 2018). There is also agreement that being exposed to nature, the opposite of urbanicity, is related to happiness (Berman et al., 2012; Berman, Jonides, & Kaplan, 2008; Frumkin, 2001; Maller, Townsend, Pryor, Brown, & St Leger, 2006; Pretty, 2012; Tesson, 2013; Wheeler, White, Stahl-Timmins, & Depledge, 2012; White, Alcock, Wheeler, & Depledge, 2013a, 2013b).

Urban malaise is common in the developed world.[4] The largest city in the United States, New York City, is the least happy or one of the least happy places in the U.S. (Okulicz-Kozaryn & Mazelis, 2018;

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[2] Most studies use the term 'happiness' interchangeably with the terms 'subjective well-being'(SWB), 'life satisfaction' and 'well-being.' For a detailed review of these definitions see Easterlin (2003). It is important to note that although these concepts are used interchangeably they are different measures of SWB. We discuss this in detail in the section, "The Concept of Happiness."

[3] Others argue that it is the characteristics of cities that produce unhappiness; things like size, density, noise, lack of cleanliness, and perception of danger. See for example Mouratidis (2019), Wirth (1938), Okulicz-Kozaryn and Mazelis (2018).

[4] Some social groups, however, are not unhappy in the largest cities–U.S. Millennials is one example (Okulicz-Kozaryn & Valente, 2019). Likewise, results from Latin America indicate that the size of one's place of residence does not impact their SWB (Graham & Felton, 2006; Valente & Berry, 2016). Easterlin et al. (2011) found that "the excess of urban over rural life satisfaction is typically large at low levels of development, but tends to disappear or even reverse at advanced levels. This leveling of life satisfaction differences by location is due largely to a convergence in urban and rural occupational structures, income levels and education" (p. 2195).

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Senior, 2006). Likewise, London is the largest and least happy place in the U.K. (Chatterji, 2013; ONS, 2012). Toronto, the largest metropolitan area in Canada is the second least happy (only Vancouver, the third largest metropolitan area, is less happy) (Lu, Schellenberg, Hou, & Helliwell, 2015). Bucharest is the largest and the least happy place in Romania (Lenzi & Perucca, 2016). Helsinki is the largest and the least happy place in Finland (Morrison, 2015). Similarly, Australia's largest city, Sydney, is the least happy (cited in Morrison, 2011), and so forth. Arguably,[5] this trend is not the result of self-selection—it is not that unhappy people mostly move to cities. Happier people are actually more willing to migrate in general (Bartram, 2013), and if anything, people with higher abilities (Jokela, 2014) move to cities (for education and jobs) and then out of cities to raise a family. Urban unhappiness is not only a result of urban problems, such as crime and poverty, but of cities themselves and their core characteristics (i.e., size, density, noise, etc.) (Morris, 2011; Mouratidis, 2019; Okulicz-Kozaryn & Mazelis, 2018; Wirth, 1938).

Perhaps, one of the best examples of urban malaise is Singapore. By many standards, Singapore, is one of the best places to live in the world: it has the third highest life expectancy (after Monaco and Japan) (Agency, 2017), the second highest degree of economic freedom (Foundation, 2019), and the third highest Gross Domestic Product (GDP) per capita[6] (after Qatar and Luxembourg) (Fund, 2017). In addition, high-school students in Singapore score the highest on global education rankings (math, reading, and science) (Coughlan, 2016), and in recent years, the country is making the greatest progress in achieving health-related goals set by the United Nations (UN) (Fullman et al., 2017). A distinctive feature of Singapore is that it is a nation-city: it is overwhelmingly urban and the third most dense country in the world (after Monaco and Macao) (https://esa.un.org/unpd/wpp). Based on Glaeser's (2011) thesis claiming that cities makes us "richer, smarter, greener, healthier and happier," Singapore should be a triumphant place; yet, despite all of its positive indicators, Singapore ranks only 34th in the World Happiness Report (Helliwell, 2019; Veenhoven, 2019).[7] Being mostly urban, Singapore is susceptible to many city problems (e.g., income inequality, conspicuous consumption, vice, and crime) that lead to unhappiness.[8]

We aim to further understand the extent and strength of the relationship between urbanism and happiness by exploring whether growing up in urban areas can have a lasting negative effect on a person's subjective well-being (SWB). We aim to provide a statement about relative happiness across places of different size in the U.S. in general since American cities are very distinct and unique from each other, including in the size at which unhappiness develops. We start by discussing the urban migration literature, and important gap in knowledge on how urbanicity affects SWB. In what follows, we review the concept of happiness, discuss our data, the U.S. General Social Survey (GSS), present our models and methods, provide results, and draw together our main conclusion.

1. Urban migrants

There is an extensive body of research highlighting the benefits of city life. Urban areas provide many goods and services that rural areas and even small cities can never efficiently supply (Glaeser, Kolko, & Saiz, 2001; Sander, 2011). An iconic city characteristic is agglomeration which increases returns for production in scale, yields more developed markets and larger local markets, lowers transportation costs, creates knowledge spillover, and facilitates infrastructure development (Alonso, 1971; Fujita & Thisse, 1996; Glaeser et al., 2001; Marshall, 1890; Masahisa & Thisse, 2002; Morris, 2019; Quigley, 2013). Cities often provide greater access to a variety of goods, services, and social networks (e.g., museums, banks, arts performance, shopping malls, and universities) (Abdel-Rahman, 1988; Glaeser et al., 2001; Morrison, 2011). As Easterlin, Angelescu, and Zweig (2011) state, "if material goods such as food, clothing, and shelter were all that mattered for happiness, then […] happiness would be greater in cities" (p. 2187). Yet, city life encompasses many circumstances that contribute to urban malaise—congestion, pollution and diseases, high rates of inequality, crime, crowding, feelings of anomie and alienation (Baum-Snow & Pavan, 2013; Dye, 2008; Easterlin et al., 2011; Glaeser & Sacerdote, 1999; Wirth, 1938).

Many urban migrants are drawn to urban areas by the belief that living in a city will provide an opportunity for social, financial and personal advancement, resulting in a higher SWB (Okulicz-Kozaryn & Valente, 2018a) (in reality, urbanites have lower levels of happiness and tend to be professionally unsuccessful (Okulicz-Kozaryn, 2015, Okulicz-Kozaryn & Valente, 2018a)). The literature on rural-urban migration as reviewed in Lall, Selod, and Shalizi (2006) is substantial—inexplicably, however, SWB is not analyzed. Most SWB-related research across urbanicity-migration studies examines rural-urban migration, and only one study (Alcock, White, Wheeler, Fleming, & Depledge, 2014) examined the longitudinal effects of urban-rural migration on mental health, finding that moving to greener areas is associated with sustained mental health improvements. There are other cross-sectional SWB studies on urbanicity and migration but they are not systematic. For instance, Tesson (2013) describes his personal story—he moved from an urban area into the wilderness, and became happy. Pretty (2012) discusses similar cases, e.g., people who have suffered from illnesses and have recovered faster after moving into greener areas. Although these studies provide great insight, they lack systematic quantitative evidence.

Some studies argue that moving to a city might inflate one's happiness almost immediately after the move, yet the average happiness scores of recent movers are in fact lower than those of rural dwellers (at least in China) (Knight & Gunatilaka, 2010). Other studies suggest that rural-urban migration positively affects SWB as long as the city is not large (Chen, Davis, Wu, & Dai, 2015). In the U.S., however, urban migrants are often labeled as "marginal men" and have lower levels of happiness (Bartram, 2015; Batatescu, 2007; De Jong, Chamratrithirong, & Tran, 2002; Hendriks, Ludwigs, & Veenhoven, 2016; Knight & Gunatilaka, 2010; Park, 1928)[9] because too much *Gesellschaft* (Tonnies & Loomis, 2017) can reduce happiness[10] (Park, 1928). Concurrently, a study by Glaeser, Gottlieb, and Ziv (2016) examining the persistent differences in self-reported subjective wellbeing across U.S. metropolitan areas found that newer residents appear to be as unhappy as longer-term residents in declining cities.

In general, locals tend to be happier than migrants as they spend

[5] It could be argued that poorer, unemployed or immigrant populations tend to concentrate in cities, therefore lowering the average happiness in the largest cities, however we control for socioeconomic status (e.g., income, unemployment) and whether respondents were born in the U.S. (refer to Appendix).

[6] Purchasing power parity adjusted.

[7] This finding derives from the World DataBase of Happiness by Veenhoven (2019) and the latest 2019 World Happiness Report by Helliwell (2019). Actual data are at http://www.worlddatabaseofhappiness.eur.nl/hap_nat/nat_fp.php?mode=8.

[8] We acknowledge that there are aspects of cities that are positive for well-being (e.g., amenities relating to education, culture), which might be the reason why millennials are happier in cities (Okulicz-Kozaryn & Valente, 2019). However, the literature indicates that in general cities are incomparable with human flourishing and well-being (Fischer, 1982; Lederbogen et al., 2011; Wirth, 1938).

[9] Per turnover/stability: in poor areas, turnover has a positive effect on happiness; in rich areas, it has the opposite effect (Ross et al., 2000). There are many studies focusing on the role of relative deprivation for migration (e.g., Stark & Taylor, 1990), but they are beyond the scope of this paper.

[10] A contemporary problem in the largest U.S. cities is that most people cannot afford to live comfortably there (Florida, 2016).

time on more happiness-generating activities than internal migrants (Hendriks et al., 2016). Migrants often contribute to increasing a city's heterogeneity, which can lead to negative consequences (Alesina, Baqir, & Easterly, 1999; Alesina & La Ferrara, 2000; Putnam, 2007), including lowered SWB (Herbst & Lucio, 2016; Okulicz-Kozaryn, 2010, 2011; Postmes & Branscombe, 2002; Vogt Yuan, 2007). In the past, many researchers claimed that heterogeneity is accompanied by lower levels of trust which can lead to anomie, and deviance, since relations tend to be anonymous, superficial, impersonal, transitory, unstable, and insecure (see Park, Burgess, and McKenzie (1967), Simmel (2012), Tonnies and Loomis (2017)). Conversely, recent research indicates that although city life is associated with impersonal social relations, this applies only to neighbor relations—cities have higher levels of social interaction, participation in religious groups and volunteering (Mazumdar, Learnihan, Cochrane, & Davey, 2018; Nguyen, 2010). Residents of compact cities tend to have larger social networks and to socialize more frequently, while they have more opportunities to meet new acquaintances (Mouratidis, 2018). Concurrently, studies on how one's upbringing might affect tolerance (Stephan & McMullin, 1982; Tuch, 1987; Wirth, 1938), claim that diversity and the heterogeneity of urban life translate into increased tolerance among urbanites (Tuch, 1987; Wirth, 1938). Growing up in a diverse environment leads to multiple secondary associations with others of divergent attitudes, values, and beliefs (Tuch, 1987), thus impacting one's level of tolerance.

We hypothesize that the size of the place one grew up in may affect one's happiness later in life, just as it affects one's tolerance. The logic is as follows: the size of a place is not only situational but also a socialization variable; people have lower levels of happiness in cities not only because they reside there, but because they learn certain ways of life in the city that are conducive to unhappiness. Socialization (social learning) is extensive in humans—a long juvenile period in childhood and teenager years prepares and shapes individuals for their adult roles in society (Wood & Eagly, 2010). As the old saying goes, “you can take the boy out of the country, but you can't take the country out of the boy” (cited in Stephan & McMullin, 1982, p. 414).

2. Gaps in the literature

Most studies take a statistical and contemporary view on how urbanicity affects SWB (Balducci & Checchi, 2009, Berry & Okulicz-Kozaryn, 2009, 2011, Okulicz-Kozaryn, 2015, Morris, Mondschein, & Blumenberg, 2018, Okulicz-Kozaryn, 2017, Okulicz-Kozaryn & Mazelis, 2018, Morrison, 2015, Tesson, 2013, Pretty, 2012, White et al., 2013a, 2013b). The literature on migration across places of different urbanicity either overlooks urbanicity of one's upbringing (focusing solely on migration) (e.g., Chen et al., 2015; Knight & Gunatilaka, 2010), or it overlooks SWB (e.g., Alcock et al., 2014; Lall et al., 2006). Hence, studies either analyze the current effects of urbanicity on a person's life, or they examine migration across degrees of urbanicity.

In contrast, our study aims to understand how an urban upbringing can affect a person's SWB later in life above and beyond any effect due to the urbanicity of the place where she currently resides. We are not aware of another study that has considered jointly the effect of urbanicity in one's upbringing and the present effect of urbanicity. This study is inspired by Lederbogen et al. (2011), who showed that growing up in a city has a lasting negative effect on a person's brain later in life. Our hypothesis is that:

Growing up in a large (*urban*) area *diminishes happiness later in life.*

3. The concept of happiness

This study examines overall happiness and not a domain-specific happiness, such as neighborhood or community satisfaction. For simplicity, the terms happiness, life satisfaction, and subjective well-being (SWB) are used interchangeably. Diener and Lucas define SWB as “both cognitive judgments of one's life satisfaction in addition to affective evaluations of mood and emotions” (Diener & Lucas, 1999, p. 213). This is similar to the definition by Ruut Veenhoven (2008, p. 2), another key happiness scholar: “overall judgment of life that draws on two sources of information: cognitive comparison with standards of the good life (contentment) and affective information from how one feels most of the time (hedonic level of affect).” Some scholars use ‘life satisfaction’ to refer to cognition and ‘happiness’ to refer to affect (e.g., Dorahy et al., 1998). This dichotomy is not pursued here, because there is only one survey item[11] in this study capturing mostly the concept of life satisfaction but also happiness to a lesser degree. Therefore the SWB definition by Diener and Lucas (1999) and Veenhoven (2008) seems to be the most appropriate.

Even though self-reported and subjective, the happiness measure is reliable (precision varies), valid, and correlated with similar objective measures of well-being (Bray & Gunnell, 2006; Di Tella & MacCulloch, 2006; Layard, 2011; Myers, 2000), while unhappiness strongly correlates with suicide incidence and mental health problems (Bray & Gunnell, 2006).

Happiness, as any measure, has some limitations. Much of happiness is hereditary or due to genes (Lykken & Tellegen, 1996). We are on the so called “hedonic treadmill”—we adapt or get used to both fortune and misfortune, even major events such as winning millions in a lottery or losing limbs in an accident (Brickman, Coates, & Janoff-Bulman, 1978). Happiness is affected by various comparisons (Michalos, 1985)—whatever happens to other people (and whatever happened to ourselves in the past) affect our current happiness. These issues, however, are not critical. Recently, Diener, Lucas, Helliwell, Helliwell, and Schimmack (2009) provided an authoritative discussion of why potential problems with happiness are not severe enough to make it unusable for interventions, planning, and public policy.

4. Data and model

We use the U.S. General Social Survey (GSS)[12] cumulative dataset containing about 60,000 observations from 1972 to 2016. The GSS is collected face-to-face and is nationally representative. Since 1994, the GSS is collected every other year (earlier, it was mostly annually). The advantage of using GSS is that it contains a question inquiring about a person's residence when growing up, the variable RES16: “Which of the categories on this card comes closest to the type of place you were living in when you were 16 years old?”:

1. non-farm (country-side)
2. farm
3. town $<50{,}000$
4. 50,000–250,000
5. big-city suburb
6. city $>250{,}000$[13]

One obvious caveat is that a person could have moved during her childhood. We make the assumption that the place where a person lived when she was 16, is the place where she grew up, which sometimes is

[11] This is an inherent limitation of our study, as the GSS only has one question on happiness. Still, these are the best data for our study–datasets with more precise measures of SWB have inadequate geographical and temporal coverage.

[12] The data is available here: gssdataexplorer.norc.org.

[13] More detailed definitions of place is needed—for instance, the definition of country-side v farm could be elaborated, as well as the distinction of modestly sized cities to megacities—but this is the only variable in the GSS measuring the size of the place where a respondent grew up in. While other datasets could arguably provide more detailed measurement, there is no other survey for the U.S. that goes back to the 70's, is nationally representative, and contains both SWB and size of the place where one grew up—hence, we use the best data available for the purpose of this study.

not the case. Still, the variable arguably has adequate precision: it captures urbanicity for at least a significant part, and usually for the majority of one's childhood— it is unlikely that a person lived in a place of very different size for most of her childhood than the place where she lived when she was 16. Other studies using this variable also make this assumption (Stephan & McMullin, 1982; Tuch, 1987).

Urbanicity is measured using a set of dummies for xnorcsiz,[14] a variable that provides a fine classification of density and size, and is widely used to measure the size of places. Additional results using alternative measures of urbanicity are in the online appendix.[15] The dependent variable happiness derives from the question, "Taken all together, how would you say things are these days—would you say that you are very happy, pretty happy, or not happy?", and possible responses are 1 = *not happy*, 2 = *happy*, and 3 = *very happy*. Using a one-item 3-step scale of SWB is a limitation of this study. As Diener, Inglehart, and Tay (2013) point out, using multi-item and multiple-step scales can strengthen the reliability of this construct. Nonetheless, the GSS item is adequate as evidenced by hundreds of publications by leading scholars using this dataset.[16] The GSS data is best suited for our study because existing datasets with more precise measures of SWB have inadequate geographical or temporal coverage. Moreover, even though single-item scales are less stable than multi-item scales, several studies have shown that a single item question asking about SWB is stable and yield reliabilities between 0.67 and 0.74 (Diener et al., 2013; Lucas & Donnellan, 2012; Michalos & Kahlke, 2010).

All variables are listed and defined in Table 1. We control for many well-documented happiness predictors at the individual level to isolate the effect of growing up in an urban area on SWB. Since these controls are not of direct interest to this study, we discuss them only briefly. What makes people happy? Myers (2000) suggests that age, race, gender, income, education and marriage are all sources of interpersonal variations in happiness. Young and old people are happy (e.g., Sanfey & Teksoz, 2007)—large cities may attract the young and repel the old. Men have lower happiness scores than women, the difference being small (Blanchflower & Oswald, 2004). Income boosts happiness and unemployment depresses it (e.g., Di Tella & MacCulloch, 2006; Di Tella, MacCulloch, & Oswald, 2001; Tella, MacCulloch, & Oswald, 2003). Being married boosts happiness (e.g., Diener & Seligman, 2004; Myers, 2000). Blacks are less happy than whites (e.g., Berry & Okulicz-Kozaryn, 2009, 2011; Blanchflower & Oswald, 2004), and they are traditionally concentrated in cities (Jargowsky, 1997). There are a few other important variables, such as health and social capital. They are missing for many respondents in GSS, and their discussion is postponed to the online appendix, where robustness checks are covered and the distributions of all variables are shown. Suffice to say, there is evidence that health levels are higher in cities (Dye, 2008; Stevenson et al., 2016). However, health could be a potential pathway between urbanicity and happiness and using it as a control would be inappropriate. Thus, we added it only as a robustness check (refer to the Appendix).

We also control for regional or cultural differences by including dummies for census regions: New England, Middle Atlantic, E. Nor. Central, W. Nor. Central, South Atlantic, E. Sou. Central, W. Sou. Central, Mountain, and Pacific. And since we use pooled GSS data, year dummies are included. Such a specification tests whether there are contextual effects unaccounted for due to regional and yearly differences.

[14] *Xnorcsiz* is one of three GSS variables that measures size of place, refer to the online appendix for the definitions. We use the original GSS name XNORCSIZ as it is widely used in the literature.

[15] This includes the *srcbelt* variable where the top category is for the 12 largest cities in the U.S., and the *size deciles* variable where the largest category is for cities with a population greater than 618 thousand. Refer to Table 4 in the Appendix.

[16] google.com/scholar?q=GSS+happiness.

We use ordinary least squares (OLS) to analyze the data. Although OLS assumes cardinality of the outcome variable, and happiness is clearly an ordinal variable, OLS is an appropriate estimation method to use in this case. Ferrer-i Carbonell and Frijters (2004) showed that results are substantially the same to those from discrete models, and OLS has become the default method in happiness research (Blanchflower & Oswald, 2011). Theoretically, while there is still debate about the cardinality of SWB, there are strong arguments to treat it as a cardinal variable (Ng, 1996, 1997; Ng et al., 2011). Nonetheless, as a robustness check we also ran ordered logit regressions, and included the results, which are substantially the same, in the online Appendix.

5. Baseline results

All results are presented in Table 2. The first column is a simple regression of SWB on the size of "place when 16 yo." The base case is "non-farm (country-side)." Only two extreme categories are significant: "farm" which is positive and "250k-"which is negative. The addition of income in column a2 makes all categories negative, except for "farm"—growing up in any place larger than "non-farm (country-side)," or "farm," is associated with a lower SWB. Also, all coefficients became larger.

The addition of other socio-demographic controls in a3 diminishes the effect sizes only slightly. So does controlling for region and including year dummies in a4. The last addition is xnorcsiz in a5: now, again, as in the beginning, only the extreme categories "farm" and "250k-" remain significant. The effect of one's current place, xnorcsiz, is as expected (Okulicz-Kozaryn, 2017): larger places have significantly lower levels of happiness. What is worth highlighting, and what is arguably unexpected, is that the statistical significance and effect size of the variable "place when 16 yo," is about as large as that of the current urbanicity variable, "xnorcsiz." We have also re-run specification a5 without the income variable, and the results were similar (refer to the online appendix).

It is instructive to focus on the interplay between the variables "place when 16 yo" and "xnorcsiz"— so we approach the model elaboration differently–we start with "xnorcsiz" and then analyze how it changes when adding the variable "place when 16 yo" in columns b1 and b2. The comparison of a1 and b1 reveals that the largest places, "gt 250k," have now an effect on SWB that is about twice as strong as the effect the largest place ("250k-") had previously. Controlling for "place when 16 yo" in b2 somewhat attenuates our estimates on xnorcsiz as compared to results in b1. Still, the full specification in a5, shows that the effect sizes are about the same. Robustness checks and supplementary results are presented in the online appendix.

While the effect sizes are not large, they are substantial—about as big as the effect of having children, and about half of the effect of race. This is not something to be disregarded, especially when taking into account current urbanization rates and the fact that each year cities grow by hundreds of millions of people. These results support our initial hypothesis that growing up in a large (urban) place is related to increased unhappiness later in life. Furthermore, this effect is above and beyond the unhappiness associated with currently living in an urban area.

6. Interactions of urbanicity now and when growing up

We further analyzed the relationship between current place of residence and place of residence growing up to explore an intriguing question: Is there an interplay between being exposed to urbanicity now and when growing up? For instance, are people who grew up in larger areas as unhappy living in them currently as people who grew up in more rural areas?

We repeated the full models from the previous section and added the interactions of urbanicity now and when growing up. Variables' interactions are easier to understand when plotted—thus, we present

Table 1
Variable definitions.

Name	Description
SWB	GENERAL HAPPINESS "Taken all together, how would you say things are these days–would you say that you are very happy, pretty happy, or not too happy?"
Place when 16 yo	"30. Which of the categories on this card comes closest to the type of place you were living in when you were 16 years old?"
xnorcsiz	EXPANDED N.O.R.C. SIZE CODE (see online appendix for details)
Family income in $1986, millions	Income variables (INCOME72, INCOME, INCOME77, INCOME82, INCOME86, INCOME91, INCOME98, INCOME06) are recoded in six-digit numbers and converted to 1986 dollars. The collapsed numbers above are for convenience of display only. Since this variable is based on categorical data, income is not continuous, but based on categorical mid-points and imputations. For details see GSS Methodological Report No. 64.
Female	RESPONDENT'S SEX
Unemployed	"Last week were you working full time, part time, going to school, keeping house, or what?" "Unemployed, laid off, looking for work"
Age	Age of respondent
Highest year of school completed	HIGHEST YEAR OF SCHOOL COMPLETED A. "What is the highest grade in elementary school or high school that (you/your father/your mother/your [husband/wife]) finished and got credit for?" CODE EXACT GRADE.; B. IF FINISHED 9th–12th GRADE OR DK*: "Did (you/he/she) ever get a high school diploma or a GED certificate?" [SEE D BELOW.]; C. "Did (you/he/she) complete one or more years of college for credit–not including schooling such as business college, technical or vocational school?" IF YES: "How many years did (you/he/she) complete?"
White	RACE "What race do you consider yourself?"
Married	MARITAL STATUS "Are you currently–married, widowed, divorced, separated, or have you never been married?" NOTE: variable recoded to 1 if married, 0 otherwise
Number of children	"How many children have you ever had? Please count all that were born alive at any time (including any you had from a previous marriage)."
ISCO 1 digit occupation	RESPONDENT'S OCCUPATION, 1988 CENSUS; NOTE: collapsed to 8 major sectors

Table 2
OLS regressions of SWB. Fully standardized (beta) coefficients.

	a1	a2	a3	a4	a5	b1	b2
Place when 16 yo (base: country, nonfarm):							
Farm	0.028***	0.032***	0.025***	0.018**	0.017**		0.027***
-50k	−0.001	−0.012+	−0.014*	−0.014*	−0.012+		0.004
50k–250k	−0.005	−0.018**	−0.013*	−0.012*	−0.008		0.006
City sub	0.006	−0.021***	−0.017**	−0.013*	−0.009		0.014*
250k-	−0.035***	−0.047***	−0.031***	−0.027***	−0.020**		−0.013*
xnorcsiz (base: country):							
lt 2.5k					0.008	0.007	0.007
2.5-10k					−0.002	−0.009+	−0.007
10-50k					0.000	−0.011*	−0.008
Uninc med					−0.001	0.004	0.006
Uninc lrg					−0.011*	−0.005	−0.001
Med sub					−0.011+	−0.014*	−0.010+
lrg sub					−0.018*	−0.025***	−0.017*
50-250k					−0.012+	−0.038***	−0.033***
gt 250k					−0.024***	−0.078***	−0.067***
Family income in $1986, millions		0.180***	0.097***	0.100***	0.102***		
Female			0.031***	0.031***	0.031***		
Unemployed			−0.060***	−0.058***	−0.058***		
Age			−0.346***	−0.335***	−0.333***		
Age squared			0.373***	0.367***	0.366***		
Highest year of school completed			0.066***	0.069***	0.070***		
White			0.047***	0.046***	0.043***		
Married			0.208***	0.206***	0.204***		
Number of children			−0.019***	−0.020***	−0.021***		
Year and region dummies	No	No	No	Yes	Yes	No	No
N	57,613	51,952	51,687	51,687	51,687	57,709	57,613
R sq.	0.002	0.034	0.084	0.088	0.088	0.005	0.006

*** $p < 0.001$.
** $p < 0.01$.
* $p < 0.05$.
+ $p < 0.1$; robust std. err.

the plots in Fig. 1, and add the regression tables in the supplementary material (refer to the section: "Urbanicity Earlier versus Urbanicity Now"). There is not a clear relationship when all categories of RES16 are interacted with current urbanicity, except, perhaps, that "farm," and "nonfarm" (and also midsize places, "50k–250k") are becoming less happy than the largest place "250k-" (but also smaller places of "-50k" and suburbs "city sub") along with current urbanicity. All results, including the graphs are in the supplementary material as well.

To focus on the main hypothesis of this study, that growing up in the largest places is associated with less happiness, we collapse the data to just two categories on RES16: "250k-" v "small." In Fig. 1, the first panel (1b) shows that if a person grew up in a big city, then she is not becoming as unhappy as people who grew up in smaller areas as the size of current place increases. The pattern is even stronger in panel 1e, which repeats the same specification, but adds a set of dummies for occupations. But the story is not that simple. The relationship is nonlinear as seen in panel 1c (and in 1f, which adds occupational dummies): People with the lowest relative happiness level are those who

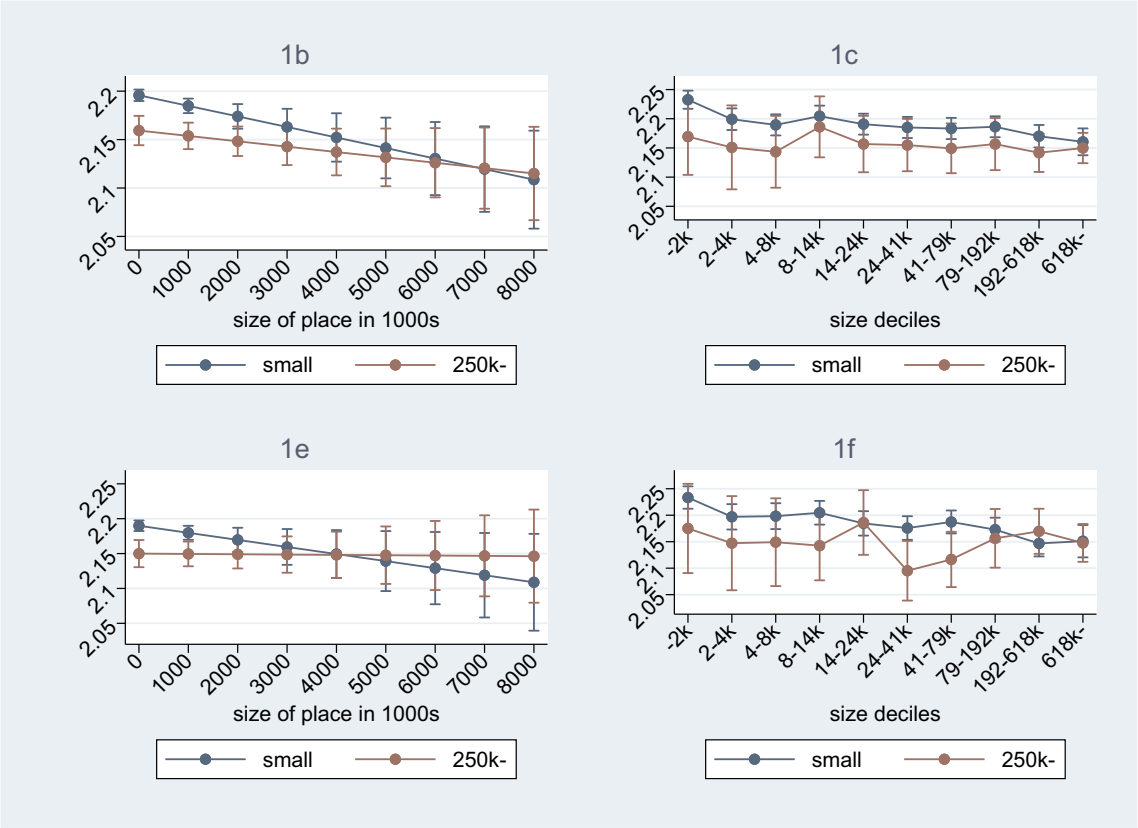

Fig. 1. Predicted SWB and 95% CI by "small" v "250k-" size of the place where one grew up against two specifications of current size of place: as a continuous variable (1b and 1e) and as size deciles (1c and 1f). The bottom row (1e and 1f) adds a set of dummies for occupations. The corresponding regression models, m1b, m1c, m1e, and m1f are in the supplementary material, (refer to section "Urbanicity earlier v urbanicity now.")

grew up in cities, and live in smaller areas; there is no difference in the largest places—people have similar levels of unhappiness regardless of where they grew up. Note that the occupational codes (both in 1e and 1f) matter and make the relationship stronger—when taking into account one's occupation, the interactive effect between urbanicity now and when growing up is stronger.

Figs. 2 and 3 use alternative operationalizations for "current urbanicity," and again, the smaller the current place of residence, the bigger the gap in SWB between those who grew up in smaller places and those who grew up in large cities. The second panel in each figure adds occupational dummies, and again, the results are stronger.

7. Age, year, and cohort effects

We have also tried interactions with age, year, and cohort. We did not find much divergent movement in SWB over time with respect to urbanicity of the place where one grew up as opposed to what was found earlier with respect to the size of one's current place of residence (Okulicz-Kozaryn & Valente, 2019).

In addition, we did not find a consistent differential in age or cohort effects by the size of the place where one grew up with respect to largest cities versus smallest areas. However, we did find a differential effect in growing up on a farm versus in the suburbs. Results for the cohorts are inconsistent when treating cohort as continuous versus discrete variable, and hence, postponed to the supplementary material. Results for age in Fig. 4 indicate that among younger respondents, there is not much difference; older people who grew up in a farm have higher happiness levels than those who grew up in big-city suburbs.[17] The second panel (6b) shows predicted values against age quintiles, and a clear U-shaped pattern emerges: people in their mid-life have the lowest happiness level, and the older the person, the bigger the gap between those who grew up on a farm, and those who grew up in the suburbs. Both models control for occupational dummies.

The existing literature examining SWB across cities in the U.S. and their suburbs suggests that those who live in suburbs might have higher SWB levels as a result of lower population densities, better amenities such as school or hospitals, higher property values, neighborhood safety, quietness, lack of pollution, and access to green spaces (Pfeiffer & Cloutier, 2016; Wang & Wang, 2016). These characteristics, which are typically associated with suburban living, could explain why people who grew up in urban areas have lower levels of happiness compared to those from suburban areas. Concurrently, Morris (2019) also found that suburbanites have higher levels of SWB than city dwellers. He attributes this difference to newer and higher-quality housing stock, greater possibilities of homeownership, less crowding, less noise, and better aesthetics (i.e., less blight, better landscaping). Building on this literature, future research should investigate the specific reasons through which suburban living seems to be contributing to higher SWB levels. It is important to underscore that the particular context of individual countries can play a significant role as well. Inner cities in the United States have been traditionally poorer than suburbs, and have been characterized by higher crime rates, low walkability, and car dependency (the majority of US urbanites still travel to work by car). The situation is very different in other contexts. For example, suburbanites are not found to be happier than urbanites in recent studies from

[17] Note that the suburb is not a proxy for a city, but this illustration allows us to see the most contrasting difference between a smaller place (farm) vs. a much bigger place (big-city suburbs).

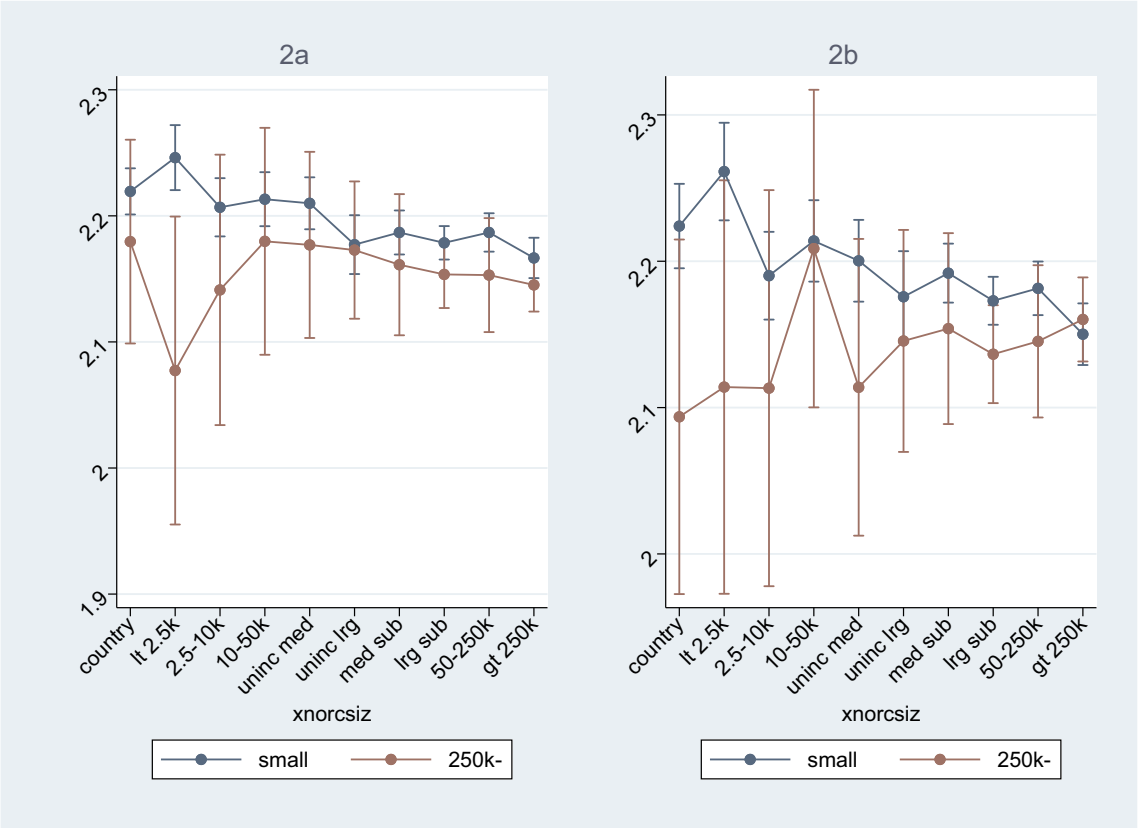

Fig. 2. Predicted SWB and 95% CI by "small" v "250k-" size of the place where one grew up against xnorcsiz. Panel 2b adds a set of dummies for occupations. The corresponding regression models, m2a, and m2b are in the supplementary material (section "Urbanicity earlier v urbanicity now.")

Norway and China (Feng, Tang, & Chuai, 2018; Mouratidis, 2019). Thus, future research would enrich the literature by exploring different places and settings.

8. Conclusion and discussion

Urbanization is arguably one of the most significant changes in human habitat, and it is happening at an unprecedented scale: each year cities balloon by tens of millions of people (refer to https://esa.un.org/unpd/wup). It is a phenomenon of such massive magnitude that China, the country that has been urbanizing the most in recent years, consumed 6500 million tons of cement between 2011 and 2014. In contrast, the United States consumed 4500 million tons of cement in the last one hundred years (Harvey, 2016). As urbanism becomes a way of life, it is important to understand how it affects people's happiness and how public policies should be enacted to maximize happiness in urban areas (Okulicz-Kozaryn, 2017; Stiglitz, Sen, & Fitoussi, 2017). The objective of this study is to understand the perennial effect of urban upbringing on a person's happiness. These results aim to stimulate discussion by challenging the mainstream pro-urban view that people are happier in cities (e.g., Glaeser (2011)) when empirical research provides evidence to the contrary: living in a city is associated with lower happiness levels, and, as our findings show, those who grew up in cities have lower happiness levels than those who did not, this is indicative of a possible long-lasting effect on one's happiness. Although our results are based on U.S. data, research examining European and Scandinavian countries have also found that urbanicity is a significant determinant of happiness—people living in smaller places and rural areas have higher happiness levels than city dwellers (Hayo, 2004; Hudson, 2006).

This study contributes to the literature by showing how being exposed to urbanicity during childhood can affect a person's SWB later in life. The results are striking: the effect of an urban upbringing on SWB is as strong as the effect of one's current urban residency. The analysis also indicates that people in the largest cities have in general lower happiness levels regardless of where they grew up. There is a flipside: not only does urban upbringing affects current SWB in addition to the urbanicity in one's current place of residence, but the urbanicity in one's current place of residence affects SWB in addition to having an urban upbringing. Thus, the current size of one's place of residence appears to affect their level of happiness—net of where one grew up and what one may understand as normal based on their childhood experiences. Yet, there is an interaction effect: if a person grew up in a big city, then her happiness level is higher living in a big city as compared to someone who grew up in a smaller area. In other words, people who grew up in larger areas but live in smaller areas have lower levels when compared to those who grew up in smaller areas and continue to live there. There is also an interactive effect with age: older people have higher levels of happiness if they grew up on a farm.

We speculate that to some degree (but not fully) people get used to cities if they grow up in them, and hence have higher levels of happiness compared to those who grew up in smaller areas and live now in cities. This may explain why Millennials are happier in cities (Okulicz-Kozaryn & Valente, 2019) as more recent cohorts are more likely to have grown up in cities. Changes in one's neural processing are a pathway between urban upbringing and adult well-being (Lederbogen et al., 2011). Another pathway may simply have to do with the negative consequences of urbanism: isolation, anomie, deviance, vice, crime, conspicuous consumption, pollution, noise, crowding, and poverty[18]

[18] For a classic review of urban problems refer to Wirth (1938), Park (1915), Park et al. (1967), Tonnies and Loomis (2017), Simmel (2012), and for a more modern view, see White and White (1977) and Okulicz-Kozaryn (2015).

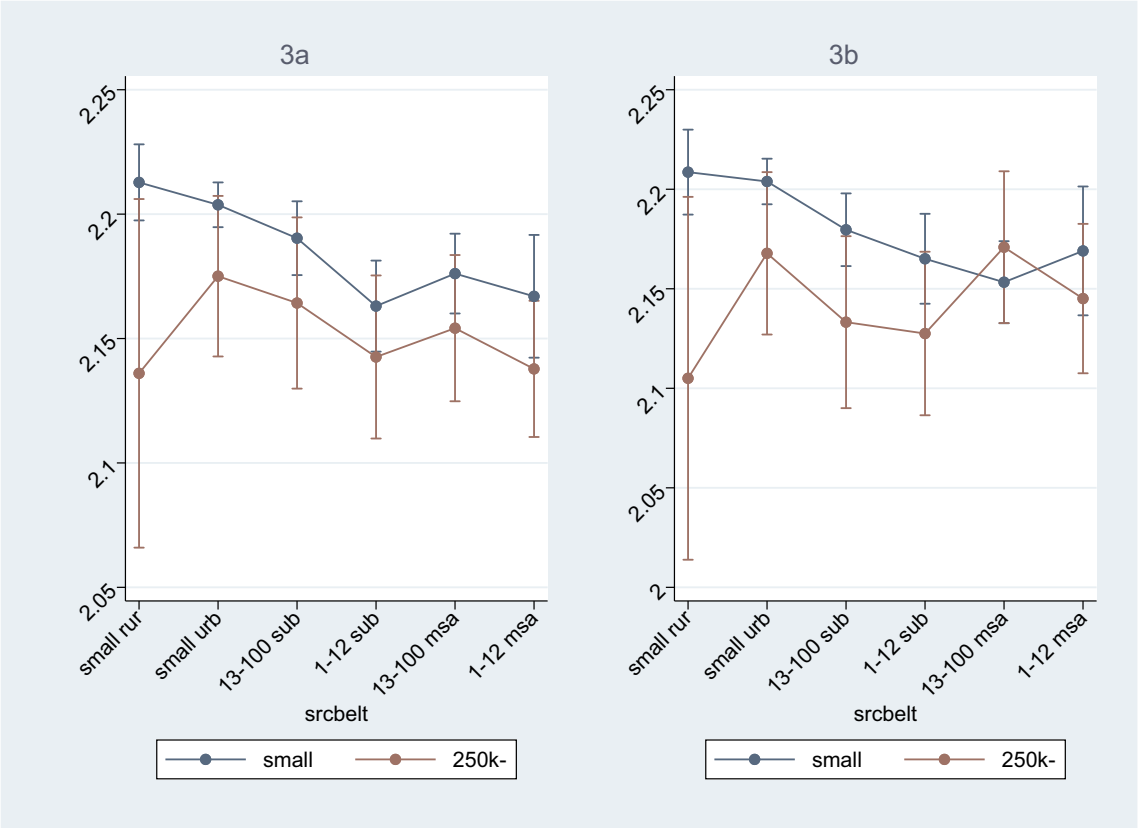

Fig. 3. Predicted SWB and 95% CI by "small" v "250k-" size of the place where one grew up against srcbelt. Both models control for occupations. The corresponding regression models, m3a, and m3b are in the supplementary material (section "Urbanicity earlier v urbanicity now.")

can take a toll on children who grow up in cities. However, it is probably largely unexpected that the urban upbringing disadvantage is felt later in adult life—it is a sobering finding especially amid current pro-urban fashion.

The size of a place can have an ecological and situational influence on SWB as shown by previous research. For example, Mouratidis (2019) showed that perceived safety, noise, and cleanliness can have a significant impact on SWB, and by addressing these problems SWB can be promoted in compact cities. Our findings are consistent with the hypothesis that the size of a place has some socialization influence on SWB, if such socialization results in lowered SWB. Our results also partially support the socialization hypothesis that urban upbringing makes people happier in today's urban world, by preparing them to better live in cities. But such adjustment is not full—urbanites still have low levels of happiness. Furthermore, growing up in the country-side does not decrease one's happiness in today's urban world. If anything, growing up on a farm may actually be associated with greater happiness later in life.[19]

Our analysis confirm this finding: people who grew up in farms have higher levels of happiness later in life. This is not necessarily unexpected—farm kids learn real life skills and are "tougher" than suburban kids.[20] At the same time, farm life does not corrupt or promote deviance as cities may (Park et al., 1967; Wirth, 1938). Yet, these days farming is often not a sustainable profitable business. As the New York Times cautiously warns readers, "Don't Let Your Children Grow Up to Be Farmers" (2014)—not only is urbanization rampant, but farming is struggling. Unfortunately, capitalism (and associated urbanization) often, if not usually, promote ways of life that do not lead to happiness (Herbert, 1955; Kasser, 2002; Klein, 2015; Lane, 2000; Scitovsky, 1976).[21]

It is worth mentioning that while urbanites have lower happiness levels than rural folks, they think that they are happier (Knight & Gunatilaka, 2010). Part of the explanation may be due to money illusion—the tendency to think in nominal rather than relative terms (Shafir, Diamond, & Tversky, 1997)–people are lured to cities because of higher earnings, but they do not realize the cost of living. In a similar way, many people want to live in California because of its lifestyle, climate, and other amenities, but do not appreciate living expenses. Accordingly, California is one of the least happy states in the U.S. (Oswald & Wu, 2010; Schkade & Kahneman, 1998).

Urbanicity and SWB research is important—it elicits discussion on how to pursue a happier life and allows people to make life-changing decisions such as where to live and where to raise a family, which we term "evidence-based pursuit of happiness." At the same time, it must be noted that for non-happiness reasons, advocating for living in smaller areas is at least in some ways problematic. There are great

[19] The positive effect of growing up on a farm is not robust after the inclusion of additional controls in the online appendix, however. Hence, caution in interpretation is needed.

[20] For instance, see a series of simple and short but arguably to the point articles: Talk (2014a, 2014b, 2014c).

[21] See also Kasser and Ryan (1993), Schmuck, Kasser, and Ryan (2000), Okulicz-Kozaryn and Valente (2018b), Harvey (2014, 2016), Vohs, Mead, and Goode (2006), Schor (2008), Engels (2005), LaMothe (2016). Also note that in the United States' past, when there was less commodification, commerce, market economy and capitalism, farming was a much more well-regarded business pursuit (De Crevecoeur, 1981; Fischer, 1991). Some researchers have claimed that capitalism is consistent with human nature, and that agrarian systems placed humans into a social cage of kinship and state power, that could only be freed by capitalist industrialization. The effect of capitalism on subjective well-being however, is overlooked. Refer to Maryanski and Turner (1992).

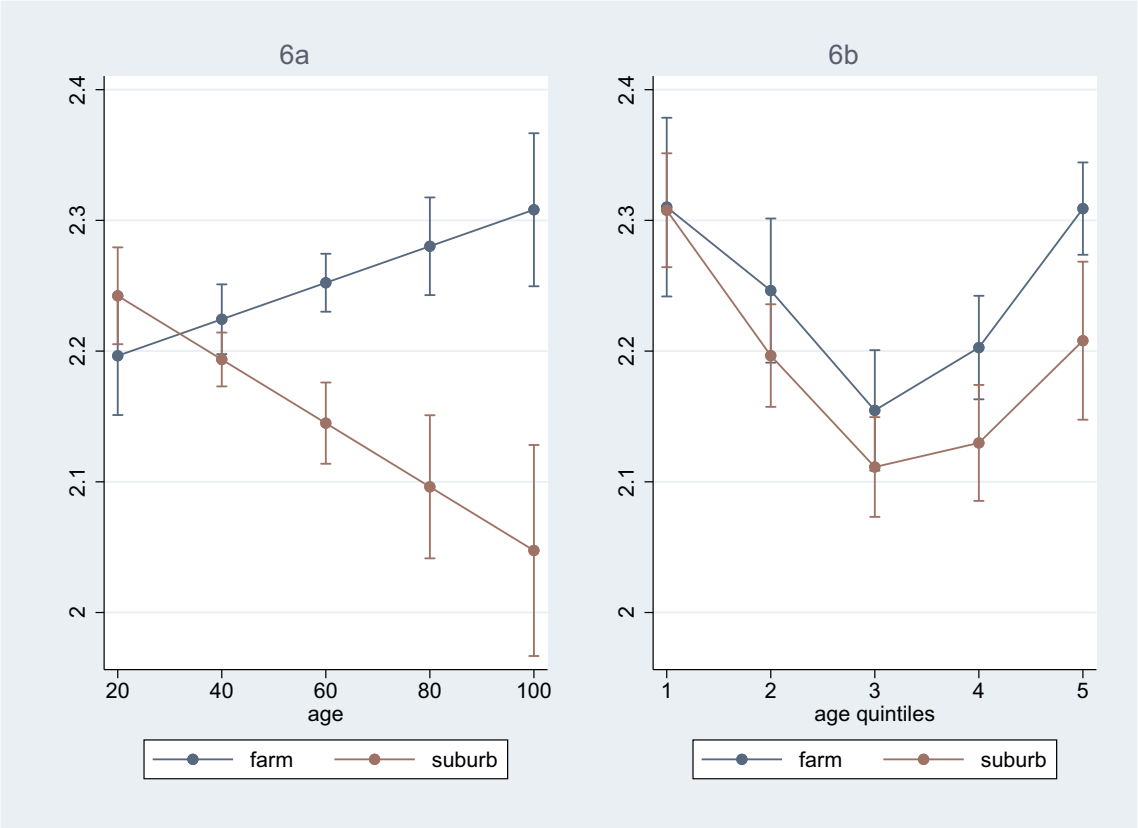

Fig. 4. Predicted SWB by "farm" v "suburb" size of the place where one grew up against age (6a) and age quintiles (6b). Panel 3b adds a set of dummies for occupations. The corresponding regression models, m6a, and m6b are in the supplementary material (section "Urbanicity when growing up against age and cohort.")

environmental (and economic) advantages to cities and mass-suburbanization or mass movement to even smaller areas is not sustainable (Meyer, 2013). Meyer (2013) makes a very convincing case in general, and there are many other studies pointing to massive problems of suburbanization specifically[22]–refer to Duany, Plater-Zyberk, and Speck (2001) for an excellent evaluation. There is more discussion of this critical problem of advocating smaller-place living for the sake of happiness in Okulicz-Kozaryn (2015) and Kallis, Kerschner, and Martinez-Alier (2012), but one point is especially important to be brought out in this context: the developed world, and especially the U.S., suffers from chronic consumerism and over-consumption, and not living in smaller areas is a key driver of our environmental problems. It is theoretically possible (e.g., tiny house movement), if practically difficult, to have a similar ecological footprint in smaller areas as in large cities. In terms of economic advantages of cities—technology seem to be removing that advantage—internet/working from home, self-driving cars, and other technologies can help us live in smaller areas in the future.

9. Caveats and future research

The goal of this paper is to document the lasting association between urban upbringing and one's SWB, above and beyond, the current urbanicity of one's place of residence. It is important to note that this study is largely descriptive—we report SWB patterns by current and past urbanicity—and leave it for future research to explore the reasons and causal paths.[23] Being an observational study, causality cannot be claimed. Testing and in-depth discussion of the underlying causal mechanism is beyond the scope of this study. Although this is a limitation, designing a true experimental study is not possible—one cannot randomly assign people to cities or other places. And even if we could, experimental designs suffer from low external validity, and are not an absolute improvement over observational studies (see for example Pawson, Tilley, and Tilley (1997)).

An inherent limitation of our study is that the place of residence at age 16 is used as a proxy for growing up—a person could have moved. For most people, however, it is reasonable to assume that the place where they were living when 16 years old, was similar to the place where they spent most of their childhood. In addition, the GSS does not provide important characteristic (e.g. socioeconomic status) of respondents when they were 16, and therefore omitted variable bias could be present. Future research can be improved by using more precise information as more data becomes available.

Likewise, our dataset is restricted to a single-item measurement of happiness. As more data becomes available in the future, researchers would benefit from using multi-item scales to cover more aspects of SWB and check the robustness of our findings.

Another caveat to our analysis is the fact that the GSS conflates places of considerable different sizes in its highest category (city >250k)—there's no distinction between megacities, such as New York and Los Angeles, and modestly sized cities. To mitigate this issue, we ran additional robustness tests using alternative measures of urbanicity

[22] More than 50% of Americans were living in suburban areas in 2010 (Morris, 2019; Nicolaides & Wiese, 2017) and recent trends indicate that suburbs continue to grow and outpace large cities in terms of population growth (Economist, 2018).

[23] Also refer to the online supplementary material for robustness checks and future research.

in the GSS that have finer size classifications and found results to be consistent (refer to Table 4 in the online appendix). Future research that disaggregates size categories further would be of great interest.

Future research should explore patterns of migrations and interactions between current place and earlier place of residency. Likewise, it would be interesting to study for whom and when the "the perennial dissatisfaction of urban upbringing" thesis holds. Moving has arguably different effects on different people. Schoenbaum (2017), for instance, makes several convincing points in this regard—women often move due to their husband's job, but they benefit less in terms of SWB. Conversely, Kettlewell et al. (2010) argue that there is no SWB effect for men, but a positive effect for women. Thus, future studies could analyze subgroups (e.g., by gender, race, nationality, profession) to see if results are concurrent with our findings. While we have started exploring the effect of occupation in the online supplementary material, a proper analysis is left for future research. People in low-paid jobs are better off in smaller places, even economically because low-paid jobs are not much better paid in big cities, but the cost of living is significantly greater (Irwin, 2017; Schoenbaum, 2017).

We have focused on the urbanicity of the size of a place: metro, city, town, and rural area. Future research could study the urbanicity of a specific region or a specific city or metropolitan area. The U.S. is extremely diverse across its regions and cities; one may even have the impression that the U.S. is a collection of different countries, just like the European Union—future studies should investigate the effect of growing up in specific urban regions and cities and how it may impact one's subjective well-being later in life.

CRediT authorship contribution statement

Adam Okulicz-Kozaryn: Conceptualization, Methodology, Software, Validation, Formal analysis, Investigation, Writing - original draft, Writing - review & editing. **Rubia R. Valente**: Conceptualization, Methodology, Investigation, Writing - original draft, Writing - review & editing.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.cities.2020.102751.

References

Abdel-Rahman, H. M. (1988). Product differentiation, monopolistic competition and city size. *Regional Science and Urban Economics, 18*(1), 69–86.

Agency, C. I. (2017). *Singapore - country comparison: Life expectancy at birth*.

Alcock, I., White, M. P., Wheeler, B. W., Fleming, L. E., & Depledge, M. H. (2014). Longitudinal effects on mental health of moving to greener and less green urban areas. *Environmental Science and Technology, 48*(2), 1247–1255.

Alesina, A., Baqir, R., & Easterly, W. (1999). Public goods and ethnic divisions. *The Quarterly Journal of Economics, 114*(4), 1243–1284.

Alesina, A., & La Ferrara, E. (2000). Participation in heterogeneous communities. *The Quarterly Journal of Economics, 115*(3), 847–904.

Alonso, W. (1971). The economics of urban size. *Papers in Regional Science, 26*(1), 66–83.

Balducci, A., & Checchi, D. (2009). Happiness and quality of city life: The case of Milan, the richest Italian city. *International Planning Studies, 14*(1), 25–64.

Bartram, D. (2013). Happiness and 'economic migration': A comparison of Eastern European migrants and stayers. *Migration Studies, 1*(2), 156–175.

Bartram, D. (2015). Inverting the logic of economic migration: Happiness among migrants moving from wealthier to poorer countries in Europe. *Journal of Happiness Studies, 16*(5), 1211–1230.

Batatescu, S. (2007). Central and Eastern Europeans migrants' subjective quality of life. A comparative study. *Journal of Identity and Migration Studies, 1*(2), 67–81.

Baum-Snow, N., & Pavan, R. (2013). Inequality and city size. *Review of Economics and Statistics, 95*(5), 1535–1548.

Berman, M. G., Jonides, J., & Kaplan, S. (2008). The cognitive benefits of interacting with nature. *Psychological Science, 19*(12), 1207–1212.

Berman, M. G., Kross, E., Krpan, K. M., Askren, M. K., Burson, A., Deldin, P. J., ... Jonides, J. (2012). Interacting with nature improves cognition and affect for individuals with depression. *Journal of Affective Disorders, 140*(3), 300–305.

Berry, B. J., & Okulicz-Kozaryn, A. (2009). Dissatisfaction with city life: A new look at some old questions. *Cities, 26*(3), 117–124.

Berry, B. J., & Okulicz-Kozaryn, A. (2011). An urban-rural happiness gradient. *Urban Geography, 32*(6), 871–883.

Blanchflower, D. G., & Oswald, A. J. (2004). Well-being over time in Britain and the USA. *Journal of Public Economics, 88*(7–8), 1359–1386.

Blanchflower, D. G., & Oswald, A. J. (2011). International happiness: A new view on the measure of performance. *Academy of Management Perspectives, 25*(1), 6–22.

Bray, I., & Gunnell, D. (2006). Suicide rates, life satisfaction and happiness as markers for population mental health. *Social Psychiatry and Psychiatric Epidemiology, 41*(5), 333–337.

Brickman, P., Coates, D., & Janoff-Bulman, R. (1978). Lottery winners and accident victims: Is happiness relative? *Journal of Personality and Social Psychology, 36*(8), 917.

Chatterji, A. (2013). *London is the unhappiest place to live in Britain*.

Chen, J., Davis, D. S., Wu, K., & Dai, H. (2015). Life satisfaction in urbanizing China: The effect of city size and pathways to urban residency. *Cities, 49*, 88–97.

Coughlan, S. (2016). *Pisa tests: Singapore top in global education ranking BBC.* Retrieved December 6, 2016https://www.bbc.com/news/education-38212070.

De Crevecoeur, J. H. S. J. (1981). *Letters from an American farmer; and, sketches of eighteenth-century America.* Penguin.

De Jong, G. F., Chamratrithirong, A., & Tran, Q.-G. (2002). For better, for worse: Life satisfaction consequences of migration. *International Migration Review, 36*(3), 838–863.

Di Tella, R., & MacCulloch, R. (2006). Some uses of happiness data in economics. *Journal of Economic Perspectives, 20*(1), 25–46.

Di Tella, R., MacCulloch, R. J., & Oswald, A. J. (2001). Preferences over inflation and unemployment: Evidence from surveys of happiness. *American Economic Review, 91*(1), 335–341.

Diener, E., Inglehart, R., & Tay, L. (2013). Theory and validity of life satisfaction scales. *Social Indicators Research, 112*(3), 497–527.

Diener, E., Lucas, R., Helliwell, J. F., Helliwell, J., & Schimmack, U. (2009). *Well-being for public policy. Series in positive psychology*.

Diener, E., & Lucas, R. E. (1999). 11 personality and subjective well-being. *Well-being: Foundations of hedonic psychology* (pp. 213). .

Diener, E., & Seligman, M. E. (2004). Beyond money: Toward an economy of well-being. *Psychological Science in the Public Interest, 5*(1), 1–31.

Dorahy, M. J., Lewis, C. A., Schumaker, J. F., Akuamoah-Boateng, R., Duze, M., & Sibiya, T. E. (1998). A cross-cultural analysis of religion and life satisfaction. *Mental Health, Religion & Culture, 1*(1), 37–43.

Duany, A., Plater-Zyberk, E., & Speck, J. (2001). *Suburban nation: The rise of sprawl and the decline of the American dream.* New York NY: North Point Press.

Dye, C. (2008). Health and urban living. *Science, 319*(5864), 766–769.

Easterlin, R. A. (2003). Explaining happiness. *Proceedings of the National Academy of Sciences, 100*(19), 11176–11183.

Easterlin, R. A., Angelescu, L., & Zweig, J. S. (2011). The impact of modern economic growth on urban–rural differences in subjective well-being. *World Development, 39*(12), 2187–2198.

Economist (2018). April 19*High prices in America's cities are reviving the suburbs*.

Engels, F. (2005). The condition of the working class in England. *The sociology and politics of health* (pp. 22–27). Routledge.

Feng, J., Tang, S., & Chuai, X. (2018). The impact of neighbourhood environments on quality of life of elderly people: Evidence from Nanjing, China. *Urban Studies, 55*(9), 2020–2039.

Ferrer-i Carbonell, A., & Frijters, P. (2004). How important is methodology for the estimates of the determinants of happiness? *The Economic Journal, 114*(497), 641–659.

Fischer, C. S. (1972). Urbanism as a way of life: A review and an agenda. *Sociological Methods and Research, 1*(2), 187–242.

Fischer, C. S. (1973). Urban malaise. *Social Forces, 52*(2), 221–235.

Fischer, C. S. (1975). Toward a subcultural theory of urbanism. *American Journal of Sociology, 80*(6), 1319–1341.

Fischer, C. S. (1982). *To dwell among friends: Personal networks in town and city*. University of Chicago Press.

Fischer, D. H. (1991). *Albion's seed: Four British folkways in America. Vol. 1*. Oxford University Press.

Florida, R. (April 28, 2016). Where millennials and the working class can no longer afford to live. *City Lab*. https://www.citylab.com/equity/2016/04/where-millennials-and-the-working-class-are-being-priced-out/480243/.

Foundation, T. H (2019). 2019 index of economic freedom. https://www.heritage.org/index/.

Frumkin, H. (2001). Beyond toxicity: Human health and the natural environment. *American Journal of Preventive Medicine, 20*(3), 234–240.

Fujita, M., & Thisse, J.-F. (1996). Economics of agglomeration. *Journal of the Japanese and international economies, 10*(4), 339–378.

Fullman, N., Barber, R. M., Abajobir, A. A., Abate, K. H., Abbafati, C., Abbas, K. M., ... Abera, S. F., et al. (2017). Measuring progress and projecting attainment on the basis of past trends of the health-related sustainable development goals in 188 countries: An analysis from the global burden of disease study 2016. *The Lancet, 390*(10100), 1423–1459.

Fund, I. M (2017). World economic outlook database. https://www.imf.org/en/publications/weo/.

Glaeser, E. (2011). *Triumph of the city: How our greatest invention makes us richer, smarter, greener, healthier, and happier.* New York: Penguin.

Glaeser, E. L., Gottlieb, J. D., & Ziv, O. (2016). Unhappy cities. *Journal of Labor Economics, 34*(S2), S129–S182.

Glaeser, E. L., Kolko, J., & Saiz, A. (2001). Consumer city. *Journal of Economic Geography, 1*(1), 27–50.

Glaeser, E. L., & Sacerdote, B. (1999). Why is there more crime in cities? *Journal of Political Economy, 107*(S6), S225–S258.

Graham, C., & Felton, A. (2006). Inequality and happiness: Insights from Latin America. *The Journal of Economic Inequality, 4*(1), 107–122.
Harvey, D. (2014). *Seventeen contradictions and the end of capitalism.* USA: Oxford University Press.
Harvey, D. (2016). *Senior Loeb scholar lecture.* Harvard University. Graduate School of Design. Retrieved www.youtube.com/watch.
Hayo, B. (2004). *Happiness in Eastern Europe. Marburg economic working paper*.
Helliwell, J.e.a. (2019). World happiness report 2019. Technical report. in https://s3.amazonaws.com/happiness-report/2019WHR19.pdf.
Hendriks, M., Ludwigs, K., & Veenhoven, R. (2016). Why are locals happier than internal migrants? The role of daily life. *Social Indicators Research, 125*(2), 481–508.
Herbert, M. (1955). *Eros and civilization: A philosophical inquiry into Freud.* Boston, MA: Beacon Press.
Herbst, C. M., & Lucio, J. (2016). Happy in the hood? The impact of residential segregation on self-reported happiness. *Journal of Regional Science, 56*(3), 494–521.
Hudson, J. (2006). Institutional trust and subjective well-being across the EU. *Kyklos, 59*(1), 43–62.
Irwin, N. (2017). To understand rising inequality, consider the janitors at two top companies, then and now. *New York Times,* 3.
Jargowsky, P. A. (1997). *Poverty and place: Ghettos, barrios, and the American city.* Russell Sage Foundation.
Jokela, M. (2014). Flow of cognitive capital across rural and urban United States. *Intelligence, 46*, 47–53.
Kallis, G., Kerschner, C., & Martinez-Alier, J. (2012). *The economics of degrowth.* Elsevier.
Kasser, T. (2002). *The high price of materialism.* MIT press.
Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology, 65*(2), 410.
Kettlewell, N., et al. (2010). The impact of rural to urban migration on wellbeing in Australia. *Australasian Journal of Regional Studies, The, 16*(3), 187.
Klein, N. (2015). *This changes everything: Capitalism vs. the climate.* Simon and Schuster.
Knight, J., & Gunatilaka, R. (2010). Great expectations? The subjective well-being of rural–urban migrants in China. *World Development, 38*(1), 113–124.
Lall, S. V., Selod, H., & Shalizi, Z. (2006). *Rural-urban migration in developing countries: A survey of theoretical predictions and empirical findings.* The World Bank.
LaMothe, R. (2016). Neoliberal capitalism and the corruption of society: A pastoral political analysis. *Pastoral Psychology, 65*(1), 5–21.
Lane, R. E. (2000). *The loss of happiness in market democracies.* Yale University Press.
Layard, R. (2011). *Happiness: Lessons from a new science.* Penguin UK.
Lederbogen, F., Kirsch, P., Haddad, L., Streit, F., Tost, H., Schuch, P., ... Deuschle, M., et al. (2011). City living and urban upbringing affect neural social stress processing in humans. *Nature, 474*(7352), 498.
Lenzi, C., & Perucca, G. (2016). The Easterlin paradox and the urban–rural divide in life satisfaction: Evidence from Romania. Unpublished. Retrieved from *http://www.grupposervizioambiente.it*.
Lu, C., Schellenberg, G., Hou, F., & Helliwell, J. F. (2015). *How's life in the city?: Life satisfaction across census metropolitan areas and economic regions in Canada*.
Lucas, R. E., & Donnellan, M. B. (2012). Estimating the reliability of single-item life satisfaction measures: Results from four national panel studies. *Social Indicators Research, 105*(3), 323–331.
Lykken, D., & Tellegen, A. (1996). Happiness is a stochastic phenomenon. *Psychological Science, 7*(3), 186–189.
Maller, C., Townsend, M., Pryor, A., Brown, P., & St Leger, L. (2006). Healthy nature healthy people: Contact with nature as an upstream health promotion intervention for populations. *Health Promotion International, 21*(1), 45–54.
Marshall, A. (1890). *Principles of economics. Vol. 1.* London: MacMillan and Co.
Maryanski, A., & Turner, J. H. (1992). *The social cage: Human nature and the evolution of society.* Stanford University Press.
Masahisa, F., & Thisse, F. (2002). *Economics of agglomeration, cities, industrial location, and regional growth.* Cambridge: Cambridge University Press.
Mazumdar, S., Learnihan, V., Cochrane, T., & Davey, R. (2018). The built environment and social capital: A systematic review. *Environment and Behavior, 50*(2), 119–158.
Meyer, W. B. (2013). *The environmental advantages of cities: Countering commonsense antiurbanism.* Cambridge MA: MIT Press.
Michalos, A. C. (1985). Multiple discrepancies theory (MDT). *Social Indicators Research, 16*(4), 347–413.
Michalos, A. C., & Kahlke, P. M. (2010). Stability and sensitivity in perceived quality of life measures: Some panel results. *Social Indicators Research, 98*(3), 403–434.
Morris, E. A. (2011). *Access and outcomes: Transportation, location, and subjective well-being. Vol. 73*.
Morris, E. A. (2019). Do cities or suburbs offer higher quality of life? Intrametropolitan location, activity patterns, access, and subjective well-being. *Cities, 89*, 228–242.
Morris, E. A., Mondschein, A., & Blumenberg, E. (2018). Is bigger better? Metropolitan area population, access, activity participation, and subjective well-being. *Journal of Transport and Land Use, 11*(1), 153–179.
Morrison, P. (2015). Capturing effects of cities on subjective wellbeing. *European regional science association conference* (Lisbon).
Morrison, P. S. (2011). Local expressions of subjective well-being: The New Zealand experience. *Regional Studies, 45*(8), 1039–1058.
Mouratidis, K. (2018). Built environment and social well-being: How does urban form affect social life and personal relationships? *Cities, 74*, 7–20.
Mouratidis, K. (2019). Compact city, urban sprawl, and subjective well-being. *Cities, 92*, 261–272.
Myers, D. G. (2000). The funds, friends, and faith of happy people. *American Psychologist, 55*(1), 56.
Ng, Y.-K. (1996). Happiness surveys: Some comparability issues and an exploratory survey based on just perceivable increments. *Social Indicators Research, 38*(1), 1–27.
Ng, Y.-K. (1997). A case for happiness, cardinalism, and interpersonal comparability. *The Economic Journal, 107*(445), 1848–1858.
Ng, Y.-K., et al. (2011). *Happiness is absolute, universal, ultimate, unidimensional, cardinally measurable and interpersonally comparable: A basis for the environmentally responsible happy nation index.* Technical reportMonash University, Department of Economics.
Nguyen, D. (2010). Evidence of the impacts of urban sprawl on social capital. *Environment and Planning B: Planning and Design, 37*(4), 610–627.
Nicolaides, B., & Wiese, A. (2017). Suburbanization in the United States after 1945. *Oxford research encyclopedia of American history*.
Okulicz-Kozaryn, A. (2010). Religiosity and life satisfaction across nations. *Mental Health, Religion & Culture, 13*(2), 155–169.
Okulicz-Kozaryn, A. (2011). Does religious diversity make us unhappy? *Mental Health, Religion & Culture, 14*(10), 1063–1076.
Okulicz-Kozaryn, A. (2015). *Happiness and place: Why life is better outside of the city.* Springer.
Okulicz-Kozaryn, A. (2017). Unhappy metropolis (when American city is too big). *Cities, 61*, 144–155.
Okulicz-Kozaryn, A., & Mazelis, J. M. (2018). Urbanism and happiness: A test of Wirth's theory of urban life. *Urban Studies, 55*(2), 349–364.
Okulicz-Kozaryn, A., & Valente, R. R. (2018a). *City life: Glorification, desire, and the unconscious size fetish.* 209–232.
Okulicz-Kozaryn, A., & Valente, R. R. (2018b). Life satisfaction of career women and housewives. *Applied Research in Quality of Life, 13*(3), 603–632.
Okulicz-Kozaryn, A., & Valente, R. R. (2019). No urban malaise for Millennials. *Regional Studies, 53*(2), 195–205.
ONS, U (2012). Analysis of experimental subjective well-being data from the Annual Population Survey. April to September 2011. *Statistical Release, 28*.
Oswald, A. J., & Wu, S. (2010). Objective confirmation of subjective measures of human well-being: Evidence from the USA. *Science, 327*(5965), 576–579.
Park, R. E. (1915). The city: Suggestions for the investigation of human behavior in the city environment. *American Journal of Sociology, 20*(5), 577–612.
Park, R. E. (1928). Human migration and the marginal man. *American Journal of Sociology, 33*(6), 881–893.
Park, R. E., Burgess, E. W., & McKenzie, R. D. (1967). *The city (1925).* Chicago: Chicago UP1.
Pawson, R., Tilley, N., & Tilley, N. (1997). *Realistic evaluation.* SAGE.
Pfeiffer, D., & Cloutier, S. (2016). Planning for happy neighborhoods. *Journal of the American Planning Association, 82*(3), 267–279.
Postmes, T., & Branscombe, N. R. (2002). Influence of long-term racial environmental composition on subjective well-being in African Americans. *Journal of Personality and Social Psychology, 83*(3), 735.
Pretty, J. (2012). *The earth only endures: On reconnecting with nature and our place in it.* Routledge.
Putnam, R. D. (2007). E pluribus unum: Diversity and community in the twenty-first century the 2006 Johan Skytte prize lecture. *Scandinavian Political Studies, 30*(2), 137–174.
Quigley, J. M. (2013). *Agglomeration, regional growth, and economic development.* Springer.
Ross, C. E., Reynolds, J. R., & Geis, K. J. (2000). The contingent meaning of neighborhood stability for residents' psychological well-being. *American Sociological Review,* 581–597.
Sander, W. (2011). Location and happiness in the United States. *Economics Letters, 112*(3), 277–279.
Sanfey, P., & Teksoz, U. (2007). Does transition make you happy? *The Economics of Transition, 15*(4), 707–731.
Schkade, D. A., & Kahneman, D. (1998). Does living in California make people happy? A focusing illusion in judgments of life satisfaction. *Psychological Science, 9*(5), 340–346.
Schmuck, P., Kasser, T., & Ryan, R. M. (2000). Intrinsic and extrinsic goals: Their structure and relationship to well-being in German and US college students. *Social Indicators Research, 50*(2), 225–241.
Schoenbaum, N. (2017). Stuck or rooted: The costs of mobility and the value of place. *Yale LJF, 127*, 458.
Schor, J. (2008). *The overworked American: The unexpected decline of leisure.* Basic books.
Scitovsky, T. (1976). *The joyless economy: An inquiry into human satisfaction and consumer dissatisfaction.* Oxford University Press.
Senior, J. (2006). *Some dark thoughts on happiness.* New York Magazine23.
Shafir, E., Diamond, P., & Tversky, A. (1997). Money illusion. *The Quarterly Journal of Economics, 112*(2), 341–374.
Simmel, G. (2012). *The metropolis and mental life.* Routledge37–45.
Stark, O., & Taylor, J. E. (1990). *Migration incentives, migration types: The role of relative deprivation.* (Technical report).
Stephan, G. E., & McMullin, D. R. (1982). Tolerance of sexual nonconformity: City size as a situational and early learning determinant. *American Sociological Review,* 411–415.
Stevenson, M., Thompson, J., de Sá, T. H., Ewing, R., Mohan, D., McClure, R., ... Sun, X., et al. (2016). Land use, transport, and population health: Estimating the health benefits of compact cities. *The Lancet, 388*(10062), 2925–2935.
Stiglitz, J. E., Sen, A., & Fitoussi, J.-P. (2017). Report by the commission on the measurement of economic performance and social progress. https://ec.europa.eu/eurostat/documents/118025/118123/Fitoussi+Commission+report.
Talk, F.. 8 things farm equipment can teach you about yourself. Fastline Front Page. (2014). https://www.fastline.com/frontpage/2014/10/20/8-things-farm-equipment-can-teach-you-about-yourself/ (October 20).
Talk, F.. 9 life lessons everyone can learn from a farmer. Fastline Front Page. (2014). https://www.fastline.com/frontpage/2014/12/16/9-life-lessons-everyone-can-learn-from-a-farmer// (December 16).

Talk, F.. Ten thing things you learn growing up a farm kid. Fastline Front Page. (2014). https://www.fastline.com/frontpage/2014/08/13/ten-thing-things-you-learn-growing-up-a-farm-kid// (August 13).
Tella, R. D., MacCulloch, R. J., & Oswald, A. J. (2003). The macroeconomics of happiness. *Review of Economics and Statistics, 85*(4), 809–827.
Tesson, S. (2013). *Consolations of the Forest: Alone in a cabin in the middle taiga.* Penguin UK.
Tonnies, F., & Loomis, C. P. (2017). *Community and society.* Routledge.
Tuch, S. A. (1987). Urbanism, region, and tolerance revisited: The case of racial prejudice. *American Sociological Review,* 504–510.
Valente, R. R., & Berry, B. J. (2016). Dissatisfaction with city life? Latin America revisited. *Cities, 50*, 62–67.
Veenhoven, R. (2008). Sociological theories of subjective well-being. *The Science of Subjective Well-Being, 9*, 44–61.
Veenhoven, R. (2019). Happiness in Singapore. *World database of happiness, Erasmus University Rotterdam, the Netherlands*. assessed on July 5, 2019 at https://worlddatabaseofhappiness.eur.nl/.
Vogt Yuan, A. S. (2007). Racial composition of neighborhood and emotional well-being. *Sociological Spectrum, 28*(1), 105–129.
Vohs, K. D., Mead, N. L., & Goode, M. R. (2006). The psychological consequences of money. *Science, 314*(5802), 1154–1156.
Wang, F., & Wang, D. (2016). Place, geographical context and subjective well-being:State of art and future directions. *Mobility, sociability and well-being of urban living* (pp. 189–230). Springer.
Wheeler, B. W., White, M., Stahl-Timmins, W., & Depledge, M. H. (2012). Does living by the coast improve health and wellbeing? *Health & Place, 18*(5), 1198–1201.
White, M. G., & White, L. (1977). *The intellectual vs. the city: From Thomas Jefferson to frank Lloyd Wright.* Oxford University Press.
White, M. P., Alcock, I., Wheeler, B. W., & Depledge, M. H. (2013a). Coastal proximity, health and well-being: Results from a longitudinal panel survey. *Health & Place, 23*, 97–103.
White, M. P., Alcock, I., Wheeler, B. W., & Depledge, M. H. (2013b). Would you be happier living in a greener urban area? A fixed-effects analysis of panel data. *Psychological Science, 24*(6), 920–928.
Wirth, L. (1938). Urbanism as a way of life. *American Journal of Sociology, 44*(1), 1–24.
Wood, W., & Eagly, A. (2010). Gender. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Vol. Eds.), *Handbook of social psychology*(5 ed.). *1*. *Handbook of social psychology* (pp. 629–667).