

Are we happier among our own race?

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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 metropolitan level. Second dataset, 1978-2012 General Social Surveys surveyed respondents about race at block level. Third dataset, the Quality Of American Life surveyed respondents about race at 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.

KEYWORDS: SEGREGATION, RACE, SUBJECTIVE WELLBEING (SWB), HAPPINESS, LIFE SATISFACTION, SOCIOBIOLOGY, THE BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS), GENERAL SOCIAL SURVEY (GSS)

Geographic segregation of people along racial (and economic) lines is one of the defining features of American cities (e.g., Massey and Denton 1993, Jargowsky 1997, Reardon et al. 2015). From 1970 to 2010, 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 and Tannen 2015). In sociology, segregation is commonly equated with disadvantage and assumed to reduce wellbeing (e.g., Massey and Denton 1993). But does it? Nobody has tested it directly.¹ 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 asked social scientists and policy makers 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?

¹Postmes and Branscombe (2002) studied segregation and wellbeing among 200 African Americans, but their study, like most psychological studies, is not representative of the the population. Vogt Yuan (2007) studied wellbeing in a representative sample but measured it differently from what is a standard in happiness literature and used data from Illinois only. All similar studies, cited in Vogt Yuan (2007), investigate the relationship within a small area, usually one metropolitan area, and they mostly study mortality, sometimes depression, but never happiness/wellbeing. In addition, unlike all other studies, we analyze racial makeup of an area at three levels of aggregation: metropolitan area (study 1), block (study 2), and neighborhood (Study 3). Currently, in a working paper, Herbst and Lucio (2014) are revisiting the issue as well, but take economics perspective on the topic, use smaller dataset, and focus on blacks only.

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 literatures.²

The Dark Side of Segregation: Sociological Literature

Sociological research commonly equates segregation with 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 and 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 and 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 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. Overwhelming majority, 80%, prefers neighborhoods with more blacks (Krysan and 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.

²The goal is not an in-depth review of literature from one discipline, but rather unification of literatures to provide the background. Such broad undertaking necessitates some incompleteness due to page limit. We only focus on most relevant writings and skip remotely or indirectly related literature. For instance, we skip a line of sociological literature about residential preference formation—much of it builds on original Schelling checkerboard model and uses agent based modeling (e.g., Charles 2001, Bruch and Mare 2006, 2009, Zhang 2004a,b). The present study does not continue this line of research—it neither builds on Schelling model, nor uses agent based modeling. That literature focuses on temporal dynamics or over-time changes in preferences. The focus of present study is a static cross-section. We will mention homophily, but racial homophily formed in evolutionary time, over thousands of years; and is fundamentally very different from that line of literature. Investigation of residential preferences formation, residential choices, or causes of segregation is beyond the scope of this paper. The focus is here on the effect of ecological racial makeup relative to person's race on her happiness in a cross-section without looking at the dynamics of segregation over time. There is also much disagreement across literatures. For instance, see a lively exchange between Clark (1986) and Galster (1988). Clark (1986) rightly pointed out what sociologists omitted: segregation is not only due to discrimination, which sociologists tend to overemphasize, but mostly due to economic status, social preferences, and urban structure. Galster (1988) criticized Clark (1986) for overemphasizing other factors at the cost of discrimination. Both authors cite different works to support their arguments. This illustrates well the state of the current knowledge: there are separate literatures reaching opposing conclusions.

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 and Denton 1993, Wilson 2012b, Grigoryeva and 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 and 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, 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 (Krivo 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.

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 even for minorities that are often forced to segregate. The key point is that it is not the segregation itself but poverty concentration and 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 and 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 and Wilkinson (2008), Stafford et al. (2010), Shaw et al. (2012).

What is the causal pathway from segregation to wellbeing? Segregated environments offer ingroup support and acceptance (Postmes and 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, 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.³

In racially homogeneous areas people are more civically engaged, more willing to trust, participate, share, support each other, and redistribute (Stack 1975, Alesina and Ferrara 2000, Luttmer 2001, Costa and Kahn 2003, Vogt Yuan 2007, Luttmer and Singhal 2008).⁴ 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 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.”

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 support for homophily.

We are born with homophily or ethnocentrism (Smith et al. 2010). Racial prejudice happens quite

³On the other hand, it is reasonable to assume that a person living in a racially homogeneous area may actually become more vulnerable to discrimination and racism outside of her homogeneous enclave, or if people of other race move into her neighborhood.

⁴There are few sociological studies, reviewed in Vogt Yuan (2007), arguing positive effects of ethnic/racial concentration on physical and mental health: lower mortality, better mental health, and increased self-esteem. A somewhat related study about wellbeing and neighborhood conditions is Ross et al. (2000)—neighborhood stability (low population turnover) is good in affluent neighborhoods, but not in poor areas. Indeed, it is good to experience instability in deprivation. Affluent neighborhoods benefit more white children than black children (Brooks-Gunn et al. 1993), but black children benefit if neighborhood is predominantly black (Turley 2003). There are educational benefits from same-race environments, too.

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 to be taught about race or ethnicity—they know these concepts themselves (Kinder and 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 and Alexander 1999). For discussion of ethnocentrism and human nature see Fox (1994), Fu et al. (2012), Kinder and 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 and Fowler 2007, Fowler and Christakis 2008). People chose to live among people like them and this choice is more apparent now than few decades ago (Bishop and Cushing 2009).

To some degree race is socially constructed as anything else is (Berger and 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 happiness. This literature has been reviewed by psychologists (Diener et al. 1993, Diener and Biswas-Diener 2002, Myers and Diener 1995, Proctor et al. 2009), economists (Dolan et al. 2008, Di Tella and MacCulloch 2006, Frey and Stutzer 2002), and by a maverick

sociologist (Veenhoven 1991, 1995). For a historical overview of the happiness concept see McMahon (2006). This interest in happiness, however, has not been substantial in sociology with only a handful of mainstream publications (Fernandez and Kulik 1981, Firebaugh and Schroeder 2009, Inglehart and Baker 2000, Lim and 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 and Seligman 2004, Seligman 2004). Sociologists could do the same.

The key advantage of happiness yardstick is that it overcomes difficulty of measuring utility in social welfare. It is an overall measure in a 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 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 and 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 indepth 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 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 metropolitan area. 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 American Community Survey (ACS 2007-2011 5-Year Estimates) with two exceptions. Crime rates come from 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).

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 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 also 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 has 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 and Ono 2012, Carr et al. 2014). Income boosts happiness and unemployment depresses it beyond lack of income (e.g., Di Tella et al. 2001b,a, Di Tella and 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 and Okulich-Kozaryn 2009, 2011). There is some evidence that education affects happiness (e.g., Dittmann and 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 exposure index, which measures exposure of a person to people of various races (Jargowsky and Kim 2009, p. 22). Also see Iceland and 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:

$$xww = \sum_{j=1}^M \frac{w_j}{W} \frac{w_j}{n_j}$$

$$xhh = \sum_{j=1}^M \frac{h_j}{H} \frac{h_j}{n_j}$$

$$xbb = \sum_{j=1}^M \frac{b_j}{B} \frac{b_j}{n_j}$$

where W, H and B are metro populations for whites, Hispanics and blacks, and w_j, h_j, b_j 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 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 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 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.⁵

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 (Fischer 1973, Okulicz-Kozaryn 2015)—we control for population density. We control for education because it almost always leads to more tolerance (Kinder and 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 crime—it is

⁵We tried replacing exposure index with dissimilarity index measuring overall segregation in a larger area, results were insignificant. Dissimilarity index indicates a proportion of a given race that would need to move across neighborhoods (census tracts) of a metropolitan area in order to achieve equal distribution. Hence, the overall segregation across neighborhoods does not result in happiness, but more exposure to or interaction with one’s own race does result in greater happiness.

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 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.⁶ Results are set in table 1. There are six models—two for each race. 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 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	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 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.

The coefficients of interest are interactions of one's race and exposure to that race in metropolitan area.

⁶If 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`

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.

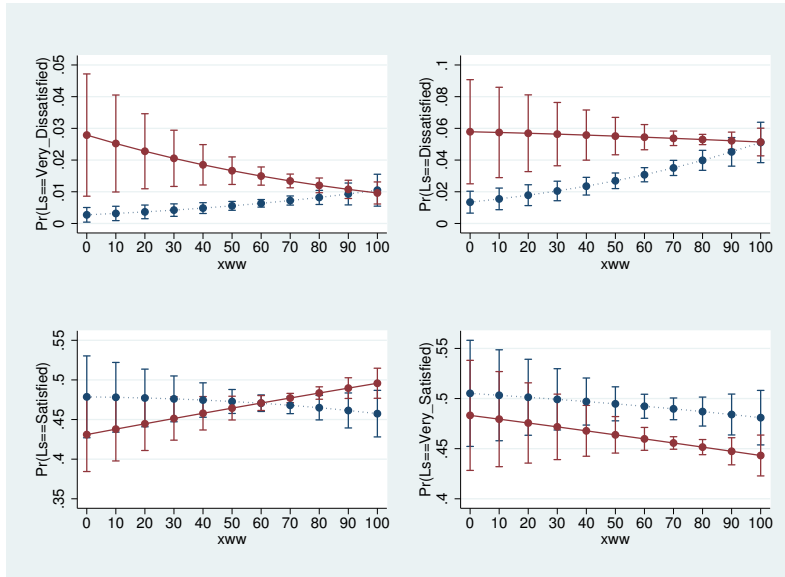


Figure 1: Predicted Probabilities For 4 Happiness Categories With 95% CI Against Exposure Index to Whites: Solid Line is for Whites, and Dotted Line for Everyone Else.

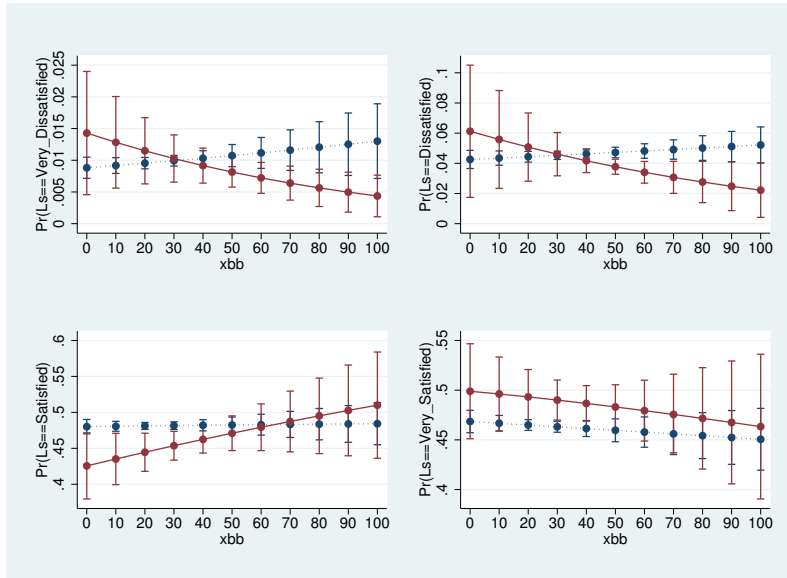


Figure 2: Predicted Probabilities For 4 Happiness Categories with 95% CI Against Exposure Index to Blacks: Solid Line is for Blacks, and Dotted Line for Everyone Else.

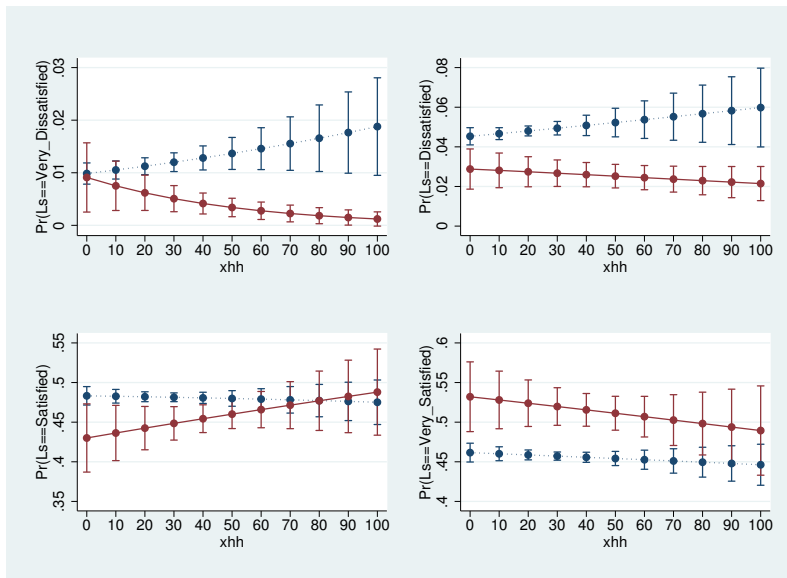


Figure 3: Predicted Probabilities For 4 Happiness Categories with 95% CI Against Exposure Index to Hispanics: Solid Line is for Hispanics, and Dotted Line for Everyone Else.

For all races, probability of being very dissatisfied or dissatisfied declines along with exposure to one's race and probability of being satisfied increases. Interestingly, 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, 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 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 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 and Schroeder 2009). We turn to General Social Survey, which includes questions about racial composition at neighborhood level.

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

Data and Measures

We use General Social Survey (GSS) dataset pooled from 1978 to 2012. GSS is a cross sectional nationally representative biennial survey. This study only uses person level variables from GSS, including ecological segregation measures, which are survey questions about racial makeup of a neighborhood. Pre-1978 years were dropped because the questions about race in the neighborhood changed. 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 to control 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 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 and Vigdor 2000). We control for fear of crime—whites often fear crime committed by minorities (e.g., Krysan and 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 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.⁷ We use following dummy variables: professional, administrative and managerial, clerical, sales, service, agriculture, production and transport, craft and technical. Political beliefs predict happiness (Napier and Jost 2008, Okulicz-Kozaryn et al. 2014), and also Americans segregate by political beliefs (Bishop and 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 and 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

⁷We are grateful to an anonymous reviewer of an earlier version of this study for this point.

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 and 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 heteroskedascity.

Table 2: OLS Regressions of Happiness. Robust Standard Errors.

	a1	a2	a3	a4	a5	a3a	a3b	a3c
Opposite race in the neighbourhood	-0.05***	-0.04***	-0.03***	-0.02*	-0.02+	-0.03*	-0.04***	-0.04**
White	0.08***	0.03*	0.02	0.01	0.02	0.01	0.03	0.01
Black	-0.12***	-0.07***	-0.08***	-0.07***	-0.04	-0.07**	-0.05+	-0.06+
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***	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		-0.19***	-0.18***	-0.17***		-0.20***	-0.12***	-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 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	yes	yes	yes	yes	yes	yes	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

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 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 2.⁸

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	-0.16***	-0.12**	-0.14**	-0.14**	-0.19*	-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***	-0.01***	-0.01***	-0.02**	-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 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

Statistical significance aside, are those relationships of substantial magnitude? After all, a .03 difference on 1-3 scale appears small.⁹ 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 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.

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 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 community, satisfaction with neighbors, and satisfaction with 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?”

⁸Due to missing data, there are no corresponding results for last 2 columns from table 2 for opinions about blacks.

⁹.03 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.

Which number on the card comes closest to how satisfied or dissatisfied you are with your life as a whole?" on 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 community since 5yo. The question reads "How long have you lived in (insert name of community, or of county if rural)?" We use this item to create two variables: "in community since 20yo" coded as 1 if age - years in community <21;"in 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 scale from 1="not good at all" to 5="very good."

Satisfaction with 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 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—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 community since they were 20 year 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 residential choice that created spurious correlation between segregation and happiness. Results are similar, and also similar when we subset further to those who were in community since 5 year 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 community in columns a5 and a6 (using a subset of those who where in 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, opportunity to chose 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.¹⁰ 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 5 in 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 5 in 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 and 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

¹⁰We are grateful to an anonymous reviewer of an earlier version of this study for these points.

winning a lottery. For discussion see Pawson and 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 societal level is not necessarily associated with more happiness in the long run. While at person level segregation increases happiness, as documented here, at 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 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 and Branscombe (2002), perhaps segregation affects our perceptions of social identification: ingroup identification or acceptance, and outgroup rejection. In other words, it is rather segregation that may create an idea of separate groups, as opposed to race itself creating groupings. Ingroups and outgroups can form based on racial perceptions in addition to race itself. Hence, formation of cross-racial groups (say workplace and sport 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, 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 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—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 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 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 policy makers 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.¹¹

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 birth of civilization collectively (Freud et al. 1930, Fromm [1941] 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 and Leary (1995). Belonging is also on Maslow’s Hierarchy of

¹¹This study provides an explanation for preferences for segregation—people do what they think will make them happier. In a sense, it provides a behavioral context for Zhang findings (2004a, 2004b). We are grateful to an anonymous reviewer of an earlier version of this study for this point. Likewise, and more directly, this study agrees with an explanation of racism persistence due to *jouissance*, a psychoanalytic term for enjoyment—for instance, Kapoor (2014) explains racism and other ingroup bonding such as nationalism and sexism in terms of *jouissance*. *Jouissance* explanation also points to animalistic or unconscious source of such preference.

Needs (Maslow [1954] 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 societal level and in the long run. Such 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 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 and Branscombe 2002, Vogt Yuan 2007, Herbst and Lucio 2014), which are limited: Postmes and Branscombe (2002) studied 200 people, Vogt Yuan (2007) studied Illinois residents, and Herbst and Lucio (2014) in a working paper study only one minority: blacks. 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 a 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 an 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, probably¹² 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, as 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 weight 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.

¹²A usual note of caution is in order: more research is needed, and we are unsure about long-run and societal level.

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ONLINE APPENDIX

Study 1 (BRFSS)

Table 5: Odds Ratios for Multinomial Logistic Regression of Happiness for a subsample of respondents with income less 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 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.