



Are Happy People Ethical People? Evidence from North America and Europe

Harvey S. James, Jr.

And

Athanasios G. Chymis

Department of Agricultural Economics Working Paper No. AEWP 2004-08

July 2004

The Department of Agricultural Economics is a part of the Social Sciences Unit of the
College of Agriculture, Food and Natural Resources at the University of Missouri-Columbia
200 Mumford Hall, Columbia, MO 65211 USA
Phone: 573-882-3545 • Fax: 573-882-3958 • <http://www.ssu.missouri.edu/agecon>

Are Happy People Ethical People? Evidence from North America and Europe

Harvey S. James, Jr.
University of Missouri-Columbia
146 Mumford Hall
Columbia, MO 65211
Phone: 573-884-9682
Email: hjames@missouri.edu

Athanasios G. Chymis*
University of Missouri-Columbia
319 Mumford Hall
Columbia, MO 65211
Phone: 573-882-3862
Email: agcd4f@mizzou.edu

Department of Agricultural Economics Working Paper No. AEWB 2004-08

July 2004

Abstract: We examine empirically the relationship between happiness and the ethical decisions of individuals. We use data from the 1995-97 wave of the World Values Survey (WVS) to test the hypothesis that the relationship between happiness and ethics is bicausal in the sense that personal ethics affects one's happiness while happiness also affects ethical preferences and proclivities. We find that happiness increases in ethical proclivities and that greater happiness results in improved ethical judgments, after correcting for bicausality and controlling for income and other factors.

JEL categories: D63, D99, Z13

Keywords: Happiness, subjective well-being, ethics

* We appreciate the helpful comments of Tawni Ferrerini, Laura McCann, Joe Parcell, Farhad Rassekh, Michael Sykuta, and Yin Xia. An earlier version of this paper was presented at the 2003 meetings of the Missouri Valley Economic Association meetings. This research was supported in part by the Missouri Agricultural Experiment Station.

Are Happy People Ethical People? Evidence from North America and Europe

Introduction

Over 2000 years ago, Plato (2000) argued that people should be just and ethical because that is the only source of true and lasting happiness. That is, ethical people are happy people. The objective of this paper is to determine whether the reverse is also true: Are happy people more likely to be just and ethical than unhappy people?

Data from the 1995-97 wave of the World Values Survey (WVS) are used to test the hypothesis that the relationship between happiness and ethics is bicausal in the sense that personal ethics affects one's happiness or sense of satisfaction while satisfaction also affects ethical preferences and proclivities. The WVS contains data on individual self-reports of subjective well-being, perceptions of ethical conduct, income, and other measures of individual respondent characteristics and is therefore ideal for examining empirically the relationship between happiness and ethical values. In this study we focus on the self-reported well-being and ethical preferences of survey respondents from North America and Europe. We find that the data are consistent with the hypothesis that happiness impacts ethical proclivities in a simultaneous or bicausal framework.

This paper contributes to a growing economic literature on happiness research (see Frey and Stutzer, 2002) by examining the impact of happiness on values and behavior. This paper also contributes to the literature linking economics to moral theory and ethical behavior (see Hausman and McPherson, 1993) by answering the following question: If “the morality of economic agents influences their behavior and hence influences economic outcomes,” as Hausman and McPherson (p. 673) claim, does the causality also go the other way in that the

effect of economic outcomes, perhaps as manifested by their effects on individual happiness, feedback onto the morality of economic agents? This paper provides evidence in the affirmative. This suggests that the ethical conduct of individuals could be influenced in part through policies that improve the (perceived) personal well-being or satisfaction of members of society.

Background

Happiness Research

The terms *subjective well being* (SWB), *happiness*, and *life satisfaction* are used interchangeably in the literature (see Diener, 1984; Diener, Suh, Lucas, and Smith, 1999; Veenhoven, 1993; Easterlin, 1995; Myers, 2000; McBride, 2001; Ryan and Deci, 2001). As conventional wisdom suggests, questions such as “how happy are you?” or “what is the level of life satisfaction you have?” cannot be answered objectively, because every person quantifies in a personal way factors of life which, according to his own judgment, contribute to happiness. There is, however, a growing economic literature on the subject (see Frey and Stutzer, 2002). Although complementary, the economic approach differs somewhat from the psychological literature on SWB in that economists generally focus on material factors affecting happiness, while psychologists stress the role of personality as well as both material and immaterial factors (Easterlin, 2003). Nevertheless, in both the economic and psychological literatures, a number of factors hypothesized to affect happiness have been studied, such as income, distribution of income, relative income, health, age, gender, race, nationality, education, employment status, marital status, socioeconomic status, inflation, religion, generosity, altruism, trust, political institutions, personality and behavior, self-fulfillment, environment, and family characteristics, among others. In spite of the extensive research, it is difficult to assess direct effects because

many of these factors are interrelated and the exact flow of causation is in question. As McBride (2001, p. 255) says: “On the surface it appears a mess, and below the surface it appears even less clear.”

One of the most examined factors expected to affect happiness is income. Does money buy happiness? According to the literature, the answer is both yes and no: Yes, for income levels low enough that they cannot satisfy basic needs, but no for higher income levels (Veenhoven, 1984; Kenny, 1999; Diener, 2000; Myers, 2000; Konow and Early, 2002). Put differently, income can only explain a small part of total happiness (Frey and Stutzer, 2002). The reason is that two things seem to be important in understanding the relationship between income and happiness – relative wealth and aspirations. First, people do not necessarily take into consideration their absolute wealth but rather their wealth relative to others (Easterlin, 1995). For example, if income increases but at a lower rate than others, then research finds that overall happiness tends to decrease. Second, if aspirations increase at a higher rate than income, then that could also erode SWB (Easterlin, 2001; Stutzer, 2004). According to Easterlin (1995), this is the reason why the rise in income that occurred during the last few decades in the US, Japan, and Western Europe did not result in an increased level of happiness. It is the gap between one’s aspirations and achievements that determines happiness (Frey and Stutzer, 2002). Wilson (1967) was one of the first scholars who used the term aspirations in his examination of the correlation between income and education. He argued that people with high income and low education are often happier than people with high income and high education because those with low education exceeded their initially low educational aspirations. He also stated that modest aspirations are a key for happiness. Excessively ambitious people who never manage to close the gap between their aspirations and deeds are generally dissatisfied. For example, Hesiod, writing 400 years

before Aristotle, told his corrupted brother Perses who bribed judges in order to seize Hesiod's property, that even if he gets all his property he will still be poor because his needs are excessively high and he wants everything.

Linking Happiness and Ethics

Greek mythology teaches that the way of virtue is full of difficulty and hardship, whereas the way of vice is pleasant and worry free. For instance, when Hercules had to make the decision on which of the two paths he would follow in his life, *Virtue* and *Vice* appeared as two women and each described her path. Hercules chose to follow the path of virtue no matter the number of hardships, leaving aside the tempting path of vice. Philosophers, such as Plato and Aristotle, and religious leaders, including Christ and Buddha, taught that the way to lasting happiness is by being ethical and virtuous.

To our knowledge there have been no studies examining the direct effect of ethics on happiness. However, recent scholarship has examined the how aspects of ethical attitudes and behavior, such as altruism, relate to happiness. For instance, Margolis (1982) developed a theory of individual behavior based in part on altruism. He argued that people have two objective functions – one which satisfies self oriented preferences and one which is group oriented – and that there is a trade-off between the two functions. Similarly, Konow and Early (2002) described the “hedonistic paradox” as one in which people obtain greater happiness by helping others rather than by being self-oriented. The paradox has its roots in two basic theories that explain happiness – the hedonistic and eudaimonistic approaches (Ryan and Deci, 2001). According to the hedonistic approach, happiness is the result of avoiding pain and seeking pleasure. It is a self-oriented approach that places emphasis on the acquisition of material goods. In contrast, the

eudaimonistic approach is based on the idea that happiness arises as people function and interact within society. This approach places emphasis on non-material pursuits. Aristotle was a proponent of the eudaimonistic view. He claimed that man is a “social animal” who needs to be socialized and who must develop strong social bonds with other members of society, part of which come by helping others. He considered the supporters of the hedonistic approach to be slaves of their own desires (see Ryan and Deci, 2001). In related work, Myers (2000) argued that the need to belong is embedded in our nature as social beings. We care not only for those we love, such as close family members or close friends, but also for other members of society with whom we must live and interact.

Therefore, people who value non-material goods relatively more than material goods may prefer to sacrifice income generating activities in order to devote more time to social activities such as voluntarism, going to church, and so forth, that generate satisfaction to them. Thus, Phelps (2001) found that married altruists are happier than married non-altruists, even after controlling for income and family size. The definition of an altruist in Phelps’ framework is the one who “derives satisfaction from the well-being of the members of the family” (p.294). Similarly, voluntarism is found to be positively correlated with happiness in that people who volunteer appear to be more satisfied with their life than those who do not volunteer (Thoits and Hewitt, 2001; Meier and Stutzer, 2004). And, empirical evidence suggests that people who are intrinsically motivated, or who “define their values by themselves,” manifest greater happiness levels than those motivated only by extrinsic incentives (Frey and Stutzer, 2002, p.410).¹ Interestingly, Hesiod offered an expressive description of *Give* which contrasts with *Seize*: “Give is a good girl, but Seize is bad and she brings death. For the man who gives willingly, even

¹ This might explain why Lipford and Tollison (2003) found a negative correlation between religion and income.

though he gives a great thing, rejoices in his gift and is glad in heart; but whoever gives way to shamelessness and seizes something himself, even though it be a small thing, it freezes his heart” (Hesiod, v. 356-360).

Although these studies examine only components of ethics, the research suggests that ethics *per se* ought to affect happiness. In addition to the question of whether ethics affects happiness, we are also interested in examining whether the causality also runs from happiness to ethics. There is research suggesting that the relationship between ethics and happiness might be bicausal. For example, Myers (1993) argued that the happier someone is, the more willing he is to contribute to another’s well-being. Inglehart (1999) found that higher levels of life satisfaction increase trust among the members of society. Konow and Early (2002) found that happier persons behave much more generously than unhappy persons. And both Thoits and Hewitt (2001) and Meier and Stutzer (2004) found not only that volunteering increases happiness, but also that higher reported well-being increases the incidence of volunteerism.

Veenhoven (1984) argued that the evidence on the issue of causality is not conclusive and that further research is needed. This paper contributes to this direction. We wish to examine whether ethics affects happiness and happiness affects ethics. As Epicurus put it, “we cannot live pleasantly without living wisely, honorably, and justly; nor live wisely, honorably, and justly without living pleasantly. For the virtues have grown into one with a pleasant life, and a pleasant life is inseparable from them.”

A Recursive (Bicausal) Relationship between Happiness and Ethics

In order to establish specific hypotheses regarding the relationship between ethics and happiness, we propose that a representative agent’s time t utility or happiness is $u_t(e, m; k)$,

which is assumed to be a twice continuously differentiable function of personal ethical proclivities (e), money income (m), and other factors (k). Importantly, we assume that the agent's personal ethics can be represented along a continuum (e.g., ranging from "low" to "high"). For example, consider the case of lying. There are different types of lies and different motivations for lying that range from altruistic to individualistic to exploitive (Linskold and Water, 1983). Suppose e represents the degree of honesty chosen by the agent in a particular context, where being honest is understood to be the inverse of lying. A high e might represent the telling of no lies, while a lower e indicates the telling of altruistic lies. As e declines further the individual might be found telling individualistic lies, with very low values of e representing the telling of exploitive lies.

We are interested in determining whether ethical judgments are also a function of utility. This can be illustrated within a recursive framework so that time t ethical judgments are a function of time $t - 1$ utility.² In this case utility would be represented as $u_t(e(u_{t-1}), m; k)$.

First, will an increase in one's ethical proclivities increase or decrease one's happiness (i.e., what is the sign of $\partial u_t / \partial e$)? The discussion above suggests that utility increases when people behave ethically, such as when they are altruistic or volunteer regularly. However, these studies did not examine the direct effect of ethics on happiness, only components of ethics. We are interested in whether, and how, ethics impacts happiness empirically. Thus, we propose the null hypothesis that *ethics has no effect on happiness, other things being equal*. Our alternative hypothesis is that happiness increases in ethics.

² For an example of a recursive model in which past happiness affects current behavior, see Hermalin and Isen (1999).

Second, does an increase in money increase or decrease utility (i.e., what is the sign of $\partial u_t / \partial m$)? According to economic theory, an increase in income will result in an increase in happiness. However, as discussed above, the empirical evidence is weak. Although an examination of the relationship between income and happiness is not the principal objective of this paper, we control for the effect of income on happiness. Therefore, we propose the null hypothesis that *income has no effect on happiness, other things being equal*, with the alternative hypothesis that income increases happiness.³

Third, is the relationship between utility and ethics bicausal (e.g., recursive), in the sense that ethical judgments affect happiness and happiness affects ethics (i.e., what is the sign of $\partial e / \partial u_{t-1}$)? We are interested in exploring empirically the issue of whether, and how, happiness affects ethics. Following Meier and Stutzer (2004), happiness can affect ethical proclivities in one of two ways: Happiness could lower the marginal costs of behaving ethically, or it could increase the marginal benefit of behaving ethically. Although we present no formal theoretical model of how happiness affects ethics, the discussion above suggests that we should find not only that ethics affects happiness but also that happiness affects ethics. Thus, we propose the null hypothesis that *happiness has no effect on ethics, other things being equal*. Our alternative hypothesis is that happiness increases one's ethical proclivities, as expected, other things being equal.

³ There is a growing literature suggesting that the relationship between income and happiness is bicausal (see Diener, 1999) in that causality could run from happiness to income (Kenny, 1999). Nevertheless, because our interest is in the causal relationship between ethics and happiness, we will not directly address the income-happiness causality problem but control only for the effect of income on happiness.

Fourth, if the utility function is well-behaved,⁴ then isoutility or indifference curves in ethics and money space (i.e., with ethics on one axis and money income on the other) will be convex to the origin. This implies that an increase in income will be associated with a decrease in ethical judgments when utility or happiness is held constant. Therefore, we are interested in determining how ethics is affected by income when holding utility or happiness constant. We propose the null hypothesis that *income has no effect on ethics, holding happiness and other factors constant*, with the alternative hypothesis that income and ethics are inversely correlated.

Data and Empirical Methods

We examine the empirical relationship between personal ethics and happiness using data from the third (1995-97) wave of the World Values Survey (WVS).⁵ The WVS is a compilation of over 60 surveys conducted in more than 50 countries around the world. The surveys involved face-to-face interviews with adult citizens ages 18 and older, and they were conducted in the respondent's native language. According to the research team responsible for designing and administering the world-wide surveys, interview subjects were selected randomly "from all administrative regional units after stratification by region and degree of urbanization" (Inglehart et al, 2000, p. 7). This analysis will focus only on a sample drawn from North America and Europe. The reason for limiting the empirical analysis to these regions of the world is that North America and Europe possess a relatively common Judeo-Christian heritage and have reasonably

⁴ The utility function is well-behaved if $\partial u_i / \partial e > 0$ and $\partial u_i / \partial m > 0$ imply that $\partial^2 u_i / \partial e^2 < 0$ and $\partial^2 u_i / \partial m^2 < 0$ so that indifference curves are convex to the origin.

⁵ See Inglehart et al (2000) for a description of the WVS.

well-developed economic structures and systems of government. This is necessary in order to control for variations in the development of social norms and ethical standards across different societies. The sample consists of approximately 11,000 total observations with the following characteristics: roughly 49 percent of respondents were male, 47 percent were employed, 11 percent had completed a college education, 56 percent were married, and the average respondent was between 35 and 44 years of age. During the interviews, respondents were asked questions regarding their personal finances, familial and social relationships, and opinions on politics, the economy, and various religious, social and moral topics. Respondents were also asked to give their opinions on a variety of ethical scenarios and to evaluate their subjective well-being or happiness. According to Frey and Stutzer (2002, p. 403), “reported subjective well-being is a satisfactory empirical approximation of individual utility.” Therefore, the data provided by the WVS can provide an adequate basis for determining whether happiness affects ethical preferences as modeled above.

In order to examine the joint effects of happiness and ethics, we estimate the following system of equations:

$$Happiness = \alpha_0 + \alpha_1 Ethics + \alpha_2 Income + \alpha_k OtherFactors + \varepsilon$$

$$Ethics = \beta_0 + \beta_1 Happiness + \beta_2 Income + \beta_k OtherFactors + \varepsilon$$

In this model, *Ethics* is constructed from answers provided by respondents to statements describing five hypothetical ethical scenarios. Specifically, respondents were asked, “Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between.” The following statements were then presented to the respondents:

- “Claiming government benefits to which you are not entitled.”
- “Avoiding a fare on public transport.”
- “Cheating on taxes if you have a chance.”
- “Buying something you knew was stolen.”
- “Someone accepting a bribe in the course of their duties.”

Respondents were asked how they would rank each statement, using a scale ranging from one to ten, where one indicated “never justifiable” and ten indicated “always justifiable.” The scores from each of the five questions were summed together and then subtracted from 55 so as to create the variable *Ethics*, which ranged from a low of five to a high of 50. We assume that the higher the value of *Ethics*, the greater are the ethical proclivities of the respondent.⁶

Two measures of subjective happiness are provided in the WVS data and are used as proxies for *Happiness*. The first (which we refer to as “*how happy*”) is derived from the following question: “Taking all things together, would you say you are ...” very happy, quite happy, not very happy, or not at all happy? The second (which we refer to as “*how satisfied*”) is based on the question: “All things considered, how satisfied are you with your life as a whole these days?” For this question the respondent was asked to indicate on a scale of one to ten, with

⁶ This measure of ethics, in which a low score indicates a low ethical proclivity and a high score represents a high ethical proclivity, and which is obtained from summing scores from multiple evaluative ethical criteria, is not unlike the “semantic differential” introduced by Osgood, Suci, and Tannenbaum (1957), who argued that an objective measurement of an attitude could be obtained by summing the scores from multiple polarized continua. For instance, a listener’s attitude toward a speaker could be obtained by asking him to rate on a seven point scale how the speaker fared among a variety of criteria, such as harmful-beneficial, negative-positive, and unfair-fair, and by adding those rankings together.

one representing “dissatisfied” and ten representing “satisfied,” how satisfied he felt. Both measures of happiness were used in the analysis in order to test for consistency of responses and robustness of the empirical findings. Summary statistics for these and other variables used in the study are provided in Table 1.

We control for income as well as other factors expected to impact the relationship between happiness and ethics. *Income* is proxied by the self-reports of respondents indicating where their household income falls within a ten-point scale of national average household income (i.e., which decile household income falls in), such that a one indicates the first or lowest decile and a ten represents the tenth or highest decile. Other control factors include: whether respondents feel they have free choice and control over their lives, the respondent’s current marital status, the gender of the respondent, the respondent’s age, the respondent’s assessment of their health, the amount of education obtained by the respondent, the respondent’s religious beliefs, and his nationality.

Research indicates that freedom and happiness are positively correlated (Frey and Stutzer, 2002) because people value the ability to exercise control in their lives. Additionally, the question of how happiness and ethics are related presumes that people are *capable* of making decisions, ethical otherwise. Therefore, we control for the extent to which respondents believe they have freedom of choice in their lives in both the *Happiness* and *Ethics* equations. This variable ranges from a low of one to a high of ten and represents the respondent’s assessment of the degree of freedom of choice and control he has over the way his life turns out.

Marriage has been found to affect happiness in a significant and positive way (Wilson, 1967; Diener, 1984; Diener, Suh, Lucas, and Smith, 1999; Easterlin 2003). Moreover, we expect that people who are married will have a different outlook on life than those who are not, thus

affecting the degree to which they might be willing to engage in unethical conduct. Therefore, we control for the marital status of respondents in both equations with a dummy variable that takes on the value of one if the respondent was married at the time of the survey interview, zero otherwise.

We also control for respondent gender and age in the *Ethics* and *Happiness* equations. Research indicates that older rather than younger, and female rather than male, individuals have higher ethical sensitivities (Collins, 2000). Therefore, we expect gender and age to be significantly correlated with ethics. Whether gender and age are related to happiness is more controversial, however. While some psychologists argue that women are more inclined to depression than men, they also exhibit higher levels of positive affect; so on average there might not be a significant difference in the level of happiness between men and women (Diener, Suh, Lucas, and Smith, 1999). With respect to age, Diener, Suh, Lucas, and Smith (1999, p. 291) argued that “life satisfaction does not decline with age.” We control for gender with a dummy variable that takes on the value of one if the respondent was male and zero if the respondent was female. We control for the age by a variable that identifies the age of the respondent within one of six specified age group categories (see Table 1 for specific classification).

In order to ensure the model is identified, we include variables for health and education in the *Happiness* equation only and respondent religious beliefs and nationality in the *Ethics* equation only. Wilson argued that a happy person is a healthy person (Wilson, 1967) and van Praag, Frijters, and Ferrer-i-Carbonell (2003) found that health is strongly correlated with happiness. However, Diener and Lucas (2000) explained that much empirical research has shown weak or even no correlation between health and happiness because subjective assessments of health are often correlated with happiness, but objective measures of health are not. We

control for the health of respondents in the *Happiness* equation with a variable that ranges from one to five and represents the respondent's self-assessment of his health, with one being low and five being high. The effect of education on happiness has been examined empirically, although some researchers find only a weak effect (see Diener, 1984; Diener, Suh, Lucas, and Smith, 1999; Veenhoven, 1984). Nevertheless, we control for the educational level of respondents in the *Happiness* equation by including a dummy variable that equals one if the respondent obtained at least some university-level schooling.

Individuals who believe in God and Hell might believe that ethical behavior would ultimately be rewarded while unethical behavior would be punished. Indeed, research indicates that religious people have greater ethical sensitivities than non-religious people (Conroy and Emerson, 2004; see also Collins, 2000). Therefore, we control for the religious beliefs of respondents in the *Ethics* equation with a dummy variable which takes the value of one if the respondent believes both in God and Hell, zero otherwise. Finally, research suggests that nationality plays an important role in the ethical tendencies and preference of individuals, with Americans showing greater ethical sensitivities than other nationalities (see Collins, 2000). Therefore, we control for the nationality of respondents in the *Ethics* equation by including a dummy variable that takes on the value of one if the respondent is from the United States and Canada and zero if the respondent is from a European nation.

Because the *how happy*, *how satisfied*, *Income decile*, and variables representing perceptions of freedom of choice and respondent health are ordinal rather than cardinal, we employ the transformation procedure outlined by Terza (1987) to replace each discrete category

value (e.g., 1 through J) with a number when estimating the joint system of equations.⁷ If d_j (where $j = 1, \dots, J$) is the discrete category value for variable D , then d_j is replaced with $\hat{d}_j = [n_{j-1}(\delta_{j-1}) - n_j(\delta_j)] / p_j$, where n is the probability density function of the standard normal distribution evaluated at δ_j , p_j is the percentage of the sample observed in category j , and δ_j is calculated as follows: First, let

$$N(d_1) = p_1$$

$$N(d_2) = p_1 + p_2$$

...

$$N(d_{j-1}) = p_1 + p_2 + \dots + p_{j-1}.$$

Then,

$$\delta_j = N^{-1}\left(\sum_{i=1}^j p_i\right), (j = 1, \dots, J-1),$$

where N^{-1} is the inverse of the standard normal cumulative distribution function, and $\delta_0 = -\infty$ and $\delta_j = +\infty$.⁸

Results

We report the results of our empirical examination of the *Happiness* and *Ethics* equations in Tables 2 and 3, using single-equation as well as two-stage and three-stage least squares

⁷ See van Praag, B.M.S., P. Frijters, and A. Ferrer-i-Carbonell (2003) for a related discussion.

⁸ Summary statistics on the transformed variables are as follows: for *How happy*, mean=0.267, S.D.=0.773; for *How satisfied*, mean=0.362, S.D.=0.766; for *Income decile*, mean=0.154, S.D.=0.907; for the freedom of choice variable, mean=0.211, S.D.=0.807; and for the health variable, mean=0.303, S.D.=0.909.

simultaneous equation estimation procedures. Table 2 shows results for respondent self-reports of “how happy” they are as a proxy for happiness, and Table 3 shows results for self-reports of “how satisfied” as the proxy. Both tables show that ethics is a significant factor affecting happiness and that happiness is a significant factor affecting ethics. Indeed, the simultaneous equation estimation provides strong evidence that happiness and ethics are related in a bicausal relationship, in that ethics increases happiness and happiness improves ethical proclivities. We note that while ethics and happiness appear to be bicausally related, our analysis shows that the explanatory power of the *Happiness* and *Ethics* models is not particularly strong. In the three stage least squares analysis, approximately 17 percent of the variation in the “how happy” variable and respondent ethics is explained jointly by the proposed factors, while 21 percent of the variation in the “how satisfied” variable and ethics analysis is explained by the included variables. Although this is consistent with other studies examining correlates of happiness (see Diener and Lucas, 2000), it suggests that in reality the relationship between subjective well-being and ethical tendencies is more complex than how it is modeled here.

We first consider the evidence presented in Table 2. The table shows that the impact of ethics on happiness and happiness on ethics is improved under the simultaneous equation estimation procedures. This supports our contention that happiness and ethics are bicausally related. For instance, in the single equation model, a one standard deviation increase in the ethics variable increases happiness (as measured by the “how happy” variable) by 0.025, while in the three stage least squares model, a one standard deviation increase in ethics increases happiness by 0.509, or nearly two-thirds of a standard deviation of happiness, other things being equal. Because ethics is positively and significantly correlated with the happiness, we can reject the first null hypothesis that ethics has no impact on happiness.

Our analysis also provides evidence that happiness is increased as income increases, although the effect is small. A one standard deviation increase in self-reported income decile results in an increase in happiness by 0.060, which is less than one-tenth of a standard deviation improvement in happiness. Thus, we are able to reject the second null hypothesis. However, we conjecture that the weak effect of income on happiness is a manifestation of the fact that relative income and aspirations are more important determinants of happiness than the absolute level of income, as discussed above.

The effect of happiness on ethics is positive and significant, thus leading us to reject the third null hypothesis. Specifically, a one standard deviation increase in happiness increases the ethical proclivities measure by 3.414, which corresponds to approximately a one-half standard deviation improvement in ethical proclivities, other things being equal. Moreover, the impact of happiness on ethics is the strongest effect of all of the variables in the *Ethics* equation (from the three stage least squares procedure), when compared to a one standard deviation increase in each variable. Thus, subjective well-being appears to be a particularly important determinant of ethical proclivities.

Interestingly, income is negatively correlated with ethics, although the effect is small. A one standard deviation increase in the income decile of respondents reduces the value of the ethics variable by 0.185, which translates into a mere three percentage point standard deviation reduction in ethical proclivities. Even though the effect of income is small it is significant; thus, we can reject the fourth null hypothesis that says income and ethics are not related. Moreover, the fact that an increase in income reduces ethics, in combination with evidence that income and ethics are positively correlated with happiness, suggest that indifference curves in ethics and income space are indeed convex. This is important, as it supports the idea that ethics and money

can be modeled using standard economic models of utility. It is also evidence that individuals seem to be willing to trade-off income and ethics, other things being equal.

These findings are supported by the evidence presented in Table 3, in which self-reports of “how satisfied” respondents are used as a proxy for happiness. In particular, we find that the simultaneous estimation procedures confirm that happiness and ethics are bicausally related. Examining the *Happiness* and *Ethics* equations from the three stage least squares estimation procedure, we find that happiness is increased in ethics, happiness is increased in income, ethics is increased in happiness, and income is negatively correlated with ethics, other things being equal, thus leading us to reject each of the four null hypotheses. For example, a one standard deviation increase in the ethics variable increases happiness (as measured by the “how satisfied” variable) by 0.356, which is slightly less than one-half a standard deviation improvement in happiness. Furthermore, a one standard deviation increase in happiness increases ethical proclivities by nearly three-fifths of a standard deviation. As in Table 2, we find that the effect of happiness on ethics is the strongest of all the variables in the *Ethics* model, in comparison to a one standard deviation increase in each variable.

Examining the other variables included in our analysis, we find that increases in the respondent’s assessments of personal freedom and control in life significantly improves happiness as proxied by both the “how happy” and “how satisfied” measures, but it does not have a significant effect on ethical proclivities. We also find that marriage is positively correlated with both happiness and ethics, while males are significantly less happy and have lower ethical proclivities than females, other things being equal. Finally, age is positively correlated with happiness and ethics, although it is statistically not significant for the *Happiness* equation in which “how happy” is used as a proxy for happiness.

Considering the variables unique to the *Happiness* equation, we find that individuals with higher self-assessed levels of health are, on average, happier than those who assess their health as relatively poor. For example, a one standard deviation increased in perceived health increases happiness by slightly less than one-third a standard deviation. Education, however, is negatively correlated with happiness, although it is significant only when the “how satisfied” measure is used as a proxy for happiness. For the variables unique to the *Ethics* equation, we find that individuals who have a belief in God and Hell express higher ethical proclivities than those who do not believe in God and Hell. We also find that respondents from North America have higher ethical proclivities than respondents from Europe, other things being equal.

Conclusions

The idea that happiness and ethics are related is not a new one, because philosophers and religious leaders have argued for at least two millennia that happiness is improved when individuals behave ethically. Nevertheless, this paper provides empirical evidence that ethics affects happiness. Importantly, this paper shows that the reverse is also true: Happiness impacts ethics. Hence, improved ethical proclivities increase one’s satisfaction with life, which in turn increases the propensity for positive ethical attitudes and conduct.

How important is happiness as a factor influencing ethical judgments? The empirical evidence suggests that improvements in ethical judgments could be obtained by improving the perceived well-being of people, although other factors, such as individual characteristics and environmental factors, are also germane. An important question that remains involves an understanding of the tradeoffs that exist among the various factors influencing ethical behavior. How happy must a person be in order to counter the negative influences of culture or

environmental surroundings on ethical behavior? An additional question concerns how the impact of happiness on ethics varies across societies with dramatically different cultures and social norms. Is the expected improvement in ethical behavior resulting from an increase in self-reported happiness of U.S. citizens the same for citizens of, say, South Africa or Bangladesh? These and other questions probing the causes of unethical behavior must continue to be explored within the social sciences.

References

- Collins, D., "The Quest to Improve the Human Condition: The First 1,500 Articles Published in the *Journal of Business Ethics*," *Journal of Business Ethics*, 26(1), 2000, pp. 1-73.
- Conroy, S.J., and T.L.N. Emerson, "Business Ethics and Religion: Religiosity as a Predictor of Ethical Awareness among Students," *Journal of Business Ethics*, 50(4), 2004, 383-396.
- Diener, E., "Subjective Well-being," *Psychological Bulletin*, 95(3), 1984, pp. 542-575.
- Diener, E., "Subjective Well-being: The Science of Happiness and a Proposal for a National Index," *American Psychologist*, 55(1), 2000, pp. 34-43.
- Diener, E., and R.E. Lucas, "Subjective Emotional Well-being," in M. Lewis and J.M. Haviland (eds.), *Handbook of Emotions*, 2/e, New York, NY: Guilford, 2000, pp. 325-337.
- Diener, E., E.M. Suh, R.E. Lucas, and H.L. Smith, "Subjective Well-being: Three Decades of Progress," *Psychological Bulletin*, 125(2), 1999, pp. 276-302.
- Easterlin, R., "Will Raising the Incomes of all Increase the Happiness of All?" *Journal of Economic Behavior and Organization*, 27(1), 1995, pp. 35-47.
- Easterlin, R., "Income and Happiness: Toward a Unified Theory," *Economic Journal*, 111(473), 2001, pp. 465-484.
- Easterlin, R., "Building a Better Theory of Well-being," Institute for the Study of Labor (IZA) in Bonn discussion paper No. 742, 2003, available on line at <ftp://ftp.iza.org/dps/dp742.pdf>, downloaded May 5, 2004.
- Epicurus, "Letter to Menoeceus," available online at <http://www.epicurus.net/menoeceus.html>, downloaded March 5, 2004.
- Frey, B.S., and A. Stutzer, "What Can Economists Learn from Happiness Research?" *Journal of Economic Literature*, 40(June), 2002, pp. 402-435.

- Hausman, D.M., and M.S. McPherson, "Taking Ethics Seriously: Economics and Contemporary Moral Philosophy," *Journal of Economic Literature*, 31(2), 1993, pp. 671-731.
- Hermalin, B.E., and A.M. Isen, "The Effect of Affect on Economic and Strategic Decision-Making," University of California-Berkeley Department of Economics working paper No. E99-270, 1999, available online at <http://iber.berkeley.edu/wps/econ/E99-270.pdf>, downloaded November 19, 2002.
- Hesiod, "Works and Days," available online at <http://sunsite.berkeley.edu/OMACL/Hesiod/works.html>, downloaded May 5, 2004.
- Inglehart, R., "Trust, Well-being and Democracy," in M. Warren (ed.), *Democracy and Trust*, Cambridge: Cambridge University Press, 1999, pp. 88-120.
- Inglehart, R., et al., World Values Surveys and European Values Surveys, 1981-1984, 1990-1993, and 1995-1997 [Computer file], ICPSR version, Ann Arbor, MI: Institute for Social Research [producer], 1999; Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2000.
- Kenny, C., "Does Growth Cause Happiness, or Does Happiness Cause Growth?" *Kyklos*, 52, 1999, 3-26.
- Konow, J., and J. Early, "The Hedonistic Paradox: Is Homo Economicus Happier?" Loyola Marymount University, Department of Economics working paper, 2002, available on line at <http://psych.lmu.edu/faculty/JKonow/Hedonistic%20Paradox.pdf>.
- Linskold, S., and P.S. Walters, "Categories for Acceptability of Lies," *Journal of Social Psychology*, 120, 1983, pp. 129-136.
- Lipford, J., and R. Tollison, "Religious Participation and Income," *Journal of Economic Behavior and Organization*, 51, 2003, pp. 249-260.

- Margolis, H., *Selfishness, Altruism and Rationality: A Theory of Social Choice*, Cambridge: Cambridge University Press, 1982.
- McBride, M., “Relative-income Effects on Subjective Well-being in the Cross-section,” *Journal of Economic Behavior and Organization*, 45, 2001, pp. 251-278.
- Meier, S., and A. Stutzer, “Is Volunteering Rewarding in Itself? Evidence from a Natural Experiment,” Institute for the Study of Labor (IZA) in Bonn discussion paper No. 1045, 2004, available online at <ftp://ftp.iza.org/dps/dp1045.pdf>, downloaded May 3, 2004.
- Myers, D.G., *The Pursuit of Happiness: Who is Happy and Why?* New York: Avon, 1993.
- Myers, D. G., “The Funds, Friends and Faith of Happy People,” *American Psychologist*, 55(1), 2000, pp. 56-67.
- Osgood, C.E., G.J. Suci, and P.H. Tannenbaum, *The Measurement of Meaning*, Urbana, IL: University of Illinois Press, 1957.
- Phelps, C., “A Clue to the Paradox of Happiness,” *Journal of Economic Behavior and Organization*, 45, 2001, pp. 293-300.
- Plato, *The Republic*, translated by T. Griffith, Cambridge, UK: Cambridge University Press, 2000.
- Ryan, R.M., and E.L. Deci, “On Happiness and Human Potentials: A Review on Research on Hedonic and Eudaimonic Well-being,” *Annual Review of Psychology*, 52, 2001, pp. 141-166.
- Stutzer, A., “The Role of Income Aspirations in Individual Happiness,” *Journal of Economic Behavior and Organization*, 54(1), 2004, 89-109.
- Terza, J.V., “Estimating Linear Models with Ordinal Qualitative Regressors,” *Journal of Econometrics*, 34(3), 1987, pp. 275-291.

- Thoits, Peggy A., and Lyndi N. Hewitt, "Volunteer Work and Well-being," *Journal of Health and Social Behavior*, 42(2), 2001, pp. 115-131.
- van Praag, B.M.S., P. Frijters, and A. Ferrer-i-Carbonell, "The Anatomy of Subjective Well-being," *Journal of Economic Behavior and Organization*, 51, 2003, pp. 29-49.
- Veenhoven, R., "Bibliography of Happiness: 2473 Contemporary Studies on Subjective Appreciation of Life," RISBO, Studies in Sociale en Culturele Verandering nr. 1, Rotterdam, 1993.
- Veenhoven, R., *Conditions of Happiness*, Dordrecht, Holland: D. Reidel Publishing Company, 1984.
- Wilson, W., "Correlates of Avowed Happiness," *Psychological Bulletin*, 67(4), 1967, pp. 294-306.

Table 1. Variable names, definitions, and summary statistics, with the corresponding World Values Survey question number identified in brackets.

Variable	Definition	Mean	S.D.
Ethics	Variable ranging from 5 to 50 comprised of the sum of rankings of “never justifiable”=1 to “always justifiable”=10 indicated by respondents to five ethical scenarios, subtracted from 55. [V192-V196]	45.558	6.365
How happy (happiness proxy)	Variable ranging from 1 to 4 based on the question: “Taking all things together, would you say you are ...” very happy, quite happy, not very happy, or not at all happy? Responses are coded as follows: “not at all happy”=1, “not very happy”=2, “quite happy”=3, and “very happy”=4. [V10]	3.209	0.623
How satisfied (happiness proxy)	Variable ranging from 1 to 10 based on the question: “All things considered, how satisfied are you with your life as a whole these days?” with 1 being dissatisfied and 10 being satisfied. [V65]	7.437	1.943
Income decile	Variable representing respondent’s self report of household income, selected from a scale of incomes divided into deciles, with lowest income=1 and highest income=10. [V227]	5.007	2.593
Perceived freedom of choice	Variable ranging from 1 to 10 indicated respondent’s assessment of the degree of freedom of choice and control they have over the way their life turns out, where 1 indicates “none at all” and 10 represents “a great deal.” [V66]	7.194	2.017
Married	Dummy variable equal to 1 if the respondent was currently married; zero otherwise. [V89]	0.559	0.497
Male	Dummy variable equal to 1 if the respondent was a male; zero otherwise. [V214]	0.485	0.500
Respondent age group	Variable identifying the age group of the respondent, where ages 18-24=1, 25-34=2, 35-44=3, 45-54=4, 55-64=5, and 65 and older=6. [AGEGROUP]	3.418	1.643
Assessed health	Variable ranging from 1 to 5 representing respondent’s assessment of their health, with “very good”=5, “good”=4, “fair”=3, “poor”=2, and “very poor”=1. [V11]	3.976	0.876
Educated	Dummy variable equal to 1 if the respondent obtained at least some university-level schooling; zero otherwise. [V217]	0.164	0.370
Believe in God and Hell	Dummy variable equal to 1 if the respondent indicated affirmatively that he believed in God and hell; zero otherwise. [V183 and V187]	0.281	0.449
North American	Dummy variable equal to 1 if the respondent was from the USA or Canada; zero otherwise (i.e., if the respondent was from France, Britain, West Germany, Italy, the Netherlands, Denmark, Norway, Sweden, Iceland, Finland, Belgium, Spain, Ireland, Northern Ireland, Switzerland, Portugal, Austria, or Andalusia). [V2]	0.140	0.347

Table 2. Empirical results for *happiness* and *ethics* models in which “How happy” is a proxy for happiness.

Variable	<u>Single-equation OLS</u> Coefficients (t-statistic)		<u>2SLS</u> Coefficients (t-statistic)		<u>3SLS</u> Coefficients (t-statistic)	
	<i>Happiness</i>	<i>Ethics</i>	<i>Happiness</i>	<i>Ethics</i>	<i>Happiness</i>	<i>Ethics</i>
Ethics	0.004* (3.33)		0.049* (5.83)		0.080* (12.04)	
How happy		0.321* (3.50)		3.791* (6.28)		4.416* (9.27)
Income decile	0.069* (7.16)	-0.240* (-2.95)	0.070* (6.71)	-0.226* (-2.55)	0.066* (6.53)	-0.330* (-3.80)
Assessed freedom of choice	0.179* (18.07)	0.153 (1.79)	0.176* (16.48)	0.164 (1.79)	0.170* (16.00)	0.127 (1.39)
Married	0.205* (11.87)	1.506* (10.23)	0.201* (10.79)	1.522* (9.52)	0.194* (10.46)	1.536* (9.63)
Male	-0.033* (-2.12)	-0.984* (-7.37)	-0.036* (-2.11)	-1.013* (-6.93)	-0.035* (-2.08)	-0.993* (-6.80)
Respondent agegroup	0.003 (0.56)	0.847* (19.57)	0.006 (1.00)	0.840* (17.78)	0.009 (1.59)	0.809* (17.19)
Assessed health	0.223* (24.02)		0.222* (22.20)		0.247* (34.60)	
Educated	-0.024 (-1.14)		-0.019 (-0.85)		-0.017 (-1.06)	
Believe in God and Hell		0.953* (6.14)		0.955* (5.62)		1.155* (9.54)
North American		1.228* (6.08)		1.090* (4.90)		2.044* (12.75)
Constant	-0.142 (-2.43)	41.686* (231.64)	-2.198* (-5.72)	40.755* (161.98)	-3.627* (-11.94)	40.472* (175.21)
Adj R ²	0.160	0.105	0.143	0.092	0.169	
F-statistic (prob)	193.65 (<.0001)	118.77 (<.0001)	169.32 (<.0001)	102.76 (<.0001)		

* significant at the 5% level or better in two-tailed tests

Table 3. Empirical results for *happiness* and *ethics* models in which “How satisfied” is a proxy for happiness.

Variable	<u>Single-equation OLS</u> Coefficients (t-statistic)		<u>2SLS</u> Coefficients (t-statistic)		<u>3SLS</u> Coefficients (t-statistic)	
	<i>Happiness</i>	<i>Ethics</i>	<i>Happiness</i>	<i>Ethics</i>	<i>Happiness</i>	<i>Ethics</i>
Ethics	0.004* (3.46)		0.029* (3.82)		0.056* (8.56)	
How satisfied		0.471* (4.83)		4.047* (5.69)		4.919* (8.03)
Income decile	0.080* (8.88)	-0.274* (-3.36)	0.080* (8.65)	-0.235* (-2.63)	0.075* (8.26)	-0.204* (-2.31)
Assessed freedom of choice	0.355* (38.35)	0.044 (0.48)	0.354* (37.12)	0.176 (1.90)	0.349* (36.73)	0.173 (1.87)
Married	0.085* (5.24)	1.556* (10.65)	0.085* (5.12)	1.556* (9.67)	0.080* (4.84)	1.537* (9.56)
Male	-0.047* (-3.18)	-0.985* (-7.37)	-0.050* (-3.33)	-1.029* (-6.99)	-0.050* (-3.33)	-1.038* (-7.06)
Respondent agegroup	0.039* (7.71)	0.832* (19.27)	0.042* (8.32)	0.842* (17.70)	0.045* (8.96)	0.852* (17.95)
Assessed health	0.204* (23.54)		0.204* (22.94)		0.224* (30.91)	
Educated	-0.060* (-3.05)		-0.056* (-2.78)		-0.038* (-2.27)	
Believe in God and Hell		0.981* (6.32)		0.975* (5.69)		0.957* (6.87)
North American		1.293* (6.42)		1.090* (4.86)		0.724* (3.94)
Constant	-0.118* (-2.16)	41.624* (230.95)	-1.258* (-3.65)	40.270* (124.88)	-2.498* (-8.41)	39.985* (135.65)
Adj R ²	0.254	0.106	0.243	0.090	0.212	
F-statistic	344.73	121.44	326.18	101.61		
(prob)	(<.0001)	(<.0001)	(<.0001)	(<.0001)		

* significant at the 5% level or better in two-tailed tests