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## ARE WE HAPPIER AMONG OUR OWN RACE?

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**ABSTRACT.** We study the effect of residential segregation by race on wellbeing. Wellbeing is measured as self-reported happiness (subjective wellbeing). Segregation is measured at three levels of aggregation. We use the 2010 Behavioral Risk Factor Surveillance System containing information about over 125 metropolitan areas and over 125,000 people living there, and measure segregation using exposure/isolation index based on census data at the metropolitan level. The second dataset, 1978-2012 General Social Surveys surveyed respondents about race at the block level. Third dataset, the Quality of American Life surveyed respondents about race at the neighborhood level. There are conflicting theories about the effect of segregation on wellbeing, but we know surprisingly little about the actual net effect. Sociologists tend to assume, without testing, that segregation has a negative effect because it is associated with concentrated poverty, exclusion, lack of opportunity, and crime. The negative effect is argued for minorities, and especially blacks. Our results, however, are consistent across all racial groups. We find that whites, blacks, and Hispanics are happier among their own race than among other races.

**JEL Classification:** I30

**Keywords:** Segregation, race, subjective wellbeing (SWB).

### Introduction

Geographic segregation of people along racial (and economic) lines is one of the defining features of American cities (e.g., Massey & Denton, 1993, Jargowsky, 1997, Reardon et al., 2015). From 1970 to 2010, the number of segregated metropolitan areas has declined, but the degree of segregation changed little and still about a third of blacks live in highly segregated areas (Massey & Tannen, 2015). In sociology, segregation is commonly equated with disadvantage and assumed to reduce wellbeing (e.g., Massey & Denton, 1993). For instance, Massey et al. (1987) claim that segregation affects social and economic wellbeing—yet they do not measure social and economic wellbeing directly by asking people whether they are satisfied with their lives.

Stiglitz et al. (2009), Helliwell et al. (2012), and Easterlin (2013) have recently challenged social scientists and policymakers to use measures of happiness to better understand social processes and draft informed policies. We propose to use a happiness

yardstick to evaluate the effect of segregation on the overall human wellbeing. Are we happier among our own race?<sup>1</sup>

Segregation is associated with many negative outcomes as pointed out by sociologists, but what is typically missed in sociology, is that there are many positive outcomes as well. We turn to review of sociological and other literature.

### **The dark side of segregation: Sociological literature**

Sociological research commonly equates segregation with a disadvantage, and suggests that segregation is clearly a negative phenomenon. It results in lowered wellbeing, to put it mildly. Much of sociological research suggests (often implicitly) outright misery (e.g., Galster, 1988, Jargowsky, 1997, Massey et al., 1987, Massey & Denton, 1993).

Sociologists argue that segregation has pernicious roots: it is caused by whites discriminating against blacks and Hispanics. The problem is whites' unwillingness to accept minorities as neighbors (e.g., Galster, 1988, Krysan, 2002, Krysan & Farley, 2002). Whites are more likely to self-segregate in metropolitan areas with many blacks (South et al. 2011). There is a neighborhood change "spiral," the self-perpetuating moving. First, a few blacks move in, then the most intolerant whites move out, and in their place, some more blacks move in, which propels less intolerant whites out and so on till neighborhood turns black. Blacks prefer more or even fully integrated areas, say 50-50, which is a problem—it, is a too high proportion of blacks for whites to accept, and accordingly such areas barely exist. In 1990 and 2000, only about 10% of census tracts had a proportion of blacks at 25-75%. In any given area, finding a 50-50 neighborhood is hard. Blacks' second residential preference has a major practical significance, because their first preference, 50-50, is difficult to satisfy. The overwhelming majority, 80%, prefers neighborhoods with more blacks (Krysan & Farley, 2002). Krysan et al. (2009) not only showed again that whites prefer to live among whites, but also that 50-50 preference for blacks might have been overestimated earlier controlling for neighborhood class characteristics, blacks equally prefer all black and mixed neighborhoods. Even some sociologists acknowledge that people like to live among their own race.

Voluntary self-segregation of whites and forced segregation of minorities, or in other words discrimination by whites is one force behind segregation. To be fair, sociologists also recognize structural reasons including historical, occupational, and economic (e.g., Massey & Denton, 1993, Wilson, 2012b, Grigorieva & Ruef, 2015). Still, more or less, the overall negativity associated with segregation persists in all sociological writings: segregation is commonly considered a negative phenomenon.

Second, sociologists observe, segregation is associated with or even causes other negative outcomes. Residential segregation explains a third of racial friendship segregation at schools (Mouw & Entwisle, 2006), reduces social mobility, and impedes equality of opportunity for children (Jargowsky, 2014). Segregation is associated with many problems: e.g., lack of opportunity, isolation, and higher risk of injury from violent crime (e.g., Fabio et al., 2009). Segregation may concentrate poverty, limit life choices and opportunities. The higher the segregation, the more crime, and it is blacks and Hispanics that mostly live in disadvantaged areas and hence bear the cost of crime (Kriwo et al., 2009). Segregation raises issues of social justice and fairness—many people are forced to stay in deprived neighborhoods, for a recent discussion see Quillian (2012). Sociologists may disagree about details, but they tend to emphasize discrimination of whites against blacks, and treat the link between segregation and decreased wellbeing as an axiom.

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<sup>1</sup> This is our main hypothesis: are people living in their own race (segregated) areas happier than those living in diverse or other race areas?

The often-missed point is that the culprit is not the racial segregation itself, but inequality and neighborhood disadvantage are to blame. Segregation itself, on the contrary, results in mostly positive outcomes as documented in non-sociological literature reviewed below.

### **The bright side of segregation: Non-sociological literature**

There are reasons to expect greater happiness within segregated areas in general, not only for whites who often segregate voluntarily but also even for minorities that are often forced to segregate.<sup>2</sup> The key point is that it is not the segregation itself but poverty concentration and a high proportion of female-headed families that lead to low wellbeing. More generally, the problem is income inequality, or more specifically in geographic terms, economic segregation and associated neighborhood disadvantage. Economic segregation and racial segregation are often equated because they correlate in the US, but they do not have to correlate in principle. Neighborhood disadvantage can be defined as (1) disadvantaged neighborhood physical environment and housing, (2) concentration of poverty, (3) lack of access to economic and educational opportunity (White & Borrell, 2011). Segregation is not part of the definition.

Racial homogeneity is associated with lower rates of psychosis, suicide, common mental disorders, psychiatric admissions, self-rated poor health, and mortality. While some studies found no effect or even increased infant and adult mortality, hypertension, and chronic conditions, the literature points to mostly positive health outcomes. For recent reviews see Pickett & Wilkinson (2008), Stafford et al. (2010), Shaw et al. (2012).

What is the causal pathway from segregation to wellbeing? Segregated environments offer in group support and acceptance (Postmes & Branscombe, 2002). Social support both improves wellbeing and buffers from misery—it is a coping mechanism (House et al. 1988). Segregated environments promote self-esteem, social cohesion, mutual social support, a stronger sense of community, and belongingness—there is no status stigma among your own kin; racism and discrimination are lower, too (Stafford et al. 2010). Segregation may actually alleviate discrimination, cultural dissimilarity, and social isolation living among like-minded individuals boosts feelings of belongingness. In racially homogeneous areas, people are more civically engaged, more willing to trust, participate, share, support each other, and redistribute (Stack 1975, Alesina & Ferrara 2000, Luttmer 2001, Costa & Kahn 2003, Vogt Yuan 2007, Luttmer & Singhal 2008). All that facilitates community organization and helps to secure access to resources (Stafford et al. 2010). In short, neighborhoods are economic, social, and emotional resources and they work better if they are racially homogeneous.

We continue with non-sociological literature in the next section.

### **Love of the Same: Similarity breeds connection**

Ethnocentrism, homophily, or ingroup preference is about preferring one's own race, ethnicity, kin, or any group that one belongs to. There are codes in popular use that signify ethnocentrism (Smith et al. 2010): PLU (People Like Us), NOKD (Not Our Kind, Dear). Krysan (2002) associated following responses with (neutral and residential) ethnocentrism among respondents in racially diverse neighborhoods: "Nothing in common with the neighbors," "Feel more drawn to people of my own race," "Not many of my own people around."

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<sup>2</sup> Surely it depends on the economic level of the country and the smaller area where one lives.

There is a great deal of support for homophily. Homophily is a very strong social force, but typically underestimated or even denied outside of psychology. The remainder of this section documents supports for homophily.

We are born with homophily or ethnocentrism (Smith et al., 2010). Racial prejudice happens quite automatically in our brains (Fiske, 2010). Infants and toddlers notice racial differences before they can speak and already by age of three children prefer to play with children of their own race (Smith et al., 2010). Children need not be taught about race or ethnicity—they know these concepts themselves (Kinder & Kam, 2010). Already 3-month-old infants demonstrated a significant preference for faces from their own ethnic group, but newborn infants demonstrated no spontaneous preference for faces from either their own or other ethnic groups (Kelly et al., 2005), which suggests that at least some homophily may be learned. Still, even if we do not accept that ethnocentrism is an evolutionary “hard-wired” trait, it does not change the fact that it is nearly a universal phenomenon (Smelser & Alexander, 1999). For a discussion of ethnocentrism and human nature, see Fox (1994), Fu et al. (2012), Kinder & Kam (2010), Wilson (2012a).

A similar mechanism to homophily is described by psychological attraction theory (Byrne, 1971). We are attracted to people that are similar to us, and people of the same race are more alike in some respects. We simply like to be among people like us (McPherson et al., 2001). This can easily translate into neighborhood preference of our own race. Furthermore, people are most likely to be attracted toward those in closest contact with them (e.g., Newcomb, 1956). There is also more recent research in network science showing that people tend to cluster by their traits—for instance, obese people are around obese people, happy people are around happy people, and so forth (Christakis & Fowler, 2007, Fowler & Christakis, 2008). People chose to live among people like them and this choice is more apparent now than a few decades ago (Bishop & Cushing, 2009). To some degree, race is socially constructed as anything else is (Berger & Luckman, 1966), but it cannot be denied, of course, that race is a biological concept as well. In general, it is striking that some people still argue either nature or nurture, while of course, it is both (Pinker, 2003).

Homophily helps to explain segregation and resulting happiness—if people have a strong preference for something, then they tend to be happy with it. Hence, this study’s hypothesis: we are happier among our own race. There are of course other explanations for segregation as discussed earlier, notably discrimination and racism. But discrimination and racism should result in unhappiness, at least among those disadvantaged. Indeed, as discussed earlier, this is what sociological research suggests. Segregation and disadvantage are commonly equated, and segregation is associated with lowered wellbeing.

## **Happiness**

Social scientists have been increasingly interested in subjective wellbeing (SWB) or happiness. This literature has been reviewed by psychologists (Diener et al., 1993, Diener & Biswas-Diener, 2002, Myers & Diener, 1995, Proctor et al., 2009), economists (Dolan et al., 2008, Di Tella & MacCulloch, 2006, Frey & Stutzer, 2002), and by a maverick sociologist (Veenhoven, 1991, 1995). For a historical overview of the happiness, concept see McMahan (2006). This interest in happiness, however, has not been substantial in sociology with only a handful of mainstream publications (Fernandez & Kulik, 1981, Firebaugh & Schroeder, 2009, Inglehart & Baker, 2000, Lim & Putnam 2010, Ross et al., 2000, Schnittker, 2008, Yang, 2008). Arguably, as pointed out by Veenhoven (2008), the reason is professional or ideological bias. Sociologists are interested in social problems such as anomie, alienation, and suicide, not wellbeing or happiness. A similar preoccupation with negative exists in

psychology but was recently countered by positive psychology movement (Seligman et al., 2005, Diener & Seligman, 2004, Seligman, 2004). Sociologists could do the same.

The key advantage of happiness yardstick is that it overcomes the difficulty of measuring utility in social welfare. It is an overall measure in the sense that it captures (imperfectly, of course) everything that affects our lives. It takes into account each person's own weighting. A problem with using other measures of wellbeing is that there are too many components that should be captured by such measures, in fact, an uncountable number. Take, for instance, quality of life, livability, and human development indices, each consisting of multiple measures weighted in a more or less arbitrary manner. Such indices by definition are incomplete. It is impossible to measure everything that affects the quality of life, livability, human development, etc. This is the advantage of happiness yardstick that it takes into account known and unknown factors that uniquely define each person's own wellbeing or welfare. For discussion, see Diener (2009), Okulicz-Kozaryn (2011a).

The happiness measure, even though self-reported and subjective, is reliable, valid (Myers 2000), and closely correlates with similar objective measures such as brain waves (Layard 2005). Unhappiness strongly correlates with suicide incidence and mental health problems (Bray & Gunnell, 2006). Happiness not only correlates highly with other non-self-reported measures but also does not correlate with measures that are not theoretically related to it: happiness has discriminant validity (Sandvik et al., 1993). For an in-depth discussion of validity see Diener et al. (2013). Finally, to be clear, we study here general/overall happiness (life satisfaction), not a domain-specific happiness such as neighborhood or community satisfaction.

## **Study 1: 2010 behavioral risk factor surveillance system (BRFSS)**

### *Data and measures*

Person-level data come from the 2010 Behavioral Risk Factor Surveillance System (BRFSS) from the Centers for Disease Control and Prevention. The BRFSS is a nationwide system (covering all states) with the total sample size exceeding 100,000 people per year. The BRFSS collects data through annual state-based telephone surveys of non-institutionalized US civilians. The advantage of BRFSS is large sample (>100,000) representative of many metros (>100) that can be identified and merged with metro level data.

We use the SMART (Selected Metropolitan/Micropolitan Area Risk Trends) MMSA (Metro- and Micropolitan Statistical Areas) version of BRFSS that is representative of metropolitan areas, for simplicity, BRFSS. Unit of analysis is a person nested within the metropolitan area. A number of metropolitan areas and persons nested within them differs depending on the model and is reported in regression tables, but there are at least 125 metros and 125,000 people. Metropolitan areas in this sample provide good variability on key variables of interest—metros come from all regions and some are predominantly white, black, or Hispanic.

All metropolitan level data come from the American Community Survey (ACS 2007-2011 5-Year Estimates) with two exceptions. Crime rates come from the Federal Bureau of Investigation Uniform Crime Reporting. Segregation data come from US 2010: America in the First Decade of the New Century ([www.s4.brown.edu/us2010](http://www.s4.brown.edu/us2010)).

**Happiness.** The survey item reads "In general, how satisfied are you with your life?" and answers are 1="very dissatisfied," 2="dissatisfied," 3="satisfied," 4="very satisfied." For simplicity, answers were recoded so that higher numeric value means more happiness. Likewise, other variables were recoded so that the higher value means "more." This measure and those used in Studies 2 and 3 are typical measures used in happiness research, and

statements about validity and reliability from the earlier theoretical section devoted to happiness apply.

**Person level control variables.** We control for social support, which is key for wellbeing (e.g., Schnittker 2008), and it correlates with segregation as discussed earlier (e.g., Vogt Yuan 2007). The measure of social-emotional support is based on the following question: “How often do you get the social and emotional support you need?” and it ranges from 1=“never” to 5=“always”. Income is another key control variable—segregation develops not only by race but also by income. Education is another proxy for affluence that we will use. Furthermore, we control for a typical set of socio-demographic variables that have been shown in the literature to predict happiness. Most studies suggest U-shaped (lowest in midlife) (Ulloa et al. 2013) effect of age on happiness, and hence, we control for age and age squared. Married people are generally happier (Lee & Ono 2012, Carr et al. 2014). Income boosts happiness and unemployment depresses it beyond lack of income (e.g., Di Tella et al. 2001b, 2001a, Di Tella & MacCulloch 2006). Unemployment not only greatly decreases happiness during unemployment, but can also decrease it more permanently (Lucas et al. 2006). Blacks are less happy than whites in the US, even controlling for other predictors of happiness (e.g., Berry & Okulicz-Kozaryn 2009, 2011). There is some evidence that education affects happiness (e.g., Dittmann & Goebel 2010, Clark et al. 2014), but importantly education is likely to decrease prejudice (Vogt 1997) and increase mobility (Jokela 2014). Finally, health is a key predictor of happiness (Dolan et al. 2008).

**Exposure index.** We measure segregation with an exposure index, which measures the exposure of a person to people of various races (Jargowsky & Kim 2009, p. 22). Also, see Iceland & Weinberg (2002) for useful visualizations of segregation patterns measured by various indices. We will use exposure to one’s own race (also called isolation) for each race:

where W, H, and B are metro populations for whites, Hispanics and blacks, and, are census tract populations of whites, Hispanics and blacks. The index ranges between 0 and 100, the higher the value, the more isolated the area, or in other words, the more exposure of a person to her own race. The index may also be interpreted as the percentage of one’s own race experienced—and this is precisely what should matter for one’s wellbeing given homophily explanation given earlier. This index is affected by the size of the group—it is almost inevitably smaller for smaller groups, and it is likely to rise over time if the group becomes larger. There is another popular measure of segregation—a dissimilarity index, which we will not use. The dissimilarity index measures whether one particular group is distributed across census tracts in the metropolitan area in the same way as another group. One problem with the dissimilarity index is that it may be misleadingly high when the proportion of a given race is very small and unevenly distributed (Clark 1986). More importantly, dissimilarity index focuses on distributional pattern across a larger area, while exposure index measures concentration or density of some race, and it captures chance of immediate contact. Exposure index is better suited for testing the homophily hypothesis, or in general, the effect of race on happiness. It is about exposure or contact, not about patterns across the metropolitan area.

**Metropolitan-level controls.** Ethnically dense areas tend to be less wealthy, and often poor (e.g., Stafford et al. 2010), and hence we control for both median income and percent in poverty. Segregation is unfair because people are involuntarily forced to stay in places that do not offer equal opportunity. Income and poverty controls are also crude measures of opportunity. People are less happy in large cities (Okulicz-Kozaryn 2015)—we control for population density. We control for education because it almost always leads to more tolerance (Kinder & Kam 2010), and tolerance arguably affects the link between ethnocentrism and happiness. Finally, we also control for age—again, older people are happier than mid-aged people, but they also may be more prejudiced than younger people. A key control variable is a crime—it is consistently shown in the literature as the key problem in segregated areas for

minorities (e.g., Fabio et al. 2009, Krivo et al. 2009). We control for both property and violent crime rates.

## Results

Brant test of parallel regression assumption indicated a violation of this assumption in ordinal logistic regression at .001 level of significance. We use a model with fewest assumptions about the level of measurement, a multinomial logistic regression. All models use sampling weights to adjust for sampling design in the BRFSS. Standard errors are adjusted for clustering within metropolitan areas.<sup>3</sup> Results are set in table 1. There are six models—two for each race. The first column for each race shows a base model with only person level controls included. The second column for each race adds metropolitan level controls. Given the homophily hypothesis, a person should be happier among her own race. Results are similar across specifications—whites, blacks, and Hispanics are happier among their own race.

Table 1. Odds ratios for multinomial survey weighted logistic regression of happiness

	a1W	a2W	a3B	a4B	a5H	a6H
Dissatisfied v very dissatisfied						
White * xww	1.01+	1.01				
Black * xbb			1.01	1.01		
Hispanic * xhh					1.01	1.02*
White	0.30**	0.34*				
Black			0.70	0.85		
Hispanic					1.17	0.73
xww	1.00	1.00				
xbb			1.00	1.00		
xhh					0.99	1.00
Satisfied v very dissatisfied						
White * xww	1.03***	1.03***				
Black * xbb			1.02***	1.02**		
Hispanic * xhh					1.02*	1.03**
White	0.05***	0.05***				
Black			0.46*	0.50*		
Hispanic					1.65	1.15
xww	0.99*	0.98*				
xbb			1.00	1.00		
xhh					0.99	0.99*
Very satisfied v very dissatisfied						
White * xww	1.03***	1.03***				
Black * xbb			1.02***	1.02***		
Hispanic * xhh					1.02*	1.03**
White	0.05***	0.05***				
Black			0.58+	0.60+		
Hispanic					2.00	1.61
xww	0.99**	0.98**				
xbb			1.00	0.99+		
xhh					0.99+	0.99*
Person level controls: married, household income, unemployed, education level, age, age squared, general health, soc/emo support	yes	yes	yes	yes	yes	yes
Metro level controls: violent and property	no	yes	no	yes	no	yes

<sup>3</sup> If the dataset is large, and there are cross-level interactions, clustered standard error estimation may be actually preferred over multilevel modeling (Primo et al. 2007). Stata command is `mlogit <happiness> <exposure to one's own race>##i.<race> <control variables> [pw=sampling weight], robust cluster(<metro variable>) baseoutcome(1) rrr`

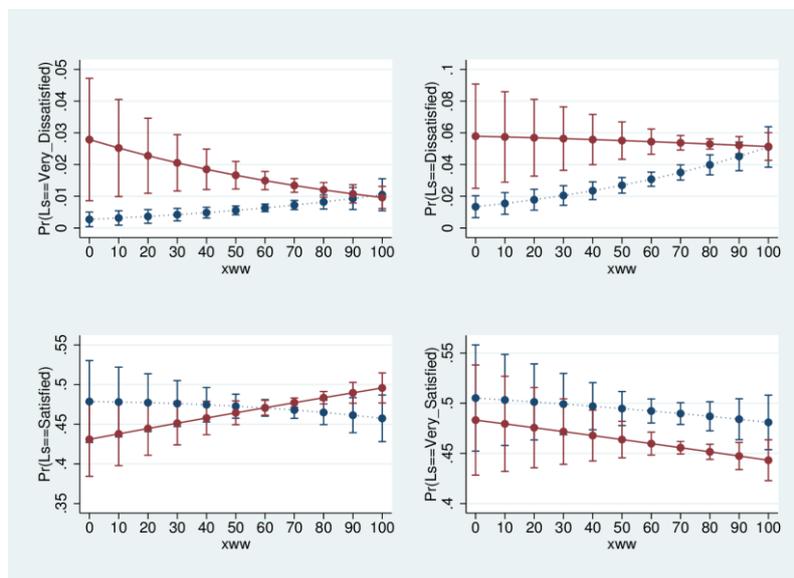
crime rates, median household income, % in poverty %>65, %> bachelors degree, population/sq. mile

N metro level	144	125	144	125	144	125
N	152,792	126,706	152,792	126,706	152,792	126,706
AIC	888	857	891	860	888	858

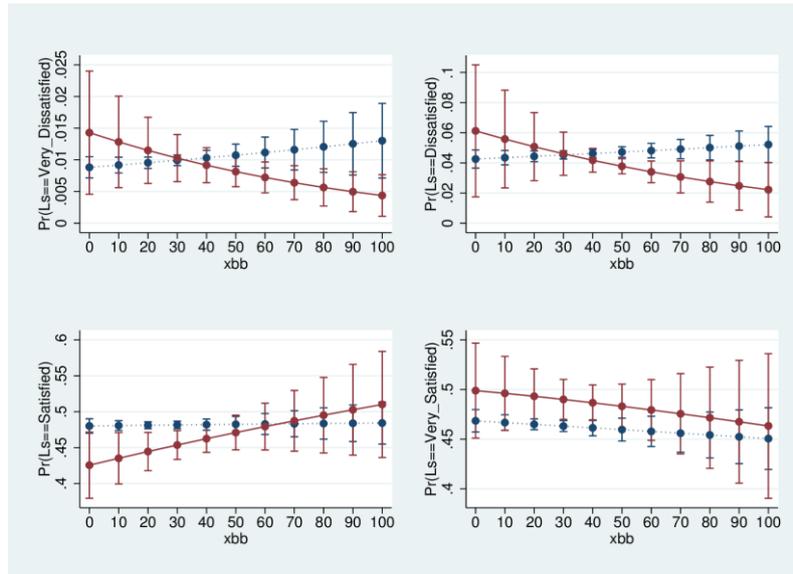
+p<0.10 \*p<0.05 \*\*p<0.01 \*\*\*p<0.001

*Note:* Numbers in the table are odds ratios from multinomial logistic regression, each panel is a contrast relative to the base case (very dissatisfied). Xww is exposure of whites to whites, or isolation of whites from other races; xbb is a corresponding exposure index for blacks, and xhh is an index for Hispanics. Results without any control variables (not shown) are similar except for Hispanics, where results remain positive but insignificant.

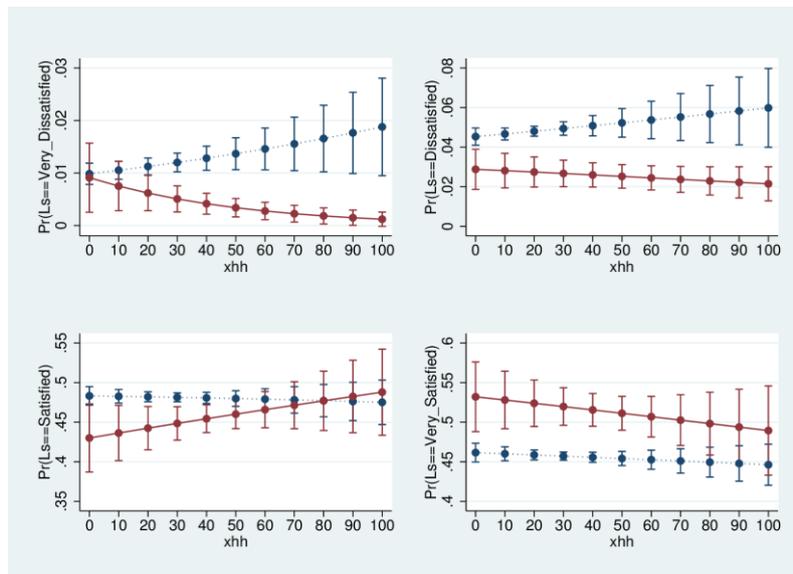
The coefficients of interest are interactions of one’s race and exposure to that race in the metropolitan area. We find that odds ratios on all interactions, White \* xww, Black \* xbb, and Hispanic \* xhh, are greater than 1, indicating positive effect, especially for contrasts “satisfied v very dissatisfied” and “very satisfied v very dissatisfied” (panels 2 and 3 in Table 1). These interactions are visualized in graphs for ease of interpretation. In each graph, probabilities are plotted separately for each happiness category. Standard errors are adjusted for clustering on metro variable and 95% CI are shown. Probabilities are calculated from full models that control for all covariates, including a full set of controls at both person and metro levels as shown in table 1 in columns a2W, a4B, and a6H. Each graph shows probabilities for whites, blacks, and Hispanics separately. These probability graphs also aid with substantive interpretation of effect sizes.



**Figure 1. Predicted Probabilities for 4 Happiness Categories With 95% CI Against Exposure Index to Whites: Solid Line is for Whites and Dotted Line for Everyone Else**



**Figure 2. Predicted Probabilities for 4 Happiness Categories with 95% CI Against Exposure Index to Blacks: Solid Line is for Blacks and Dotted Line for Everyone Else**



**Figure 3. Predicted Probabilities for 4 Happiness Categories with 95% CI Against Exposure Index to Hispanics: Solid Line is for Hispanics and Dotted Line for Everyone Else**

For all races, probability of being very dissatisfied or dissatisfied declines along with exposure to one’s race and the probability of being satisfied increases. Interestingly, the probability of being very satisfied declines as if a person cannot be very satisfied at high levels of exposure to her own race. In other words, the three bottom probabilities (very dissatisfied, dissatisfied and satisfied) indicate greater happiness when one is exposed to her own race, except the highest category (very satisfied), which indicates the opposite.

Note that the effect sizes are non-trivial. Probabilities change quite substantially in magnitude along with racial exposure. For instance, the probability of being satisfied with life increases from .43 to .5 for blacks and whites. Probabilities of being very dissatisfied decrease quite dramatically for all races from few percent to virtually zero. Furthermore, even finding

no effect would be actually worth reporting. Again, in sociology, the untested assumption, or even an axiom, is that segregation has a negative effect on wellbeing.

As with any study, there are limitations. Possibly the most serious one is a somewhat weak conceptual link between metro level segregation and person level happiness. Exposure index used in this study provides only average exposure for the metropolitan area. People can be more affected by their immediate neighborhoods than by a metropolitan area in which they live. On the other hand, using metro level data has advantages. Many metro level variables such as median household income, percent in poverty, unemployment rate, and overall segregation are likely to influence a person regardless of her neighborhood composition and characteristics. Furthermore, people interact with each other in a labor market. Metropolitan area is a better proxy for a labor market than smaller areas (Berry et al. 1969).

Yet, using only highly aggregated data at metropolitan level is a limitation, and the effect of racial composition on happiness at metro level is an incomplete explanation because it does not say much about the effect of racial composition on wellbeing at the neighborhood level. The effect of segregation on happiness at neighborhood level may differ or be even opposite. Such opposing effects on happiness are not uncommon. For instance, Americans are happier when they reside in richer neighborhoods, but in poorer counties (Firebaugh & Schroeder 2009). We turn to General Social Survey, which includes questions about racial composition at the neighborhood level.

## Study 2: 1978-2012 General Social Surveys (GSS)

### *Data and measures*

We use the General Social Survey (GSS) dataset pooled from 1978 to 2012. GSS is a cross-sectional nationally representative biennial survey (covering all states). This study only uses person-level variables from GSS, including ecological segregation measures, which are survey questions about the racial makeup of a neighborhood. Pre-1978 years were dropped because the questions about race in the neighborhood changed. A number of persons used for the analysis differs depending on the model and is reported in regression tables.

The advantage of GSS is that it allows controlling for more person level variables than in Study 1. The additional control variables help to alleviate a potential problem of spurious correlation between segregation and happiness.

**Happiness.** Happiness is measured with answers to "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? " 1="not too happy," 2="pretty happy," 3="very happy."

**Opposite race in the neighborhood.** "Are there any ['blacks' or 'whites' for 'whites' or 'blacks' ] living in this neighborhood now? " (GSS name: "raclive") 1="yes" (58%); 0="no" (42%).

**Distance to opposite race.** "How many blocks (or miles) away do they (['black' or 'white' for 'white' or 'black' respondents] families who live closest to you) live? " (GSS name: "racdis") 1="same block" (47%), 2="1-3 blks away" (31%), 3="4-8 blks away" (12%), 4="over 8 blks" (9%).

**Controls.** In a similar fashion to study 1, we control for a number of person-level predictors of happiness. We control for the race of a respondent, marital status (married or otherwise), family income (in constant dollars), age and age squared, whether a person is unemployed, education (highest year of school completed), and health status. We also add additional controls.

We include a dummy for large cities (city>250k)—people are less happy in large cities (Fischer, 1973, Okulicz-Kozaryn, 2015), and large cities are often most segregated (e.g.,

Glaeser & Vigdor, 2000). We control for fear of crime—whites often fear crime committed by minorities (e.g., Krysan & Farley, 2002), and such fear may drive unhappiness stemming from lack of segregation: “Is there any area right around here—that is, within a mile—where you would be afraid to walk alone at night? ” 1=“yes,” 0=“no.” One of the reasons for segregation is history, and American South has distinctive race relations—we include a dummy for South coded as 1 for following census regions: South Atlantic, East South Central, and West South Central. Working hours predict happiness (e.g., Okulicz-Kozaryn, 2011b) and arguably affect exposure to race at one’s residence—the longer working hours, the less exposure. Type of occupation may affect happiness (Christiansen et al. 1999), and more importantly, may affect residential location and segregation. We use the following dummy variables: professional, administrative and managerial, clerical, sales, service, agriculture, production and transport, craft and technical. Political beliefs predict happiness (Napier & Jost, 2008, Okulicz-Kozaryn et al., 2014), and Americans segregate by political beliefs (Bishop & Cushing 2009). We include two dummy variables: Republican and Democrat. Finally, we control for attitudes about others, especially blacks—negative attitudes should increase segregation (e.g., Krysan, 2002, Krysan & Farley, 2002) and decrease happiness (Mohanty, 2009). We control for general trust (trust by race has most values missing): “Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people? ” coded as 0=“cannot trust or depends” and 1=“can trust;” how close feel to blacks “In general, how close do you feel to Blacks? ” on scale from 1=“not at all close” to 9=“very close;” and neighborhood half black “Now I’m going to ask you about different types of contact with various groups of people. In each situation would you please tell me whether you would be very much in favor of it happening, somewhat in favor, neither in favor nor opposed to it happening, somewhat opposed, or very much opposed to it happening? ” “ Living in a neighborhood where half of your neighbors were blacks? ” on scale 1=“strongly oppose” to 5=“strongly favor.”

## Results

We use OLS (Ordinary Least Squares) as opposed to maximum likelihood estimation used earlier with much larger BRFSS data. OLS is easier to interpret and when happiness is a dependent variable, there is little difference between discrete models and OLS (Ferrer-i Carbonell & Ramos, 2014).

Results are set in table 2. All regressions include year dummies to account for pooling of data across waves, and South dummy to account for its distinctiveness. All significance levels are based on robust standard errors to account for heteroskedasticity.

We start with a simple relationship in column a1, whites are happier, blacks are less happy (base case is other race). An opposite race in the neighborhood (white for blacks, or black for whites) is associated with lower happiness. As hypothesized, segregation predicts greater happiness. Results persist when adding controls in elaborated models. Column a2 adds basic predictors of happiness except for health, which is added in column a3. Column a4 adds fear of crime, Democrat and Republican dummy variables, and city>250k dummy. Column a5 is a saturated model with added occupational dummies and hours of work. Finally, we would like to exclude one alternative explanation. It could be argued that results are only due to a small prejudiced minority, which is happier among its own race. We elaborate model a3 (to retain larger sample size) by adding trust (a3a), feeling of closeness to blacks (a3b), and preference for half black neighborhood. Results remain strongly significant.

In the second set of models, we measure other race presence in the neighborhood more precisely, by how far away it is located and treat it as a continuous variable. Results are set in table 3 and are very similar to those in Table 2.<sup>4</sup>

Table 2. OLS regressions of happiness. Robust standard errors

	a1	a2	a3	a4	a5	a3a	a3b	a3c
Opposite race in the neighbourhood	-	-	-	-0.02*	-0.02+	-0.03*	-	-0.04**
	0.05***	0.04***	0.03***				0.04***	
White	0.08***	0.03*	0.02	0.01	0.02	0.01	0.03	0.01
Black	-	-	-	-	-0.04	-0.07**	-0.05+	-0.06+
	0.12***	0.07***	0.08***	0.07***				
South	0.04***	0.05***	0.05***	0.05***	0.02	0.06***	0.06***	0.04**
Family income in constant \$1986		0.00***	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***
Age of respondent		-	-	-	-	-	-	-
		0.01***	0.01***	0.01***	0.02***	0.01***	0.01***	0.01***
Age squared		0.00***	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***
Married		0.25***	0.25***	0.24***	0.24***	0.27***	0.29***	0.26***
Unemployed		-	-	-	-	-	-	-0.12**
		0.19***	0.18***	0.17***		0.20***	0.12***	
Highest year of school completed		0.02***	0.01***	0.01***	0.01*	0.00	0.01***	0.01***
Health			0.19***	0.18***	0.18***	0.17***	0.19***	0.19***
Republican				0.06***	0.06***			
Democrat				0.02+	0.02			
Afraid to walk at night in the neighborhood				0.04***	0.03**			
City>250k				-0.02+	-0.02			
Number of hours worked last week					0.00+			
Trust						0.11***		
How close feel to blacks							0.02***	
Neighborhood half black								0.03***
Occupation dummies	no	no	no	no	yes	no	no	no
Year dummies and South dummy	yes							
Constant	2.14***	2.06***	1.53***	1.40***	1.44***	1.60***	1.41***	1.47***
N	41,166	36,847	25,690	22,837	10,096	14,974	10,278	7,397
AIC	1.9	1.8	1.8	1.8	1.7	1.8	1.8	1.7

+p<0.10 \*p<0.05 \*\*p<0.01 \*\*\*p<0.001

Statistical significance aside, are those relationships of substantial magnitude? After all, a .03 difference on 1-3 scale appears small.<sup>5</sup> It is not small if we look at beta coefficients (available upon request). The effect of opposite race in a neighborhood is about a third to half (depending on a model) of income effect and comparable to the effect of education. This is not something to be disregarded, and the effect is even larger for lower social classes. Furthermore, these effects have a very meaningful impact when a geographic area is considered. Compare for instance 2 towns, each of size of 50 thousand people—one desegregated and the other segregated, and equal on everything else—the difference in happiness between the towns would be 50,000\*(.03), which means that in a segregated town

<sup>4</sup> Due to missing data, there are no corresponding results for last 2 columns from table 2 for opinions about blacks.

<sup>5</sup> .03 difference comes from coefficient on segregation variable from table 2. 1-3 scale is happiness scale. Our hypothetical exercise visualizing effect with a 50,000 town is conservative. If coefficient on segregation variable from table 3 was used, the effect would be larger.

there would be 1,500 people who are “pretty happy” instead of “not very happy.” This is a large amount of public happiness achieved due to segregation.

Table 3. OLS regressions of happiness. Robust standard errors

	b1	b2	b3	b4	b5	b3a
Distance to opposite race	0.03***	0.02*	0.02*	0.01+	0.03*	0.02*
White	0.04	0.01	-0.01	-0.03	-0.15*	-0.05
Black	-	-0.12**	-0.14**	-0.14**	-0.19*	-0.16**
	0.16***					
South	0.03*	0.04***	0.05**	0.05**	-0.01	0.06**
Family income in constant \$1986		0.00***	0.00***	0.00***	0.00***	0.00***
Age of respondent		-	-	-	-0.02**	-
		0.02***	0.01***	0.01***		0.02***
Age squared		0.00***	0.00***	0.00***	0.00**	0.00***
Married		0.21***	0.20***	0.19***	0.14***	0.21***
Unemployed		-	-	-		-
		0.17***	0.20***	0.19***		0.24***
Highest year of school completed		0.01***	0.01+	0.00+	0.01	0.00
Health			0.18***	0.18***	0.19***	0.16***
Republican				0.08**	0.11*	
Democrat				0.03	0.10*	
Afraid to walk at night in the neighborhood				0.01	-0.02	
City>250k				-0.01	-0.01	
Number of hours worked last week					0.00	
Trust						0.12***
Year dummies and South dummy	yes	yes	yes	yes	yes	yes
Occupation dummies	no	no	no	no	yes	no
Constant	2.10***	2.08***	1.51***	1.48***	1.54***	1.82***
N	11,221	10,322	7,020	6,960	1,681	4,185

+p<0.10 \*p<0.05 \*\*p<0.01 \*\*\*p<0.001

### Study 3: 1971 The quality of American life (QOL)

#### *Data and measures*

This study uses the Quality Of American Life (QOL) survey, which was the data source underlying classic Campbell et al. (1976) study, one of the first studies about happiness. The data were collected via personal interviews from a nationwide (all states) probability sample of 2,164 persons 18 years of age and older during the summer of 1971. The unique feature of this dataset is a rich set of variables about community: years in the community, satisfaction with neighbors, and satisfaction with the community.

**Happiness.** Happiness is measured with answers to "We have talked about various parts of your life, now I want to ask you about your life as a whole. How satisfied are you with your life as a whole these days? Which number on the card comes closest to how satisfied or dissatisfied you are with your life as a whole? " on a scale from 1="completely dissatisfied" to 7="completely satisfied."

**Neighborhood racial diversity.** Respondents were asked "Is this <r's> neighborhood all white, mostly white, about half and half, mostly (black), all (black), or what? " and then asked to compare it to respondent's race on scale from 1="everybody of same race as respondent" to 5="everybody of different race than respondent." Specifically, the answers were: 1="r white, neighborhood all white; or r black, neighborhood all black;" 2="r white, neighborhood mostly white; or r black, neighborhood mostly black;" 3="r white, neighborhood half and half; or r black, neighborhood half and half;" 4="r white,

neighborhood mostly black; or r black, neighborhood mostly white ;” 5=“r white, neighborhood all black except r and family; or r black, neighborhood all white except r and family.” A limitation is that only white and black races were considered (there were few Asians and Hispanics in 1971).

**In community since 20yo and in the community since 5yo.** The question reads “How long have you lived in (insert name of the community, or of the county if rural)? ” We use this item to create two variables: “in the community since 20yo” coded as 1 if age - years in community <21; “in the community since 5yo” coded as 1 if age - years in community <6.

**Satisfaction with neighbors.** “What about the people who live around here < in r’s neighborhood>. As neighbors would you say that they are very good, fairly good, neither good nor bad, not very good, or not good at all? ” on a scale from 1=“not good at all” to 5=“very good.”

**Satisfaction with the community.** “And what about this particular neighborhood in (name city or county). All things considered, how satisfied or dissatisfied are you with this neighborhood as a place to live? Which number comes closest to how satisfied or dissatisfied you feel?” on a scale from 1=“completely dissatisfied” to 7=“completely satisfied.”

**Controls.** In a similar fashion to Studies 1 and 2, we control for a number of person level predictors of happiness: race of a respondent (white), marital status (married), family income (7 brackets), age and age squared, whether a person is unemployed, size of a place (rural-urban continuum), and health status.

## Results

Results are set in table 4. All significance levels are based on robust standard errors to account for heteroskedasticity. We start with a bivariate relationship in column a1: neighborhood racial diversity predicts lower happiness—the relationship is not only statistically significant but also substantial in magnitude: increasing diversity by 1 on 5 point scale decreases happiness by .2 on 7 point scale. Adding controls in column a2 attenuates this relationship by almost half, but it still remains sizable. The beta coefficient on neighborhood racial diversity (not shown) is .06, about the same as on income or unemployment and half of the strongest predictor, self-reported health. This is a striking magnitude.

In column a3 we subset sample to people who stayed in the community since they were 20 years old. Few people exercise residential choice before that age. We want to be able to argue that segregation causes happiness, not residential choice (self-selection), which is plausibly correlated with both segregation and happiness and hence may make the relationship between them spurious. In BRFSS such information is absent, and in GSS it is largely missing. After subsetting, the subsample remains substantial (n=1,386). It was not a residential choice that created a spurious correlation between segregation and happiness. Results are similar, and also similar when we subset further to those who were in the community since 5 years old in column a4 (n=928). Results are actually stronger for this subset. It could be argued that people who have not moved, exercised residential choice and simply decided to stay. To account for this possibility we control for two variables that often motivate people to move or stay: satisfaction with neighbors and satisfaction with the community in columns a5 and a6 (using a subset of those who were in the community since 20 years old). The effect of neighborhood racial diversity decreases but remains negative.

Table 4: OLS regressions of happiness. Robust standard errors.

	a1	a2	a3 (20yo)	a4 (5yo)	a5 (20yo)	a6 (20yo)
Neighborhood racial diversity	-0.19***	-0.11**	-0.13*	-0.14*	-0.09+	-0.10+
White		-0.03	0.07	0.13	0.02	0.05
Satisfaction with community					0.12***	
Satisfaction with neighbors						0.17***
Rural-urban		-0.04**	-0.03*	-0.02	-0.02	-0.02
Health problems		-0.37***	-0.26**	-0.28**	-0.24**	-0.26**
Married		0.53***	0.50***	0.50***	0.48***	0.47***
Family income bracketed		0.05**	0.06**	0.08**	0.05**	0.06**
Age		-0.04***	-0.04***	-0.04**	-0.05***	-0.05***
Age squared		0.00***	0.00***	0.00***	0.00***	0.00***
Unemployed		-0.50**	-0.38	-0.23	-0.38	-0.39
Constant	5.83***	5.98***	5.95***	5.67***	5.39***	5.34***
N	2,044	1,980	1,271	864	1,269	1,255
AIC	3.3	3.2	3.1	3.1	3.0	3.1

+p<0.10 \*p<0.05 \*\*p<0.01 \*\*\*p<0.001

### Robustness and endogeneity

The present study attempted to address endogeneity in several ways. This is an observational study and we have no control over administering the treatment (segregation), but we leverage income (Study 1), residential mobility and satisfaction with community/neighbors (Study 3) to get closer to exogenous or random assignment to segregation. In terms of endogeneity, possibly the most serious potential problem is that of self-selection: people may self select themselves into neighborhoods of specific racial composition. In addition, the opportunity to choose a place may drive both happiness and segregation and hence make the correlation between them spurious. Assume that (a) persons have a strong preference for same race, as this study argues; and (b) persons are happier when they are able to exercise choice in the neighborhoods (or metros) where they live. It follows then that the degree of choice (agency) in residential selection drives both happiness and segregation. Under these conditions the correlation between racial homogeneity and happiness is spurious. This, however, should be mostly observed for whites. Minorities, as sociologists documented, are often stuck and cannot move, but we found them happier among their own race, too. In addition, issue of self-selection was specifically addressed in Study 3 by subsetting data to people who did not move and have no propensity to move (proxied by satisfaction with community and neighbors). Results remained substantively the same. Another way to deal with this problem is to subset data to people who do not have much choice over moving. We have rerun estimates from Study 1 from table 1 subsetting sample to people with household income of less than \$25,000. Results for this subsample are virtually the same (see table 1 in the appendix).

There may be reverse causality. Happiness may cause segregation. Happiness may also affect residential choice (though it is more plausible that causality goes from neighborhood's or metro's attributes to happiness). Again, subsetting should alleviate this problem. We subset to low income (table 1 in the appendix), and subset to individuals who have not moved at all or have no propensity to move—this was already accomplished in Study 3. Finally, people move mostly for other reasons. They move to metros mostly for jobs (Okulicz-Kozaryn 2011a), and people move to communities mostly for affordability, safety, and school quality (Carnoske et al. 2010).

There can be also a problem of biased responses to questions in GSS and QOL surveys: happy people may wrongly over report more people like them nearby, and unhappy

people may see more people who do not belong to their group, and also blame their unhappiness on other (in their view “hostile”) group. This limitation is overcome in Study 1: Racial composition data are not self-reported. We operationalized segregation in an objective way, using census data to avoid potential reverse causality.

Still, one can never be sure about causality except in an experiment. Experimental assignment to a neighborhood, however, is very rare, nonrepresentative, and observed for very few people. Some natural experiments may be possible, but we have not found any such data. This study remains nonexperimental or observational. Yet, as persuasively pointed out by labor economist Andrew Oswald (e.g., Blanchflower & Oswald 2011, Oswald 2014), nonexperimental studies are not without merit, despite what some scientists recently argue. Many scientific breakthroughs were first discovered in observational studies, for instance, the relationship of smoking to cancer. It is often overlooked that experiments suffer from many critical problems that are not inherent in observational studies such as lack of external validity, small sample size, artificial laboratory setting, and forced imaginary roles, such as a person pretending to be a company or imagining winning a lottery. For discussion see Pawson & Tilley (1997).

### **Limitations and future research**

The goal of this study was to present theory and quantitative evidence challenging a popular claim in sociology that segregation has a negative effect on wellbeing. We find the opposite: segregation has a positive effect on wellbeing. It is important to keep in mind, however, that this is precisely the finding—we are happier among our own race—and other, related outcomes do not necessarily follow. In particular, long-run and extended-geography generalizations do not necessarily follow: more segregation at a societal level is not necessarily associated with more happiness in the long run. While at person level segregation increases happiness, as documented here, at a societal level, segregation may actually decrease happiness. These contradictory effects on happiness at different levels of aggregation have been observed in other domains. In politics, for instance, conservatives are happier than liberals, but liberal welfare countries are happier than other countries (Okulicz-Kozaryn et al., 2014).

We are happier among our own race, but this study does not test whether a person moving to the same-race area would become happier. Panel data are needed to trace the effect over time. Panel Study of Income Dynamics added happiness question in 2009 and soon data will have enough waves to enable such explorations. A related approach is to examine the effect of neighborhood racial change on one’s wellbeing.

Philosophically, a significant positive relationship between segregation and happiness does not make segregation an intrinsically desirable condition. Put plainly, not everything that makes us happy is the right thing to do. Following Postmes & Branscombe (2002), perhaps segregation affects our perceptions of social identification: ingroup identification or acceptance, and outgroup rejection. In other words, it is rather a segregation that may create an idea of separate groups, as opposed to the race itself creating groupings. Ingroups and outgroups can form based on racial perceptions in addition to the race itself. Hence, the formation of cross-racial groups (say workplace and sports teams) could diminish or even remove race as a grouping variable. On the other hand, as discussed earlier, there is some evidence that same race preference is an inborn, evolutionary, and often unconscious trait.

Overall, we found that all races, whites, blacks, and Hispanics are happier among their own race, but it should be noted that results are strongest for whites. First, the magnitude of the effect was slightly stronger for whites than for blacks and Hispanics in Study 1. Second, we subset sample in Study 2 to whites and blacks only and found significant effect for whites

but not for blacks, although the sign of effect of segregation on happiness was mostly negative for blacks as well, that is, results would have been significant if the sample were larger (results are available upon request). Third, simply most respondents analyzed were white, and hence, we know most about whites from this study.

Effect size is larger in Study 3 (1971) than in Studies 1 (2010) and 2 (1978-2012). One interpretation is that race mattered more because there used to be more prejudice and discrimination. This interpretation points to an earlier discussion—the race is not only a biological construct but is also socially constructed.

In this study, we have focused on the overall pattern—increased happiness due to the presence of one's own race—but the relationship may be nonlinear. Future research may explore interactions and test for threshold effects. For instance, minorities may be happier in more integrated neighborhoods than whites. Such test would require a large dataset at the ecological level, say county level; present study used only 144 metropolitan areas. In short, future research can focus on specificity: which groups and under what conditions are most and least happy among their own race. The goal of this study was to document the overall relationship.

### **Discussion and conclusion**

This study is relevant to a broad sociological audience—it adds to our understanding of how social environment affects individuals by investigating the effect of racial social environment on personal wellbeing. For almost all of our species history, we lived among our own kin and our own race. Modernization, industrialization, and more recent advances in transportation changed it. Yet people still prefer to live among their own race despite efforts of policymakers and academics to change it further. There exists an untested assumption in sociology that segregation decreases our wellbeing. This study challenges this widely held assumption by arguing that we are happier among our own race.

Findings from this study are relevant to sociologists specializing in many areas, and especially those studying cities, race, segregation, and discrimination. A key contribution is that our results help to explain why segregation is persistent and desegregation is difficult—people are simply happier in segregated areas.

The result of happiness among one's own race is explained in terms of homophily. But we think that this explanation is a part of a more fundamental explanation in terms of the all-powerful need to belong. Perhaps, the need to belong is the single most important human need in contemporary western society. Taking the psychoanalytic perspective, we have lost the bond at biological birth individually, and at the birth of civilization collectively (Freud et al., 1930, Fromm, 1994, Kapoor, 2014), and we desperately want the bond back, we want to belong. The need to belong, at very least, is one of the most fundamental human needs—for elaboration see classic Baumeister & Leary (1995). Belonging is also on Maslow's Hierarchy of Needs (Maslow 1987), where it appears already after safety need. It is a fundamental need. Lack of prejudice is also a human need, but it appears as part of last needs' segment "self-actualization," only after more fundamental needs are satisfied, such as belonging. Belonging is arguably more important to humans than diversity free of prejudice, and belonging is more easily achieved in more homogeneous or segregated place. When discussing race, sociologists tend to emphasize prejudice and discrimination, but overlook the fact that segregation may actually satisfy a more fundamental need, the need to belong. Results should not be interpreted as suggesting segregation to achieve greater happiness at a societal level and in the long run. Such a conclusion should be based on studies analyzing society or societies as a unit of analysis over long time periods. Indeed, segregation may be a negative phenomenon in the long run. It may be difficult for people to communicate if they grow too far apart, and it may

be the beginning of a conflict: “where individuals of the same race or of the same vocation live together in segregated groups, neighborhood sentiment tends to fuse together with racial antagonisms and class interests” (Park, 1915, p. 582). Conflict and especially violence endangers the safety and physiological needs that are more important than belonging.

Results from this study agree with findings of the only other three studies on the topic (Postmes & Branscombe, 2002, Vogt Yuan, 2007, Herbst & Lucio, 2014), which are limited: Postmes & Branscombe (2002) studied 200 blacks, Vogt Yuan (2007) studied Illinois residents and Herbst & Lucio (2014) in a working paper study blacks only. We are using much larger datasets that are representative of US metropolitan areas (BRFSS) and US population (GSS, QOL), and we study whites, blacks, and Hispanics. In addition, we triangulate measurement. We operationalize segregation at three levels of aggregation: metro (Study 1), block (Study 2), and neighborhood (Study 3). We measure segregation in an objective way using census data (Study 1), and we measure it with subjective self-reports. Subjective measures may measure race perceptions as opposed to factual racial presence. Such measurement is advantageous in the sense that what matters for happiness stemming from the same race presence is salience or whether we actually notice the racial environment and how we perceive it.

### ***Is it better to be a human being dissatisfied or a pig satisfied?***

Happiness arguably should be the key driver of human action—we should do what makes us happy. According to utilitarian Bentham, whole societies including their elites and policymakers must strive to achieve “the greatest happiness for the greatest number.” Indeed, there is recently increased attention given to happiness. Nobel Prize-winning economists including Amartya Sen and Joseph Stiglitz, and politicians including French former president Nicolas Sarkozy and former UK Cabinet Secretary Lord O’Donnell are actively pursuing the Bentham’s idea (Stiglitz et al., 2009, Helliwell et al., 2012, O’Donnell et al., 2014).

On the other hand, “it is better to be a human being dissatisfied than a pig satisfied; better to be Socrates dissatisfied than a fool satisfied”(Mill 2010). It is not always what makes us happy that is the right thing to do. There are many ultimate outcomes of interest that are worth considering in addition to or instead of happiness, for instance, capabilities (Sen 2000, Nussbaum 2006) and social justice (Rawls 2009). Perhaps, equality, morality, and social justice trump happiness. Perhaps it is better to be unhappy among other races than happy among one’s own race.

### ***Inequality is the problem, not segregation***

Segregation has mostly positive consequences as documented here using happiness yardstick. Yet segregation is often unfair because it is forced. The fundamental problem is that there are many people who cannot move and are forced to stay in deprived areas of concentrated poverty, which makes them worse off than just being poor (Jargowsky, 1997). Blacks and Hispanics are often forced to suffer from objectively negative conditions such as lack of opportunity and crime (e.g., Fischer et al., 1996). But this is not an inevitable outcome of racial segregation. Racial segregation in itself does not cause crime, lack of opportunity, and other outcomes that sociologists attribute to it. Rather, the culprit is income inequality. Racial segregation itself, as we argue here, probably causes greater happiness.

Sociologists’ very negative view of segregation seems unwarranted. Segregation correlates with many negative outcomes. Yet perhaps surprisingly, the overall net effect is positive as evidenced by the overall wellbeing metric. We are happier among our own race. Even minorities often forced to segregate are happier among their own race. They would have

been even happier, we speculate, if they could segregate more freely, that is, they owned more resources and had more choice. We hope to provoke more discussion and research in this area to find out more and make fewer unwarranted assumptions.

## Conclusion

To summarize, residential segregation by race is a persistent feature of life in the US, even wealthier minority households who can move, choose to stay in poorer areas that are of their race (Reardon et al., 2015). Our results help to explain it—we are happier among our own race. Sociologists, like other social scientists, have their dogma and rely on common sense explanations more than they realize (Watts, 2014). One such assumption or explanation is that segregation reduces wellbeing. There are negative and positive outcomes associated with segregation. We evaluate pros and cons using a happiness yardstick. On the whole, we find a net positive effect of segregation on wellbeing for whites, blacks, and Hispanics—we are all happier among our own race.

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**Appendix 1. List of sample countries**

Table 1: Odds Ratios for Multinomial Logistic Regression of Happiness for a subsample of respondents with income lower than \$25,000.

	a1W	a2W	a3B	a4B	a5H	a6H
Dissatisfied v very dissatisfied						
White * xww	1.02+	1.01				
Black * xbb			1.01	1.00		
Hispanic * xhh					1.02*	1.03*
White	0.21**	0.34+				
Black			0.68	0.92		
Hispanic					0.81	0.62
xww	1.00	1.00				
xbb			1.00	1.00		
xhh					0.99	0.99
Satisfied v very dissatisfied						
White * xww	1.03***	1.03**				
Black * xbb			1.03***	1.02**		
Hispanic * xhh					1.02*	1.03**
White	0.05***	0.07***				
Black			0.35**	0.39**		
Hispanic					1.63	1.16
xww	0.98*	0.98**				
xbb			1.00	1.00		
xhh					0.99	0.99*
Very satisfied v very dissatisfied						
White * xww	1.03**	1.02*				
Black * xbb			1.03***	1.03***		
Hispanic * xhh					1.02*	1.03*
White	0.05***	0.06***				
Black			0.40**	0.39**		
Hispanic					2.08	1.54
xww	0.98*	0.98**				
xbb			1.00	1.00		
xhh					0.99*	0.99**
Person-level controls: married, income, unemployed, education level, age, age squared, general health, soc/emo support	yes	yes	yes	yes	yes	yes
Metro level controls: violent and property crime rates, median household income, % in poverty %>65, %> bachelors degree, population/sq. mile	no	yes	no	yes	no	yes
N metro level	144	125	144	125	144	125
N	40,438	33,673	40,438	33,673	40,438	33,673
AIC	888	857	891	860	888	858

+p<0.10 \*p<0.05 \*\*p<0.01 \*\*\*p<0.001

*Note:* Numbers in the table are odds ratios from multinomial logistic regression, each panel is a contrast relative to the base case (very dissatisfied). Xww is exposure of whites to whites, or isolation of whites from other races; xbb is a corresponding exposure index for blacks, and xhh is an index for Hispanics.