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SUBJECTIVE WELL-BEING AND CULTURE ACROSS TIME AND SPACE

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The authors compare the subjective well-being of citizens in 20 nations with the subjective well-being of Americans who claim to have ancestors from those nations. The results show that the rank order of the well-being scores for the citizens of the 20 nations is similar to the rank order of the well-being scores for the Americans with ancestors from those nations. This finding suggests that the aspects of culture that influence subjective well-being have been passed from people who lived centuries ago to their contemporary descendants at home and in America. Additional analysis suggests that religion may be an important agent in the transmission process.

Keywords: subjective well-being; happiness; culture; Europe; United States

There has been a great deal of research in recent years on the relationship between subjective well-being and culture (Diener, Oishi, & Lucas, 2003; Diener & Suh, 2000). One important finding is that subjective well-being, which refers to how satisfied and happy people are with their lives, tends to be higher in individualist cultures than in collectivist cultures (Diener, Diener, & Diener, 1995; Schyns, 1998; Veenhoven, 1997). This discovery has led to a sizeable literature that explores why these two cultures correlate with different levels of subjective well-being (Ratzlaff, Matsumoto, Kouznetsova, Raroque, & Ray, 2000). Interest in this question is certainly understandable, but it has drawn attention away from another important question: How durable is culture's influence on subjective well-being? Do the aspects of culture that influence well-being change easily, or are they stubborn, shaping a person's sense of well-being for a lifetime or even shaping a society's sense of well-being for generations?

To help answer this question, we employ contemporary survey data in creative ways to trace the stability of subjective well-being across time and space. We compare the subjective well-being of citizens in 20 nations with the subjective well-being of Americans who claim to have ancestors from these countries. If there is no relationship between the well-being of the contemporary citizens in the 20 nations and the Americans with ancestors from the nations, then this finding would suggest that the aspects of culture that influence well-being have changed over time. If however, there remain significant similarities in the relative levels of subjective well-being between the American ethnic groups and the citizens in these other nations, then this finding would suggest that culture's influence on feelings of well-being may be resistant to change, even across generations and oceans.

BACKGROUND

Philosophers have been interested in subjective well-being (or happiness, as it is sometimes called) for centuries, but the scientific investigation of what makes people happy dates back only a few decades (Diener, 1984; Diener, Suh, Lucas, & Smith, 1999; Sumner, 1996). Psychologists and social scientists began studying subjective well-being in earnest when valid and reliable measures of the concept were developed in the 1960s and 1970s. The most common measures involve asking people how satisfied or happy they are with their lives (Andrews & Robinson, 1991; Pavot & Diener, 1993). These self-report measures usually correlate highly with each other and with other non-self-report indicators of well-being, such as informant data, memory measures, and physical behavior (Balatsky & Diener, 1993; Sandvik, Diener, & Seidlitz, 1993). Evidence also suggests that it is possible to translate the questions used to measure well-being into different languages and retain the same meaning (Inglehart & Klingemann, 2000; Shao, 1993). Ouweneel and Veenhoven (1991), for example, find that the levels of subjective well-being are similar across language groups in nations where more than one language is spoken.

The range of factors that influence a person's subjective well-being is exceptionally broad and includes personality, sociodemographic characteristics, individual and aggregate economic conditions, family and health situations, and political rights and regime ideology. In addition to these factors, scholars find that deep-seated cultural differences between societies are also important to feelings of well-being. The study of culture's influence on subjective well-being has taken two forms, the most common of which correlates empirical indicators of culture and well-being. As we have noted, much of this work examines the link between subjective well-being and the degree to which cultures are individualist or collectivist. The results generally show that well-being tends to be higher in individualist cultures (Arrindell, Hatzichrisou, Wensink, & Rosenberg, 1997; Radcliff, 2001; Ryff, 1989; Suh, Diener, Oishi, & Triandis, 1997; Veenhoven, 1994a), although some research suggests that the relationship may be more complex (Kagan & Knight, 1979).

The second form of research, which is of more interest to us, focuses on the robustness of culture's influence on well-being over time. It assumes that culture, by its very nature, is slow to change, so if societal levels of subjective well-being remain relatively constant across long periods of time, then this consistency is evidence, albeit indirect evidence, that culture helps determine the underlying levels of well-being in societies. Inglehart and Klingemann (2000) made this argument in their examination of subjective well-being levels in European nations during the last quarter century. The absolute level of aggregate well-being stayed about the same in these nations, leading the authors to conclude that societies "have a normal baseline level of well-being that varies only moderately in response to current events" (Inglehart & Klingemann, 2000, p. 169). This baseline, Inglehart and Klingeman contended, is due in part to culture. Veenhoven (1993) also reported that the absolute level of well-being has remained about the same in many nations for a decade or longer.

In another study, Veenhoven (1994b) compared the well-being of recent immigrants to the well-being of their contemporaries back home. The data came from four surveys: two of migrants to Australia and two of migrants to Germany. Veenhoven calculated aggregate-level well-being scores for seven immigrant groups in one Australian study (Greeks, Germans, Irish, Italians, Dutch, English, and Yugoslavians) and three in the other (Greeks, Italians, and English). For the two German studies, he calculated well-being scores for five immigrant groups (Greeks, Italians, Spanish, Turks, and Yugoslavians). The correlations between the aggregate well-being scores of these immigrant groups and the aggregate scores

of the citizens back in their homelands (derived from other surveys) were .58 and .10 for the Australian studies and .50 and .03 for the German studies. Although none of these relationships was significant, the positive coefficients provided evidence that the aspects of a person's native culture that influence his or her well-being may not fade quickly after immigration. This conclusion is consistent with the notion that culture helps determine well-being; it also speaks directly to our examination of the durability of well-being across time and space.

Inglehart and Klingemann (2000) may be right that culture influences the baseline level of subjective well-being in a society, but to have confidence in their thesis, we need data for periods much longer than a few decades. After all, if subjective levels of well-being stay about the same for a couple of decades, the consistency may be due as much to the stability in economic, political, and sociodemographic factors as it is to culture. We need subjective well-being data that go back many decades, perhaps a century or more, so that we can see if societal levels of well-being remain similar, even after changes in other factors thought to influence well-being. The problem is, of course, that there are no subjective well-being data from that far back. It might seem, then, that many more years will have to pass for there to be data during a long enough period of time to assess the extent to which culture influences well-being. We believe, however, that it is possible to learn a great deal about the long-term relationship between culture and well-being by creatively using data that are available today.

METHOD

The data we use come from two widely respected sources: the World Values Surveys (WVS) and the General Social Surveys (GSS). The WVS consist of responses to three waves of random-sample population surveys (1981 to 1984, 1990 to 1993, and 1995 to 1997) conducted in dozens of nations.¹ The GSS consist of a series of random-sample population surveys of English-speaking U.S. citizens that have been conducted almost every year since 1972 by the National Opinion Research Center.² Both sets of surveys include a question measuring subjective well-being. The WVS question asks the following: Taking all things together, would you say you are very happy, quite happy, not very happy, or not at all happy? The GSS question asks the following: 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? The questions are almost identical except for the number of response categories. Research shows that self-report scores on questions this similar tend to be highly correlated (Sandvik et al., 1993).³

From the responses to the subjective well-being questions in the WVS and GSS, we created aggregate-level measures of well-being for the WVS nations and for Americans who claim to have ancestors from these countries. We derived the WVS and GSS scores by calculating the means on the happiness questions by nation and ancestral group (the WVS happiness question was coded 1 = *not at all happy*, 2 = *not very happy*, 3 = *quite happy*, and 4 = *very happy*, and the GSS happiness question was coded 1 = *not too happy*, 2 = *pretty happy*, and 3 = *very happy*). Before calculating the GSS scores, we removed all of the respondents who were not born in the United States, thus purging the GSS data of people who may have been socialized elsewhere. We determined the ancestral background of the GSS respondents from the following question: From what countries or part of the world did your ancestors come? We included the respondents who named a single nation (46.8%) and those who chose a single nation after first mentioning more than one nation (31.0%). We omitted the respondents who did not choose a single nation after mentioning more than one (10.8%) and those who did not mention any nations (11.4%). Each of the respondents in our GSS sample, then, was

considered to have a primary ancestral heritage. The mean well-being scores for the WVS nations and the GSS ancestral groups are provided in Appendix B.

The distribution of GSS respondents by ancestry ranged from several thousand English, Germans, and Irish to only a handful for many groups, such as Belgians, Japanese, and Romanians. To protect against the potential biases of small sample sizes, we limited the analysis to only those ethnic groups that had at least 75 respondents. This method left 20 cases that satisfied the criterion of being both a nation in the WVS and a nation that at least 75 GSS respondents claimed as their primary ancestral home. The cases are Austria, Canada, Czechoslovakia, Denmark, England, Finland, France, Germany, Hungary, Lithuania, Ireland, Italy, Mexico, the Netherlands, Norway, Poland, Russia, Spain, Sweden, and Switzerland.⁴ It is important to stress that although we have only 20 cases, the GSS subjective well-being score for each case is aggregated from at least 75 randomly selected survey respondents and the WVS well-being score for each case is aggregated from at least 900 randomly selected survey respondents. Thus, we can be confident that GSS and WVS happiness scores resemble the scores for the populations that they are purported to measure.

With the data ready for analysis, let us review what we intend to do and what we might find. The data consist of the means on subjective well-being questions for the citizens of 20 nations and for Americans who claim to have ancestors from those nations. For the initial part of our analysis, we correlate the WVS and GSS means to see if there is a relationship between the two. A relationship would be strong evidence that the aspects of culture that influence subjective well-being are very durable, apparently persisting across time and space. Whatever these cultural aspects might be, it would seem that they have been passed on from earlier generations to their younger descendants at home and in America. It is difficult to imagine what else could explain such a relationship.

There are, of course, many reasons why it is unlikely that the WVS and GSS well-being means will be related. For one, the GSS respondents have been born and raised in the United States (and most of them have been here for many generations), providing ample time for the aspects of culture that influence well-being to have been homogenized into an American culture. Beals (1985), for example, finds that first-generation immigrants to America are often less happy than second-generation and third-generation immigrants, presumably because the later generations assimilate into American culture. Another reason we may not find a relationship is that the cultures of the contemporary WVS respondents may have changed in significant ways since their ancestors left for America generations ago. There are also the always-present cross-national survey research concerns about comparable question wording. Although previous studies suggest that wording should not be a serious problem, the reality is that the WVS subjective well-being question has been translated into many languages, leaving open the possibility that the meanings are not the same across nations. In addition, we must remember that the subjective well-being questions in the WVS and GSS are worded a little differently. This list certainly does not exhaust the factors working against finding a relationship between the WVS and GSS well-being means, but it is long enough to highlight the conservative nature of our test.

RESULTS

As already noted, we first examine the relationship between the aggregate subjective well-being scores for the 20 nations and for the Americans with descendants from those nations. Next, we extend our investigation to include individual-level data from the WVS

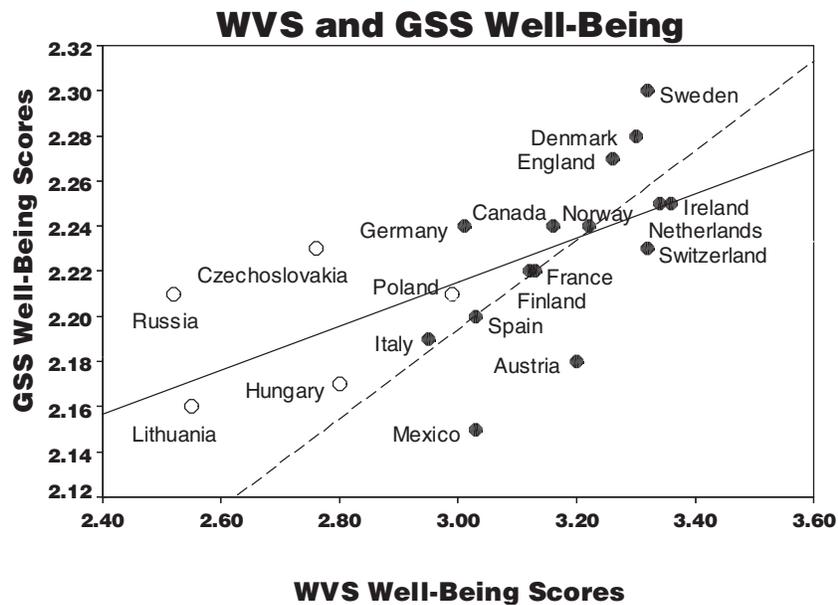


Figure 1: WVS and GSS Well-Being
NOTE: WVS = World Values Surveys; GSS = General Social Surveys.

and GSS. Finally, we take a very preliminary look at the role that social networks play in transmitting well-being across time and space.

THE RELATIONSHIP BETWEEN THE WVS AND GSS AGGREGATE WELL-BEING SCORES

Figure 1 displays the relationship between the mean subjective well-being scores for citizens of the 20 nations and the 20 American ancestral groups with descendants from those nations. The 5 light data points represent the nations that experienced communist rule until recently, and the 15 dark data points represent the other nations. Previous research suggests that the communist experience may have significantly reduced feelings of subjective well-being (Inglehart & Klingemann, 2000), so we decided to visually separate these nations from the others in the figure.

Obviously, the data points form an upward-sloping pattern. This trend is summarized in the solid best fitting regression line. In statistical terms, the relationship is significant at the .01 level, and the correlation coefficient is an impressive .62. The healthy correlation is not unduly dependent on one case, as sometimes occurs with sample sizes this small. When we dropped the cases one at a time and recalculated the statistic, the relationship always remained significant. In substantive terms, Figure 1 demonstrates that the pattern of aggregate subjective well-being for the 20 nations bears a clear resemblance to the pattern of well-being for the Americans who have ancestors from those nations. Citizens in some countries, such as Denmark and Sweden, have relatively high levels of subjective well-being, as do Americans with ancestors from those nations; citizens in other nations, such as Hungary and Lithuania, have relatively low levels of well-being, as do Americans with forebears from those nations.

A closer look at Figure 1 shows that the citizens in former communist nations tend to have lower well-being scores than the citizens in the other nations. This result may be due in part to the citizens' experience with communism, but the Americans with descendants from these nations also have average-to-low well-being scores. Thus, cultural influences that predate the communist era may be one reason that the citizens of the former communist nations and the Americans with descendants from the nations both have relatively low subjective well-being. When the former communist nations are dropped from the analysis, the correlation coefficient increases to .68, and the pitch of the best fitting regression line (signified by the dashed line) increases.

It is important to stress that the robust correlation in Figure 1 does not mean that the range of the aggregate WVS and GSS well-being scores are the same. Indeed, the spread of the GSS scores is much narrower than the spread of the WVS scores, implying that living in the United States has had a homogenizing effect on feelings of well-being. The standard deviation of the 20 nations' GSS well-being scores is .040. Because the GSS question has three categories ranging from 1 to 3 (a range of 2), the proportion of this range spanned by a standard deviation is 2.0% (.040/2). For the WVS question, which has four categories ranging from 1 to 4 (a range of 3), the standard deviation of the well-being scores is .251, which spans 8.3% of the range in the question response categories (.251/3). Hence, the spread of the well-being scores for the American ethnic groups is only about a quarter of the spread among the nations. Apparently, the American ancestral groups have assimilated toward a common well-being score over time. The extent of the assimilation is substantially less, however, if we exclude the former communist nations from the calculations. Under this scenario, the standard deviation of the GSS scores is .039, and the standard deviation of the WVS scores falls to .134. The range of the WVS response categories spanned by a standard deviation in well-being thus falls to 4.3% (.134/3), approximately double the span of 2.0% for the GSS data (.039/2).

The homogenization of well-being among the American ethnic groups is apparent in another way also. As noted earlier, some of our GSS respondents chose a single nation when asked where their ancestors came from, and others picked more than one country before indicating to which one they felt closer. When the respondents are segmented into two groups (those who named only one nation and those who first named more than one nation), there are 14 ethnic groups that appear in both segments and that have a sample size of at least 75. The mean aggregate well-being scores for the 14 groups who named only one nation range from 2.13 to 2.31, with a standard deviation of .045. The scores for the same 14 groups that chose more than one nation before indicating which one they felt closer to ranges from 2.18 to 2.30, with a standard deviation of .036. The lower standard deviation among those respondents who initially named more than one nation suggests that their multiple ancestry pulls their well-being score toward the overall mean. In other words, multiple ancestry serves, on average, to homogenize the mean well-being scores for American ancestral groups.

THE RELATIVE IMPORTANCE OF CULTURE

The relationship in Figure 1 is certainly consistent with the ideas that culture helps determine subjective well-being and that the aspects of culture that influence well-being persist across time and space. It is possible, however, that the relationship is the result of common sociodemographic levels across the pairs of nations and ancestral groups. For instance, perhaps the contemporary Swedes and the descendants of Swedes in America are happy not

because they share a Swedish cultural heritage but because both groups are relatively well educated; that is, it might be common education levels that are driving well-being. By moving the analysis to the individual level, we are able to test for this possibility in two ways.

For the first test, we developed an individual-level ordinary least squares (OLS) regression equation with the WVS interviewees' well-being scores serving as the dependent variable. The independent variables were the aggregate-level GSS ancestral scores and a broad collection of relevant control variables. We created the GSS variable by assigning the WVS respondents the aggregate subjective well-being score for the GSS respondents who claimed to have ancestors from that nation. For instance, we gave all of the Swedes in the WVS sample a score of 2.30, which is the average well-being score for Americans of Swedish descent.

The other independent variables fall into three categories: individual-level socioeconomic variables, aggregate-level socioeconomic variables, and aggregate-level economic and political variables (see Appendix for information on the variables). The individual-level socioeconomic variables consist of the WVS interviewees' responses to five questions that represent factors frequently identified as influencing well-being: age (Diener & Suh, 1998; Herzog & Rodgers, 1981), gender (Inglehart, 1990; Micholas, 1991), education (Campbell, Converse, & Rodgers, 1976; Diener, Sandvik, Pavot, & Diener, 1993), social class (Diener et al., 1993), and marital status (Diener, Gohm, Suh, & Oishi, 2000; Glenn, 1975).

The aggregate-level socioeconomic variables consist of national-level indicators for each of the five socioeconomic factors. Age was measured as median age, gender was measured as the ratio of men over women, education was measured as the percentage of higher education aged people in school, social class was measured as the national-level mean of the responses to the WVS social class question, and marital status was measured as the annual marriage rate. The national value for each nation on each of these measures was attached to the WVS respondents from that nation. For example, the median age in Sweden is 40.1, so we attached that value to every Swedish respondent. By adding these variables to the regression model, we are testing for national-level sociodemographic effects net of any individual-level effects. This process is referred to as ecological analysis (Hofstede, Bond, & Luk, 1993).

The aggregate-level economic and political variables are three factors that commonly correlate with well-being. One is national wealth (Diener et al., 1995), which we measured as the 1990 GDP per capita of each nation. The other two variables measure political factors. We determined the commitment of national governments to basic political rights and civil liberties by combining the well-known Freedom House indices in these two areas (Karatnycky, 2002). We measured the durability of democratic institutions as the number of years that each nation has been a democracy (Inglehart, 1990, 1997). We created variables from these indicators by attaching the national value on each indicator for each nation to the WVS respondents from that nation.

Equation 1 in Table 1 displays the results of regressing the individual-level WVS well-being scores against the 14 independent variables. The *p* values indicate that even after controlling for all of the sociodemographic, economic, and political variables, the GSS well-being scores are significantly related to the WVS well-being scores. According to the standardized coefficients, only the individual-level marriage variable and the aggregate-level gender ratio variable are more strongly linked to WVS well-being than the GSS variable. These findings strongly suggest that culture is an important determinant of well-being.

For the second test, we reversed this process and generated an OLS regression equation to account for the individual-level responses to the GSS subjective well-being question. The independent variable representing the WVS well-being scores was constructed by assigning

TABLE 1
Subjective Well-Being Individual-Level Regression Models

Independent Variables	World Values Surveys (WVS)		General Social Surveys (GSS)	
	Equation 1		Equation 2	
Culture variables				
GSS well-being	1.62**	.09	—	—
WVS well-being	—	—	.08*	.03
Individual-level controls				
Age	-.00**	-.09	.00	.01
Gender	.02**	.01	.05**	.04
Education	.02**	.02	.01**	.06
Social class	.06**	.09	.13**	.14
Marital status	.23**	.17	.24**	.20
Aggregate-level controls				
Age	-.01**	-.05	.00	.01
Gender	5.37**	.21	-.01	-.00
Education	-.00**	-.07	.01	.00
Social class	-.01	-.00	-.14	-.02
Marital status	.88**	.06	.26	.01
GDP	.00*	.03	—	—
Freedoms	.12**	.09	—	—
Years democratic	-.00*	-.04	—	—
R^2	.13		.07	
N	38,781		17,527	

NOTE: For variable construction information, see Appendix. Czechoslovakia was omitted from Equation 1 because the Czech respondents were not asked the social class question. The values in the first and third columns are unstandardized regression coefficients and the values in the second and fourth columns are standardized regression coefficients.

* $p < .01$. ** $p < .001$.

the GSS respondents the WVS well-being score for the nation they claimed as their ancestral homeland. So for example, we gave all Swedish Americans the value 3.32, which is the mean WVS well-being score for Swedes.

The other independent variables consist of five individual-level sociodemographic variables and five aggregate-level sociodemographic variables. The individual-level variables are the GSS individual-level measures for age, gender, education, social class, and marital status. The five aggregate-level variables were constructed by attaching the means for each GSS ancestral group on each of the five individual-level sociodemographic questions to the respondents from that ancestral group. It was necessary to use the individual-level GSS data to build the aggregate-level variables because we were unable to locate any ancestral sociodemographic data at the aggregate level. Including the aggregate-level variables in the regression equation allows us to assess the ancestral-level sociodemographic effects net of the individual-level effects. We did not include any societal-level economic or political variables in the GSS analysis because the surveys cover only the United States, leaving no variance on these factors.

The results of regressing the individual-level GSS well-being scores against the 11 independent variables are presented in Equation 2 of Table 1. According to the p values and the standardized coefficients, the most powerful predictors of well-being are the individual-level measures for gender, education, social class, and marital status. Also significant, however, is the aggregate-level WVS well-being variable. Apparently, the ancestral background of Americans still exerts an influence on their sense of well-being.⁵

The Table 1 findings provide substantial evidence that the relationship between the WVS and GSS subjective well-being scores is not due simply to similarities in the sociodemographic status of the American ethnic groups and the contemporary populations in the 20 WVS nations. To be sure, many of the sociodemographic variables (and the economic and political variables in Equation 1) are significantly related to the well-being scores, but even after controlling for these factors, we find that culture still seems to be an influence. Thus, the pattern in Figure 1 is probably due in part to the cultural transmission of subjective well-being from past generations in the 20 nations to their contemporary relatives at home and in America. Why else, for example, would Swedish Americans have higher levels of well-being than Americans of German or Italian descent? And why would the contemporary citizens of Sweden also happen to have very high levels of well-being? The explanation would seem to be that subjective well-being has been transmitted to them from common Swedish forebears through a transgenerational socialization process.

SOCIAL NETWORKS AND THE TRANSMISSION OF WELL-BEING

The socialization agents most responsible for the transmission of subjective well-being across time and space are probably the family and other social networks. Unfortunately, the WVS and GSS do not include the types of questions necessary to put this thesis to a rigorous test. An indirect test is possible, however, using a GSS query on church attendance. If social networks, such as religious congregations, help transmit the aspects of culture that influence well-being, then the relationship between the aggregate well-being scores for the WVS nations and the corresponding American ethnic groups should be stronger for Americans who attend church regularly. Immigrants, after all, bring their religions with them. Thus, contemporary Americans who attend church should be more likely than other Americans to be embedded in social networks composed of people with whom they share a common ancestry. And these church networks, because they are based at least in part on common ancestry, may transmit the aspects of the homeland's culture that influence well-being.

To test for this possibility, we employed the GSS question that asks the following: How often do you attend religious services? There are nine response categories: 0 = *never*, 1 = *less than once a year*, 2 = *about once or twice a year*, 3 = *several times a year*, 4 = *about once a month*, 5 = *two to three times a month*, 6 = *nearly every week*, 7 = *every week*, and 8 = *several times a week*. We collapsed the nine categories into three groups consisting of those respondents who attend church less than once a year (Categories 0 and 1), once a year to nearly every week (Categories 2 to 7), and at least once a week (Categories 8 and 9). We selected these three recode categories because they resulted in almost equal sample sizes. Next, we calculated aggregate well-being scores for the 20 American ancestral groups in each of the three recoded church attendance categories. This method gives us, for example, aggregate well-being scores for American Swedes in three categories: those who attend church less than once a year, those who attend church once a year to almost every week, and those who attend church at least once a week. Nine of the 20 American ancestral groups had to be dropped from the analysis because the sample size for one or more of their three church attendance categories fell below our minimum baseline of 75. The American ancestral groups available for the analysis are the Canadians, Dutch, English, French, Germans, Irish, Italians, Mexicans, Norwegians, Poles, and Swedes.

When the aggregate well-being scores for the 11 American ancestral groups are correlated with the aggregate well-being scores for the corresponding 11 WVS nations, the results

TABLE 2
Well-Being by Church Attendance

	<i>Aggregate GSS Well-Being Scores by GSS Church Attendance</i>		
	<i>Attend Church at Least Once a Week</i>	<i>Attend Church Once a Year Attend to Almost Once a Week</i>	<i>Attend Church Less Than Once a Year</i>
Aggregate WVS well-being scores	.79 ($p < .01$)	.37 ($p < .12$)	.15 ($p < .32$)

GSS = General Social Surveys; WVS = World Values Surveys. Cell entries are z -order correlation coefficients. $N = 11$.

provide evidence that religious networks may help transmit well-being. Table 2 shows that the correlations between the WVS and GSS well-being scores are strongest for the American ancestral groups that attend church at least once a week and are weakest for the ancestral groups that attend church less than once a year. This pattern supports the notion that Americans who are embedded in religious networks are more likely than other Americans to have well-being levels similar to those of the people in their ancestral homelands. It also suggests that as Americans drift away from social networks composed primarily of people who share their ancestry, such as church congregations, the cultural bonds that transmit feelings of well-being may be weakened.

We conducted a further test of the influence of religious social networks on well-being using the GSS individual-level data. With the GSS data segmented into the three church attendance categories, we ran separate regression equations on the responses of the interviewees in each category following the same format as in Equation 2 of Table 1. The dependent variable was the individual-level GSS well-being scores, and the independent variables were the 10 sociodemographic variables and the aggregate WVS well-being scores (attached to the respondents of the corresponding American ancestral groups). We included only the respondents from the 11 American ancestral groups with more than 75 respondents in each of the three church attendance categories. Among the respondents who attend church at least once a week, the WVS variable had the third largest standardized coefficient of all of the independent variables, and it was statistically significant at the .03 level (one-tailed test). In the model for the respondents who attend church once a year to nearly every week, the WVS variable was not statistically significant. The variable was also insignificant in the model for the respondents who attend church less than once a year. These results indicate that the ancestral backgrounds of Americans who attend church at least once a week help predict their subjective well-being. Once again, it appears that religious networks, which are, presumably, often composed of people who share ancestral background, may assist in transmitting the aspects of culture that influence well-being.

The GSS measure of church attendance is certainly not the ideal question for assessing the role of social networks in the transmission of subjective well-being. The assumption that frequent churchgoers worship with people who tend to share their ancestral background is, of course, sometimes mistaken. It is also the case that many nonchurchgoers are embedded in social networks that contain many people who share their ancestral history. Problems such as these, however, should make it less likely that we will find a relationship between church attendance and well-being. Another problem with using church attendance as a measure of social networks is that it is impossible to sort out whether the relationship between

attendance and well-being is because of networks or religious doctrine. It is plausible, we suppose, that it is church dogma instead of socialization networks that transmit the aspects of culture that influence well-being. Clearly, more work needs to be done on how feelings of well-being are transferred across time and space. Nevertheless, the relationships between church attendance and well-being provide important first evidence that social networks play a role.

DISCUSSION

Scholars have demonstrated repeatedly that different cultures seem to produce people with different levels of subjective well-being. The extent to which culture influences well-being across time and space is much less clear, however. Is culture's power over feelings of well-being tenacious, persisting for generations and traveling with a people as they emigrate to faraway lands, or does it dissipate relatively quickly across generations and geography? Our analysis suggests the former. We find that the relative rankings of subjective well-being among citizens in 20 contemporary nations and among Americans with ancestors from those nations are very similar, a result implying that the aspects of culture that influence well-being have been transmitted from people who lived in these nations centuries ago to their contemporary descendants in the homeland and in America. In the words of Inglehart and Klingemann (2000), societies appear to have normal baseline levels of well-being that are culturally determined. This is not to say, of course, that the relative baseline levels of aggregate well-being are static. Cultures change, albeit slowly, and these changes should affect feelings of well-being. Still, the similarity in the pattern of the subjective well-being scores between the 20 nations and the corresponding American ancestral groups suggests that the aspects of culture that influence well-being do not give way quickly or easily. To be sure, living in America has served to lessen the differences in well-being scores across the ancestral groups, but the relative ranking of the American scores remains very similar to the relative ranking of the scores for the 20 nations.

In light of our findings, researchers examining the determinants of subjective well-being may want to explore new ways of incorporating culture into their models. As we have mentioned, culture is most often operationalized in terms of the degree to which a person or society is individualist or collectivist. Although this dimension has proven useful in accounting for different levels of well-being across diverse samples, most of our 20 nations (and the 20 American counterparts) are relatively individualist, suggesting that other aspects of culture may also be important. Determining exactly what these aspects are is a task for future research, but it may be that individualism has multiple dimensions (Oishi, 2000). Until the aspects of culture that influence subjective well-being are better understood, researchers would be wise to include ancestry in their models as a surrogate for these aspects.

Finally, we should emphasize that culture is not the only, or even primary, determinant of subjective well-being. People are not locked into a certain level of happiness because of their culture. Swedes may have relatively high aggregate well-being scores in our sample, and Austrians may have relatively low scores, but millions of Swedes have well-being scores lower than millions of Austrians. Other factors, such as family and friends, financial status, work environment, education, and national economic and political conditions, influence subjective well-being, and most of these can be influenced by the individual. Culture may provide something of a well-being baseline for people, but it is not the *solum res* influencing well-being.

APPENDIX A

VARIABLE CONSTRUCTION**WELL-BEING SCORES**

Individual-level WVS well-being scores. These scores are from the following survey question: Taking all things together, would you say you are very happy, quite happy, not very happy, or not at all happy? The response categories are coded as 1 = *not at all happy*, 2 = *not very happy*, 3 = *quite happy*, and 4 = *very happy*.

Individual-level GSS well-being scores. These scores are from the following survey question: 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? The response categories are coded as 1 = *not too happy*, 2 = *pretty happy*, and 3 = *very happy*.

Aggregate-level WVS well-being scores. These scores were calculated as the mean individual-level well-being score for each nation.

Aggregate-Level GSS well-being scores. These scores were calculated as the mean individual-level well-being score for each ancestral group.

INDIVIDUAL-LEVEL SOCIODEMOGRAPHIC VARIABLES

WVS. Age is the age of the respondents in years; gender is *men* = 1, *women* = 2; education is the age at which the respondents finished their formal education, 1 to 16 = 1, 17 to 19 = 2, 20 and older = 3; social class is the subjective social class of the respondents, 1 = *lower class*, 2 = *working class*, 3 = *lower middle class*, 4 = *upper middle class*, 5 = *upper class*; and marital status is 1 = *not currently married* and 2 = *currently married*.

GSS. Age is the age of the respondents in years; gender is *men* = 1 and *women* = 2; education is the number of years of formal education for each respondent; social class is the subjective social class of the respondents, 1 = *lower*, 2 = *working*, 3 = *middle*, and 4 = *upper*; and marital status is 1 = *not currently married* and 2 = *currently married*.

AGGREGATE-LEVEL SOCIODEMOGRAPHIC VARIABLES

WVS. Age is median age (Central Intelligence Agency, 2003); gender is the ratio of men over women (Central Intelligence Agency, 2003); education is the percentage of the college-age population enrolled in higher education (Inglehart, 1997); social class is the national-level mean of the responses to the individual-level WVS social class question; and marital status is the marriage rate (United Nations, 2000).

GSS. The GSS aggregate-level sociodemographic variables were constructed by attaching the means for each GSS ancestral group on each of the five individual-level GSS sociodemographic questions to the respondents from that ancestral group.

ECONOMIC AND POLITICAL VARIABLES

WVS. The GDP is the 1990 GDP of each nation (World Bank, 1993); freedoms is the mean of the political rights score and civil liberties score for each nation from *Freedom House 2001-2002* (data were coded so that nations with the most political rights and civil liberties received the largest score of 2, and all other nations received a lower score of 1); and years democratic is the number of years of continuous democracy since 1920 for each nation (Inglehart, 1997).

APPENDIX B
Aggregate Well-Being Scores

	<i>Well-Being Scores</i>	
	<i>WVS</i>	<i>GSS</i>
Austria	3.20	2.18
Canada	3.16	2.24
Czechoslovakia	2.76	2.23
Denmark	3.30	2.28
Great Britain	3.26	2.27
Finland	3.12	2.22
France	3.13	2.22
Germany	3.01	2.24
Hungary	2.80	2.17
Ireland	3.36	2.25
Italy	2.95	2.19
Lithuania	2.55	2.16
Mexico	3.03	2.15
The Netherlands	3.34	2.25
Norway	3.22	2.24
Poland	2.99	2.21
Russia	2.52	2.21
Spain	3.03	2.19
Sweden	3.32	2.30
Switzerland	3.32	2.23

NOTES

1. For a description of WVS, see *World Values Surveys and European Values Surveys, 1981-1984, 1990-1993, and 1995-1997* (2000).

2. For a description of GSS, see *General Social Surveys, 1972-2000: Cumulative Codebook* (2000).

3. The WVS also includes a life satisfaction question, and the responses to the question are highly correlated with the responses to the WVS happiness question. We decided to use the happiness question in this analysis because the wording is very similar to the wording of the happiness question in the GSS.

4. The WVS German aggregate well-being score is calculated using respondents from West Germany, and the Czechoslovakian score is calculated using respondents from the Czech Republic.

5. It is worth noting that Equation 2 controls for the differences in the sample sizes of the American ancestral groups. Those groups with a lot of cases, such as Americans of German descent, are weighted more heavily in the equation because more Americans have had the mean WVS German well-being value attached to them. This means that large ancestral groups exert more influence on the WVS well-being coefficient than smaller groups, effectively

weighing the relationship between the GSS individual-level dependent variable and the WVS aggregate-level independent variable by the size of the American ancestral groups.

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