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# Happy Peasants and Frustrated Achievers? Agency, Capabilities, and Subjective Well-being

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## Abstract

We explore the relationship between agency and hedonic and evaluative dimensions of well-being, using data from the Gallup World Poll. We posit that individuals emphasize one well-being dimension over the other, depending on their agency. We test four hypotheses including whether: (i) positive levels of well-being in one dimension coexist with negative ones in another; and (ii) individuals place a different value on agency depending on their positions in the well-being and income distributions. We find that: (i) agency is more important to the evaluative well-being of respondents with more means; (ii) negative levels of hedonic well-being coexist with positive levels of evaluative well-being as people acquire agency; and (iii) both income and agency are less important to well-being at highest levels of the well-being distribution. We hope to contribute insight into one of the most complex and important components of well-being, namely, people's capacity to pursue fulfilling lives.

*Keywords:* agency, capabilities, subjective well-being

## INTRODUCTION

Well-being comprises both income and non-income dimensions and, as such, is more complex to measure than income-based constructs such as Gross Domestic Product (GDP).<sup>1</sup> Yet, precisely because it is a multi-dimensional concept, defining and measuring the distinct elements of well-being can broaden and deepen our understanding of the human condition. For example, a fundamental dimension of well-being, which is the focus of this paper, is the capacity that individuals have to exercise choice and pursue fulfilling lives. This paper aims to contribute to our understanding of how to conceptualize and measure this capacity, as well as understand empirically how it mediates the dimension of well-being that individuals emphasize when they think about their lives as a whole.

What was, until a few years ago, a nascent collaboration between economists and psychologists studying the economics of happiness, has become a new “science” of well-being. Scholars have developed the metrics to validly and reliably assess the well-being effects of a range of phenomena, from smoking, exercising, and commuting time to socio-demographics such as age and marriage to macroeconomic and institutional arrangements, such as inflation and inequality (Alesina, et al., 2004; Blanchflower and Oswald, 2004). In addition, a smaller body of newer research is also attempting to assess the well-being's causal properties, and finds that higher levels of well-being are associated with better health and earnings capacities, among other things (de Neve and Oswald, 2012; Diener et al., 1999; Graham et al., 2004).

Despite this wealth of studies, we still have a relatively limited understanding of how to assess human well-being as related to the capacity to live a fulfilling life. In our view, better understanding that phenomenon, which is the aim of this study, may be one of the most important contributions that well-being metrics can make. In this paper, we build on previous work related to the process of acquiring

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<sup>1</sup> That said, there are plenty of complexities in the measurement of GDP and other national accounts. For a summary, see Deaton (2005).

agency<sup>2</sup> and its impact on well-being, as well as on scholarship suggesting that the well-being dimension which individuals emphasize (i.e., *hedonic or evaluative* as defined below) is mediated by their capacity to control their own lives.

Previous empirical research on happiness and capabilities has already established that various capabilities and functionings<sup>3</sup> are correlated with subjective well-being (Anand et al., 2009; Anand, Hunter, & Smith, 2005; Anand, Krishnakumar, & Tran, 2011; Anand & van Hees, 2006; Van Ootegem & Spillemaeckers, 2010; Veenhoven, 2010). In addition, several studies look at the link between agency and well-being (i.e., agency as a dimension of well-being) (Alkire, 2005) and the link between freedom of choice and well-being (Veenhoven, 2000; Verme, 2009).

Furthermore, recent research shows that there are two distinct, albeit related, dimensions of well-being (Diener, 2012; Graham, 2011; Kahneman and Krueger, 2006, among others). First, *evaluative well-being* metrics capture how people think about and evaluate their lives as a whole – such as through general life satisfaction questions – and reflect a global view. This well-being dimension, roughly categorized as “Aristotelian” (by rogue economists such as ourselves stepping into philosophers’ territory), encompasses eudemonic concepts, such as the extent of purpose and meaning that people derive from their jobs, relationships, and lives. In addition, it may also be related to long-term behaviors such as investments in health and education. In this paper, we propose that and test whether this dimension is inherently related to the opportunities that people have to exercise choice and to pursue fulfilling lives (i.e., their capabilities and agency).

Second, the *hedonic dimension of well-being*, roughly categorized as “Benthamite,” is more directly related to the environment or context in which people live – the quality of their jobs, their immediate state of health, the nature of their commute to work, and their social networks – and is reflected in positive and negative affective states, among other things. Specifically, daily experience is linked to health status and other outcomes via channels such as worry and stress on the one hand (i.e., negative affect), and pleasure, enjoyment, and happiness at the moment on the other (i.e., positive affect). For instance, the very different assessments about the role that children play in most peoples’ lives from time use and life evaluation surveys illustrate how hedonic metrics capture the effects of life environments while evaluative metrics represent the intersection of having children with one’s aspirations about and reflections on life as a whole. Specifically, having children is largely negatively correlated with hedonic well-being based on time-use survey data, while life evaluations and other measures show a largely positive correlation for the same relationship.<sup>4</sup>

In this paper, we build on research suggesting that which dimension of well-being individuals value most may be mediated by their agency and capacity to control their lives (Graham and Lora, 2009; Graham and Pettinato, 2002; Kahneman and Deaton, 2010). Kahneman and Deaton (2010) find that income correlates much more closely with evaluative than hedonic well-being in the United States. Specifically, the positive correlation between hedonic well-being and income tapers off at roughly \$75k, or, median

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<sup>2</sup> By “agency,” we mean a person’s capacity to pursue a fulfilling life and the opportunities to exercise choice (Graham, 2011). Crocker (2008) offers another definition of being an agent, namely when a person decides autonomously for herself; when decisions are in pursuit of goals; when she takes an active role, and when she brings about change in the world. Furthermore, we use the terms “autonomy” and “agency” interchangeably.

<sup>3</sup> A “capability” is “the substantive freedom to achieve alternative functioning combinations” or “the freedom to achieve various lifestyles” (Sen, 1999, p. 75); a “functioning” is an active or inactive state of being. Sen also highlights the concept of “valued functionings,” which are essentially activities or states that a person may value doing or being such as being healthy or taking part in community life and having self-respect (Sen, 1999, p. 75).

<sup>4</sup> Moreover, Clark and Senik (2011) make a distinction between assessments of the temperature of bathwater at the moment, and the broader set of variables that come to play when people think of their lives as a whole. See Dolan (2012) and Chapter 2 in Graham (2011) for a further discussion of the differences between hedonic and evaluative well-being.

income, but the association between income and evaluative well-being continues in a linear fashion. This suggests that beyond a certain point, additional income cannot make people enjoy their daily lives more (although insufficient income is clearly linked to suffering and negative moods), but higher levels of income offer people many more choices about how to live and what to do with their lives. Along the same lines, research by Tay and Diener (2011) on need fulfillment and life satisfaction around the world finds that life evaluation (i.e., evaluative well-being) is more closely associated with basic needs fulfillment and country-level economic conditions, while positive and negative affect were more closely associated with individual level conditions (social ties, respect, and autonomy).

Similarly, Graham and Lora (2009) find that the most important variables for the reported life satisfaction of the “poor” in Latin America (i.e., those with incomes below the median), after having enough food to eat, are friends and family on whom to rely in times of need. In contrast, the most important factors for the life satisfaction of the “rich” (i.e., those with incomes above the median) are work and health. It is likely that friends and family are the vital safety nets that make daily life tolerable for the poor in the hedonic sense, while work and health provide respondents with more means and agency to make choices in their lives.

Furthermore, recent cross-country research on the effects of creativity and tolerance on well-being by Mellander, Florida, and Rentfrow (2011) is also suggestive. The authors find that higher levels of post-industrial structures and values (such as a higher proportion of the population in the “creative class” as opposed to the manufacturing sector, and higher levels of tolerance for ethnic and sexual diversity) are positively associated with life satisfaction worldwide. Yet, the effect is much stronger for countries in the wealthier sub-sample (i.e., those with annual incomes above \$11,000 per capita), while the effect of income on life satisfaction is much more important for those countries in the poorer sub-sample.

Another manifestation of the different well-being aspects that individuals emphasize, which is the inspiration for this paper’s title, is the “happy peasant and frustrated achiever” paradox, whereby very poor people with very low incomes can report to be “happy” at the same time that their cohorts who are experiencing positive income change and mobility report deep frustration (Graham and Pettinato, 2002). This research suggests that the process of *acquiring* agency and means is unpleasant (especially in terms of hedonic well-being) as it is paved with uncertainty, rapid change, and altered norms and reference groups (Graham, 2009; Graham & Lora, 2009). Part of the explanation is methodological, and hinges on which dimension of well-being is being measured. Studies based on open-ended happiness questions, for example, do not specify the dimension that is being measured, and thus respondents may be emphasizing different notions when they report to be happy or not. As such, it is likely that poor respondents who have adapted to adversity emphasize hedonic well-being, while those with raised expectations in the process of acquiring agency are thinking about their lives as a whole, including their capabilities, means, and agency. The second explanation hinges on the unanswered question of whether some unhappiness necessarily underlies the search for opportunity and progress, or whether the associated changes reduce well-being, at least in the short-term.

Furthermore, individuals who focus primarily on daily (i.e., hedonic) experiences – due to low expectations, lack of agency, or imposed social norms – may have less incentive to invest in the future. In contrast, people who have a longer-term focus and are more achievement-oriented may at times sacrifice daily experiences for longer-term objectives and anticipated well-being in the future. The extreme manifestation of this is those who choose to migrate to another country to provide their children with opportunities, or those who participate in social unrest for a broader societal objective. Graham and Markowitz’s research (2011) based on intent to migrate data from Latin America shows that these more extreme behavioral choices are associated with lower levels of ex-ante well-being levels.

In this paper, we explore the empirical linkages between the two dimensions of well-being and several measures of agency, capabilities, and means, based on worldwide data from the Gallup World Poll

(GWP). Because we only have pooled cross-sections, rather than a panel, we cannot address issues of causality. We can, however, use several measures of agency to establish correlations (or lack thereof) with each well-being dimension.<sup>5</sup>

We define “agency” as the capacity to pursue a purposeful and fulfilling life (Graham, 2011), and “capability” as “the substantive freedom to achieve alternative functioning combinations” or “the freedom to achieve various lifestyles” (Sen, 1999, p. 75). We further distinguish between *internal* and *external* capabilities. Internal capabilities are, for example, learning and health, while external capabilities are tools such as technology or the environmental conditions for economic and professional advancement. Typically, individuals in poor and developing economies have less of both types of capabilities, as health and education systems are less developed, and environmental and institutional conditions can range from under-developed to adverse. In addition to perceived capabilities variables, which we construct based on respondents’ answers to respective questions in GWP, we include in our analyses “objective” proxies for capabilities, means, and agency, such as household income, education, and employment status. [See Table 1 for a list of the self-reported capability variables]

[Table 1 here]

## **HYPOTHESES**

We explicitly test four hypotheses, which draw on the extant literature:

**Hypothesis 1:** *Because evaluative well-being better reflects agency (Graham, 2011; 2012), proxies for capability and autonomy are more likely to be strongly correlated with evaluative well-being than with hedonic well-being.*

We test this hypothesis by comparing the empirical results from two separate regressions – one using an evaluative well-being metric as the dependent variable and one using hedonic well-being as the regressand. Specifically, we regress each well-being measure on a range of right-hand side variables that capture different elements of agency, means, and capabilities, along with standard socio-economic and demographic controls.

**Hypothesis 2:** *Means and capabilities – or the process of acquiring them – may also be associated with stress and frustration, or even well-being decreases for some cohorts, as they lead to changes in time use, norms of reference, and income, among others.*

The process of acquiring agency – because it is paved with uncertainty, rapid change, and altered norms and reference groups – can be unpleasant (especially in terms of hedonic well-being) (Graham, 2009; Graham & Lora, 2009). For example, while access to information technologies is generally positive for well-being as it provides new tools and capabilities, it is also linked to stress and anger, especially for those for whom such access is new and can reveal deprivation or limited opportunities and lack of autonomy (Graham & Nikolova, 2013).

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<sup>5</sup>These are large and complex questions and cannot be addressed in one article. Indeed, they are the subject of extensive ongoing research – including our own. In a later stage of this project, we will build on these findings and explicitly assess the effects of *changes* in aspects of agency, such as income and education gains, changes in employment conditions and status, based on panel data from the German Socio-Economic Panel (SOEP).

As in hypothesis 1, we test this proposition using the main regression models, but looking for discrepant patterns in the results, such capabilities and means which are positively linked to stress and anger, as in the case of access to technology cited above. We also assess whether and how results differ across people in different countries and regions of different levels of development.

**Hypothesis 3:** *Individuals put different weights on different capabilities and means (e.g., income) at different points of the well-being distribution. In particular, while income and capabilities are likely to be important for well-being overall, the happiest individuals are likely to be happy regardless of factors such as income, capabilities, and autonomy and are likely to emphasize them less than relatively unhappier respondents.*

In testing this hypothesis, we are interested in the nuances in the relationship between capabilities, means, and agency on the one hand, and well-being on the other. While standard regressions show the relationship between capabilities and well-being for the average person, they conceal important variation, as individuals at different levels of the happiness distribution may put different weights on capabilities and income. [See Figure 1 for the distribution of well-being across the GWP sample]

[Figure 1 here]

Binder and Coad's work (2011) highlights that the differential importance of factors such as education, social factors, and income diminishes at higher levels of the happiness distribution. In fact, while education is positive for well-being in general, it is negatively correlated with well-being at the top of the happiness distribution. This could be due to the fact that learning makes the "happy peasants" realize their absolute or relative deprivation and lack of choice and opportunities. It may also be that the most educated have unrealistic expectations and ambitions and even their high capacity to live fulfilling lives cannot make them happy (Graham, 2011). It is likely, therefore, that capabilities and autonomy as well as various means, such as income, have a different meaning and level of importance for people at different levels of the happiness distribution. Like Binder and Coad (2011), we test this hypothesis using quantile regressions, which describe the entire conditional distribution rather than merely the conditional mean.

**Hypothesis 4:** *Depending on their agency levels, people will value differently the same tools and capabilities and the differential valuation will be reflected in their subjective well-being scores.*

Related to hypothesis 3, on the one hand, those who already have the means or a capacity to control their own lives will emphasize personal effort and internal capabilities, such as health and education, which promote future opportunities and mobility. On the other, those lacking means or autonomy may emphasize external factors which facilitate their day-to-day existence. Research shows that people who believe that outcomes in their lives depend on effort have a greater appreciation for freedom than those who believe in the power of external factors such as destiny (Verme, 2009). In addition, respondents who exhibit high levels of agency emphasize evaluative aspects of well-being and are more achievement-oriented. They may also be willing to tolerate temporary decreases in daily satisfaction for long-term gains (Graham, 2012).

We test this hypothesis by estimating our basic regression equations by splitting the sample in separate regressions by income quintiles and then by three regions of different levels of development (i.e., Latin American and Caribbean countries, transition economies, and the EU15 countries).

## **DATA and MODELS**

The data in this paper are from the Gallup World Poll (GWP), which is an annual survey run by the Gallup Organization which has covered roughly 140 countries worldwide since 2005. The survey has nationally representative coverage in most countries, ranging from more than 4,000 household interviews

in China every year to 500 households in Puerto Rico.<sup>6</sup> Because different individuals are interviewed each year, we have pooled cross-sections of data for 2009-2012 rather than a panel. The surveys are face-to-face in countries where telephone coverage is limited, and by telephone in those where it is universal (primarily the OECD countries). The difference in interview mode may introduce some biases in well-being responses, and we try to control for these to the extent we can.<sup>7</sup>

In addition to the wide range of questions in GWP that assess socio-demographics, macroeconomic and social conditions, and political freedom, among others, we utilize several questions which capture the two well-being dimensions (i.e., evaluative and hedonic). First, we use the Cantril ladder question on the best possible life (BPL), which asks respondents to compare their life to the best possible life they can imagine, based on an eleven-point scale or ladder, as our *evaluative* well-being metric. (See Figure 1)

[Figure 1 here]

Because it frames the individual's reported well-being to a notional reference norm (i.e., one's best possible life), answers to this question typically correlate more closely with income than do open-ended happiness or life satisfaction questions (Graham et al., 2010). Second, in the arena of hedonic metrics, psychologists stress the distinct traits of positive and negative affect. While those with high levels of positive affect are less likely to experience a lot of negative affect (and visa versa), these traits are not on a linear continuum from one to the other. Thus, we use one question to assess positive hedonic well-being, namely, whether the respondent experienced *happiness* yesterday; and two questions to assess negative hedonic well-being, i.e., whether the respondent felt *stress* and whether she experienced *danger* yesterday. The responses to the best possible life question run on an eleven-point scale, corresponding with the steps on the notional ladder, where zero represents the worst possible life, and ten corresponds to the best possible life. The hedonic well-being questions are binary (i.e., with possible answers being no or yes). The summary statistics for the primary GWP variables used in the regression analyses are in Table 2 below.

[Table 2 here]

Several questions in GWP capture *self-reported* capabilities and agency, ranging from physical capabilities (as in the absence of a health problem), to opportunities to learn and be creative, and perceptions of autonomy (i.e., satisfaction with one's freedom to choose in life). The questions and the perceived capabilities that they aim to capture are listed in Table 1. In addition to these variables, we also rely on variables such as income, education, and employment status as *objective* measures of agency/capabilities. GWP's employment categories allow us to distinguish between those employed full-

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<sup>6</sup> While this means that China is under-sampled and Puerto-Rico is likely over-sampled, we do not have control over the composition of the survey.

<sup>7</sup> There are some potential differences in the way individuals respond to well-being questions face-to-face versus on the telephone. Dolan and Kavetsos (2012) find that face-to-face responses are biased upwards compared to telephone responses in the UK, as people are less likely to admit they are unhappy in person. While we cannot control for this as precisely as we would like, our regressions have country dummies, which should at least in part capture differences in response modes across countries.

time, the self-employed, part-time employees (both voluntarily and involuntarily), the unemployed, and those out of the labor force.<sup>8</sup>

When BPL is the dependent variable, we use an ordered logit specification and when the dichotomous hedonic questions (i.e., happiness yesterday, stress, and anger) are the regressands, we use logits. Our basic specification explored the well-being  $Y$  of individual  $i$ , in year  $t$ , residing in country  $c$ , conditioned on the usual socioeconomic and demographic traits,

$$Y_{itc} = \alpha'X' + \beta'T'_{itc} + \gamma'Z'_{itc} + \kappa_c + \tau_t + \varepsilon_{itc}$$

where  $X'_{itc}$  is a vector of capabilities and means such as the absence of a health problem, opportunities to learn and be creative, and perceptions of autonomy; and income, education, and employment;  $T'_{itc}$  is a vector of observed individual-level variables such as gender, age, marital status, and others,  $Z'_{itc}$  is a vector of person-specific observed household-level variables such as household size, household location (i.e., rural or urban), and others;  $\alpha'$ ,  $\beta'$ , and  $\gamma'$  are coefficient vectors,  $\kappa_c$  represents country dummies,  $\tau_t$  represents controls for time (year of survey), and  $\varepsilon_{itc}$  is the stochastic error term.

For the quantile regressions, we follow a method described by Binder and Coad (2011) based on Koenker and Bassett (1978). While standard regressions describe the conditional *mean*, quantile regressions allow us to explore the entire conditional *distribution* by analyzing the effects of the covariates at different points of the well-being distribution. Rather than splitting the sample into segments based on values of the dependent variable, quantile regressions weigh data points depending on whether they are above or below the best fit line.

Quantile regressions have several informational and methodological advantages. First, from a policy perspective, it may be important to understand the distribution's extremes in order to know whether particular policies (e.g., universal education) are equally relevant for the happiest and unhappiest individuals. Second, from a normative point of view, some policies may have a small positive effect on the majority but still be morally problematic if they create disproportionate gains or losses for a minority. Quantile regressions allow us to test for such dynamics. Third, methodologically, estimating means across heterogeneous populations may seriously under- or overestimate the impacts or even fail to identify some effects. Quantile regressions do not assume that the error terms are identically distributed all points of the conditional distribution, which allows for individual heterogeneity as the slope parameters differ along the quantiles (Binder and Coad, 2011).

The quantile regression model is based on Koenker and Bassett (1978) and is presented by Binder and Coad (2011) as:

$$y_{it} = x'_{it}\beta_{\theta} + e_{\theta it} \text{ with } \text{Quant}_{\theta} = (y_{it} | x_{it}) = x'_{it}\beta_{\theta},$$

where  $y_{it}$  is subjective well-being (BPL),  $x$  is a vector of covariates,  $\beta$  is the vector of parameters to be estimated, and  $e$  is the stochastic error term.  $\text{Quant}_{\theta} = (y_{it} | x_{it})$  is the  $\theta$ th conditional quantile (where  $0 < \theta < 1$ ) of well-being ( $y$ ) given the covariates and  $\theta$  solves the following minimization problem:

$$\min_{\beta} \frac{1}{n} \left\{ \sum_{i,t: y \geq x'_{it}\beta} \theta |y_{it} - x'_{it}\beta| + \sum_{i,t: y < x'_{it}\beta} (1 - \theta) |y_{it} - x'_{it}\beta| \right\} = \min_{\beta} \frac{1}{n} \sum_{i=1}^n \rho_{\theta}(u_{\theta it})$$

<sup>8</sup>Note that GWP's employment categories are only available from year 2009 onwards.



where  $\rho_{\theta}(\cdot)$  is:

$$\rho_{\theta}(u_{\theta it}) = \begin{cases} \theta u_{\theta it} & \text{if } u_{\theta it} \geq 0 \\ (\theta - 1)u_{\theta it} & \text{if } u_{\theta it} < 0 \end{cases}$$

The above equations are operationalized by statistical programming methods such as those offered in Stata's `sqreg` command. For more precise estimates, we used bootstrapped standard errors.<sup>9</sup>

Finally, in the regressions by income and region, we simply run our baseline models with the sample split into income quintiles, and then by regions.

## FINDINGS

Our empirical findings do not always reflect our theoretical priors and we find support for some but not all of our hypotheses. Yet, we hope that they provide significant new insights. Perhaps most notable is the lack of clear support for hypothesis 1. Even after controlling for personality traits (optimism and whether the respondent smiled yesterday), the four perceived capability variables (absence of a health problem, learning, hard work, and freedom) have higher coefficient estimates in the positive hedonic well-being regression (i.e., with experienced happiness yesterday as the dependent variable) than in the evaluative well-being regression (i.e., with BPL as the dependent variable). (See Table 3)

[Table 3 here]

In addition, all of the *perceived* capability variables are negatively and significantly correlated with stress and anger, which contradicts hypothesis 2. At the same time, we find that being self-employed and being employed full-time, which proxy *objective* means/capabilities, are positively associated with stress and anger. It seems that while employment-related capabilities provide various means, they add to stress and anger at the same time, supporting hypothesis 2.

Income, meanwhile, has a larger coefficient estimate in the evaluative well-being (i.e., BPL) regressions than in the positive affect (i.e., using happiness yesterday as the dependent variable) ones, which provides support for hypothesis 1. This finding is similar to Kahneman and Deaton's (2010) results cited in the introduction. Furthermore, having at least a high school degree, which proxies objective capabilities in terms of education, in addition to being positively associated with stress, is statistically significant and positive in the BPL regression but statistically insignificant in the happiness regression, which runs in support of hypotheses 1 and 2. Being employed full-time is positively associated with BPL but negatively associated with happiness, again in support of hypothesis 1.

Living in an urban area, like full-time employment, is positively associated with BPL but negatively associated with happiness, also supporting the logic presented in hypothesis 1. Specifically, one can imagine that while urban areas provide various opportunities for employment and education, they are also likely more stressful and less pleasant environments to live in, at least from a day-to-day quality of life sense. Richard Florida's excellent work on the "creative class," for example, highlights the opportunities that cities provide and shows how productive and talented people as a group have positive externalities in terms of job creation, among other things (2004).

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<sup>9</sup> For further discussion of the quantile regression method, see Buchinsky (1998), Cade and Noon (2003), and Koenker and Hallock (2001).

Our findings on gender are of interest. As in other work, we discover that women have higher levels of BPL than men (Graham and Chattopadhyay, 2012). Yet, gender is insignificant in the happiness regression, and females have higher levels of stress and anger than males. The multi-tasking which is increasingly part of women's lives, particularly where participating in the labor force is (becoming) the norm, likely provides opportunities for life fulfillment along many dimensions, but may also contribute to stress. Also, having children is negatively correlated with BPL, as in other studies, but is statistically insignificant in the happiness regression, suggesting that having children has slightly different effects on evaluative versus hedonic well-being. Using the reasoning in hypothesis 1, it may be that while children have differential effects on daily experience (both good and bad), they also take a great deal of time and may limit people's ability to pursue other tasks that they deem fulfilling.

One clear pattern that emerges from all of the findings is that the hedonic (i.e., experienced happiness yesterday) variable correlates more closely with the perceived internal capabilities variables, such as belief in hard work and satisfaction with one's freedom to choose, while the evaluative (i.e., BPL) variable correlates more closely with our objective measures, such as income, education, and employment status. This reflects the more framed nature of the BPL variable and is consistent with its stronger correlation with income than affect variables in other studies (Graham et al., 2010).

It may also be that those with higher levels of positive affect (i.e., happiness yesterday), are more likely to perceive that they have internal capabilities. While we control for positive affect and personal traits in the regressions by including controls for smiling yesterday and optimism, these proxies may be imprecise. Specifically, because both happiness and agency are self-reported, personality traits likely play a big role, which means that the capabilities-well-being relationship suffers from endogeneity problems. Our interpretation is that the unobservable personality traits should have a greater impact in the regressions using the hedonic metric as the dependent variable than in the BPL regression, as the latter question is more precisely framed. Empirically, when we add the personality controls to the main regressions, the coefficient estimates for the independent variables in the happiness regressions change more than those in the BPL regressions, confirming our priors.<sup>10</sup>

#### *Quantile regressions*

To test hypothesis 3, we employ quantile regressions with BPL, i.e., the evaluative well-being variable, as the regressand. We find a fair amount of support for the hypothesis, and the findings are primarily driven by the tails of the well-being distribution (i.e., the unhappiest and happiest respondents), which is unsurprising. Specifically, we discover that the magnitudes of the coefficient estimates decrease from the 25<sup>th</sup> percent quantile (i.e., the unhappiest quantile) to the 90<sup>th</sup> percent quantile (i.e., the happiest quantile) for the following agency/capabilities variables: the absence of a health problem, hard work, income, education, being employed part-time and not wanting full-time; and being unemployed. All of these run in support of hypothesis 3. [See Table 4]

[Table 4 here]

The coefficient estimate for learning, meanwhile, is U-shaped, high for the 25<sup>th</sup> percent quantile (Q25), decreasing for Q50, and then increasing again for Q75 and Q90, where it is the highest. This

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<sup>10</sup> Results without the controls for smiling and optimism are available from the authors upon request. Note that Anand et al. (2011) use a generalized linear latent and mixed model (GLAMM) to assess the impact of capabilities on life satisfaction in the presence of endogeneity (i.e., personality traits) and find that the GLAMM results do not differ from their baseline findings (i.e., those not correcting for endogeneity). They conclude that even though some personality traits may be important for the capability-happiness relationship, their inclusion or exclusion makes little difference for the overall direction and magnitude of the results. However, their dependent variable is satisfaction with life overall (and not the best possible life) and does not allow them to discern the role of unobservable personality traits for the two different well-being dimensions that we include in our analysis.

suggests that learning (and perhaps creativity), in contrast to the other agency variables, is very important for the happiest people, with causality likely running in both directions. Our findings corroborate Dolan and Metcalfe's (2012) results showing a positive association between innovation and well-being. Similarly, the coefficient estimate for living in an urban (as opposed to a rural) area increases from Q25 and Q50 to Q90, which is again suggestive of Florida's (2004) creative class phenomenon.

The coefficient estimates for the employment variables also provide support for hypothesis 3. The estimate for full-time employment is positive for Q25, declines in magnitude but is still positive for Q50, is insignificant for Q75, and then becomes *negative* and statistically significant for Q90, suggesting that the happiest people value full-time work and the associated constraints the least. Self-employment, meanwhile, is statistically insignificant for Q25 and Q50, and becomes negative and statistically significant for Q75 and Q90, again supporting the hypothesis. Furthermore, being unemployed, has the strongest negative effect on the unhappiest quantile and the smallest impact on the happiest.

The coefficient estimate for satisfaction with one's freedom to choose is highest for Q25 and declines to Q75, and rises slightly in Q90, providing modest support for hypothesis 3. The coefficient estimate for gender remains positive and increases slightly up the quantiles, being the greatest at the top, indicating that the happiness gap between men and women is highest among the happiest people. Finally, as in other studies, having children is negatively correlated with BPL across the quantiles, except for the unhappiest quantile, where the coefficient is insignificant. A rather speculative interpretation is that this suggests anomie or desperation among the unhappiest people, who are therefore also a bit disconnected from their children (Diener et al., 1999; Stutzer et al., 2010).

#### *Split sample results (by income)*

In addition to quantile regressions, we split our sample into income quintiles, as a test of hypothesis 4. Specifically, the entire sample is split into five income quintiles and the regressions include country and year dummies as before. We ran our income quintile splits with both BPL and happiness as the dependent variables.

In the regressions by income quintile using BPL as the dependent variable, the coefficient estimates for the absence of a health problem and for hard work increase from the poorest quintile (Q1) to the richest quintile (Q5), in support of hypothesis 4. The coefficient estimates for learning and freedom vary across the quintiles, though, without a clear pattern. Furthermore, the estimates for education (i.e., having at least a high school degree) decline from Q1 to Q4 and then rise slightly again for Q5. The coefficient estimate for income is lowest for Q1 and highest for the middle-income quintiles. This may be linked to the "happy peasants" concept, whereby non-income dimensions of well-being are more important for the poorest (note, for example, that the coefficient estimate for household size, which may proxy support networks within the home, is positive and significant only for the poorest quintile). By contrast, those in the middle-income quintiles are likely in the process of acquiring agency and understand very well the importance of income as a means to achieving alternative ways of being and living. Finally, being unemployed, has an increasing negative impact from Q1 to Q5, in support of the hypothesis. [Table 5]

[Table 5 here]

When happiness yesterday is the dependent variable, the capability variables exhibit no clear patterns. The absence of a health problem is most important for the poorest (Q1) and least important for richest (Q5), which is the opposite of the result in the BPL regressions. It may well be that while health seems to be more relevant to the evaluative aspects of well-being of the rich than the poor, the former also have better means of handling the effects of health problems on daily quality of life.

Learning is most important for the richest quintile (Q5) and least important for Q2, which provides some, albeit limited, support for hypothesis 4. Belief in hard work as a means of getting ahead is least important for Q3 and most important for Q4. These results are difficult to interpret; a somewhat heroic explanation is that those in Q3 are most likely to be “stuck in the tunnel,” to borrow Hirshman and Rothschild’s (1973) terminology, while those in Q4 may have more prospects for upward mobility. Perhaps this is yet another example of money not being the only ticket to happiness, particularly at the top of the income distribution where basic needs are more than satisfied.

Freedom, meanwhile, is least important for the poorest and the most affluent, and most important for the middle-income quintiles. In fact, the most destitute value freedom the least in terms of both their evaluative and hedonic well-being, which is likely due to the fact that they lack the means to take advantage of freedom and autonomy, which furnishes some support for hypothesis 4. The richest, by contrast, seem to emphasize autonomy more in the evaluative sense than in the hedonic sense, and freedom of choice and acquiring means may come at the expense of sacrificing small daily pleasures.

These mixed findings are in part a result of the problem of using income quintiles based on the world’s income distribution, where Q3, for example, could include some of the richest respondents from the poorest developing countries and some of the poorest respondents from the wealthiest advanced economies, which, in turn, makes the results difficult to interpret. As an attempt to go around this issue, we ran the quintile regressions separately for three more homogenous regions: the EU15 countries, the transition economies, and Latin America and the Caribbean (LAC). For the specific lists of included countries, see footnote 11 below.

With the exception of the poorest quintiles in the EU15 states, for which an insufficient number of observations with very low incomes does not allow regression analysis in for the bottom income quintile, we got more consistent findings on the effects of income on BPL (than on happiness) in the regional regressions (Tables A1-A3 in the Appendix). Income in the LAC regressions is statistically insignificant for the poorest quintile (Q1) and the richest quintile (Q5). Moreover, it has the highest coefficient estimate for Q4. In the EU15 models, the coefficient estimate for income is statistically significant for Q4 and Q5 only. In the transition countries, the coefficient estimate for income is statistically insignificant for the poorest quintile, while Q4 has the highest coefficient estimate. To put these results in perspective, as mentioned above, in the main regressions (for all regions) with BPL as the dependent variable, income has the highest coefficient estimates for the middle-income quintiles, the largest coefficient estimate being for Q4. These results show support for our conjecture that people in the middle of the world’s income distribution drive the main findings on income (for BPL). [Table 5] While it is hard to establish a consistent pattern across the capability variables by region with the split income quintiles, the results are also available in the Appendix.

### *Regional comparisons*

It is possible that the worldwide comparison in the basic regressions, which control for country-level time-invariant heterogeneity through employing country dummies, may be obscuring some important region-level differences in the relationship between the two well-being dimensions and agency. Some of this variation could result from the manner in which people in different regions and speaking different languages and having cultures interpret attitudinal questions such as those about the importance of hard work and of freedom to choose. There may also be generalized disparities in perceptions of agency as countries/regions across certain levels of development.

To explore this further, we ran the basic regressions with BPL and experienced happiness yesterday as the respective dependent variables for each of three regions with different levels of average

per capita income, namely, the EU15, the transition economies, and LAC.<sup>11</sup>[Table 6] Our findings illuminate important differences in the relationship between well-being and capabilities and means across the three regions.

For the wealthiest group, the EU15 countries, we find that all capability variables except learning have much larger coefficient estimates in the BPL regressions than in the happiness ones, which is in line with hypothesis 1. We also find larger coefficient estimates for income and education in the BPL specification than in the happiness specification (education is actually negatively correlated with happy and positively correlated with stress), in support of hypotheses 1 and 2. Full-time employment, meanwhile, has no significant correlation with either evaluative or hedonic well-being (BPL and happiness, respectively), but is positively correlated with stress (in support of hypothesis 2).<sup>12</sup>

[Table 6 here]

In the LAC countries, we get the opposite results, whereby all the perceived internal capability variables have a stronger relationship with the happy yesterday variable than with BPL. In contrast, the objective measures –income, education, and employment –have stronger relationships with BPL over happy. Full-time employment, for example, is positive in the BPL regression but insignificant in the happiness specification. Self-employment is negatively correlated in the BPL regression but insignificant for happy. Likewise, involuntary part-time employment is negatively associated with BPL and insignificant in happy, but is positively associated with stress. Education, meanwhile, is positively correlated with both BPL and happy, as well as with stress, with the coefficient estimate in the BPL specification significantly larger than that in the happiness regression.

The results for the transition countries fall in between those for the two other regions. Hard work and the absence of a health problem have a stronger relationship with BPL, as does income, while learning has a stronger relationship with happy yesterday, and the coefficient estimate for freedom is equal across both well-being dimensions. Education is positively and significantly correlated with BPL but negative and insignificant with happy and as in other regions, and positively correlated with stress. Being employed full-time is insignificantly correlated with BPL but statistically significant and negative for happy. Living in an urban area is insignificant for BPL, and negatively correlated with happy yesterday as well as positively correlated with stress. When we split the transition countries into the EU members and the non-EU members, meanwhile, the EU members closely resemble their wealthy EU15 counterparts, providing some indication about EU status as a marker of higher standards of living and greater opportunities. [Table 7]

[Table 7 here]

Our regional results suggest a pattern across development levels, with respondents in wealthier countries seemingly valuing capabilities more as they think of their lives as a whole than when they think about contentment or daily quality of life. In contrast, those in the poorer countries either use their

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<sup>11</sup>The specific countries included in each region are as follows. For EU15, we have Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and United Kingdom. We have thirty transition economies: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kosovo, Kyrgyz Republic, Latvia, Lithuania, Macedonia FYR, Moldova, Mongolia, Montenegro, Poland, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. The twenty-five LAC countries are: Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Trinidad and Tobago, Uruguay, and Venezuela.

<sup>12</sup> Due to space limitations, the results for anger are not shown in Table 6 but are available upon request.

capabilities more for daily living, which is more of a challenge in poorer countries, or, more simply, the absence of capabilities makes daily living that much worse.

An illustration from our urban variable (i.e., whether the respondent lives in an urban as opposed to a rural area) is suggestive (Table 6). While being in an urban area is positive for evaluative well-being (BPL) and negative for hedonic well-being (happy yesterday) for the sample as a whole, living in an urban area is negative for BPL for the wealthy EU15 countries and insignificant for happiness. In LAC, urban is significant and positive for BPL and insignificant for happy, but positively associated with stress. It is likely that in poorer contexts, the benefits and opportunities that cities provide over poor urban areas are reflected in higher BPL, while in wealthier ones, where there are fewer regional disparities and opportunities are more widely available, the hassles of daily living in the city outweigh the marginal benefits in terms of opportunities.

## OMMITTED VARIABLES CHECKS

Because we have pooled cross-sections, rather than a panel, we cannot control for individual-level heterogeneity, which raises the concern that our findings are driven by omitted variables. To test for the size of the potential bias, relative to the magnitude of our coefficient estimates, we followed a method spelled out in Altonji et al. (2005) and Grosjean and Senik (2012). We ran two regressions— one with (a composite of)<sup>13</sup> the internal capability variables (and country and year dummies) only (i.e., restricted model) and one with the full set of controls (i.e., full model). Intuitively, the smaller the difference between the coefficient estimates generated from the two regressions, the less likely they are to be influenced by the unobservables. To compute the size of the bias that would explain away the impact of the capability/agency variables on well-being, we use the following ratio:

$$\frac{\hat{\beta}_F}{\hat{\beta}_R - \hat{\beta}_F}$$

where  $\hat{\beta}_F$  is the coefficient estimate of the (composite) of the capability variables from the full model and  $\hat{\beta}_R$  is the coefficient estimate of the (composite) of the capability variables from the restricted model.

Our results yield that for the BPL regression, the influence of the omitted variables needs to be 2.09 times higher than the included variables in the BPL regression to explain away the influence of the (perceived) capability variables on BPL. For the happiness regression, the influence of the omitted variables needs to be 2.37 times higher than the included variables in the regression to explain away the influence of the (perceived) capability variables on happy. For the stress regression, the influence of the omitted variables needs to be 5.49 times higher than the included variables in the regression to explain away the influence of the (perceived) capability variables on stress, and for the anger regression, the omitted variables influence would have to be 3.97 times the included variables. As such, our focal variables seem to be doing a good job in explaining the variation in our well-being variables and the size of the omitted variables is relatively small.

## CONCLUSION

The emerging science of well-being has a potential to inform us about the complexities of human welfare. In this paper, we contribute to the understanding of one of the most multifaceted and yet, in our view, important components of well-being, which is people's capacity to exercise choice and to pursue fulfilling lives. We capture this dimension through the concept of agency, and rely on objective and self-reported variables related to agency and capabilities.

<sup>13</sup>Because we have four capability variables, we created a composite variable (which is the sum of all four variables – the absence of a health problem, learning, hard work, and freedom) just for the purposes of calculating the omitted variables bias.

We tested four related hypotheses. First, individuals with more agency and capabilities are more likely to emphasize evaluative well-being in their survey responses, and therefore the agency variables should correlate more closely with evaluative than hedonic well-being metrics. Second, the process of acquiring agency can both increase well-being in some aspects and reduce it in others (as it may be associated with stress and anger). Third, respondents with different well-being levels may value capabilities differently, with the happiest respondents being most likely to be happy regardless of contextual variables and capabilities. The fourth, and related, hypothesis is that depending on their agency levels, people will value the same tools and capabilities differently, with those with higher levels of agency giving capabilities a higher value.

Our results provide nuanced support for the hypotheses, with the findings being the most mixed in terms of the first proposition. One important and consistent pattern, however, is that the hedonic metric (experiencing happiness yesterday) correlates more closely with our perceived internal capabilities variables, such as hard work and freedom to choose, while our evaluative well-being metric (BPL) correlates more closely with the objective measures, such as income, education, and employment status. This may reflect the more framed nature of the BPL variable and how it is better associated with income in other studies. It also may be that those with higher levels of affect, as is captured by happiness yesterday, are more likely to perceive that they have internal capabilities. While we control for personality traits in our regressions, our controls may be imprecise.

We also find that hypothesis 1 holds up better in wealthier contexts and among individuals with more means and capacity, which fits with our priors. Furthermore, we have a number of notable findings, such as the result that full-time employment and living in an urban area are positively correlated with BPL on average and negatively correlated with happiness, suggesting that the conditions providing opportunities are not always associated with higher levels of hedonic well-being.

We get similar results when we break the sample regionally to reflect different levels of development. Respondents in wealthier regions seemingly value capabilities more as they think of their lives as a whole than when they think about contentment or daily quality of life. In contrast, those in the poorer countries either use their capabilities more for daily living, as it is more of a struggle in poorer countries, or, more simply, the absence of capabilities makes daily living that much worse.

We also show statistically significant evidence of the coexistence of higher levels of well-being with greater levels of stress related to agency. There are a number of notable findings along these lines, such as the results that full-time employment and living in an urban area are also positively associated with stress at the same time that they are positively associated with BPL. This dual relationship holds across different levels of development.

In our quantile regressions, we examine the entire conditional well-being distribution at different points. Our results support our third hypothesis. Overall, respondents at the highest levels of the well-being distribution are least concerned with (or value the least) the proxies for objective capabilities such as income and education. Full-time employment, meanwhile, is least important (indeed, negative) for the happiest, and unemployment has the strongest negative correlation with BPL for the least happy end of the distribution. The self-reported capability variables demonstrate a more nuanced pattern, meanwhile, not least as they capture very different factors, ranging from health conditions, which are very important for the least happy, and learning and creativity, which seem very important for the most happy.

Finally, we examined the relationship between well-being and agency across people of different means, based on our sample split by income quintiles and with evaluative well-being (BPL) as the dependent variable. We find that the coefficient estimates for the absence of a health problem and for hard work increase from the poorest quintile (Q1) to the richest quintile (Q5), in support of the hypothesis that those with more means will value capabilities more. Being unemployed, meanwhile, has an increasing

negative impact from Q1 to Q5, in support of the hypothesis. Many other variables display inconsistent patterns, which is either a result of the complexity of the relationship or of the problem of segregating the world sample into income quintiles. Our sample split by regions, discussed above, displays more uniform patterns.

Given that public policy has a role in assisting those lacking choice and agency by providing them with equal opportunities, our results may ultimately have some utility in that arena. They suggest that what constitutes equal opportunities may have different meaning and value in different contexts or among different cohorts, and thus policies which aim to enhance capabilities may have differential impact on well-being across them. For example, if objective opportunities are likely to improve the long-term well-being of those lacking agency, then it may be reasonable to promote such tools and means for this group. Alternatively, for normative reasons, policymakers may choose to focus on equalizing the internal capabilities for all citizens (e.g., through investments in education and training or health) despite the differential weights that different people put on them and the differential impact on well-being. In both these cases, the associated changes may be linked with lower well-being for some groups (either the poorest or the happiest, for example), at least in the short-run.

We view paper this as a first step towards understanding a complex question that is fundamental to human well-being and flourishing. Our results are as complex as the propositions we make, yet we hope that they are promising enough to spur further exploration.



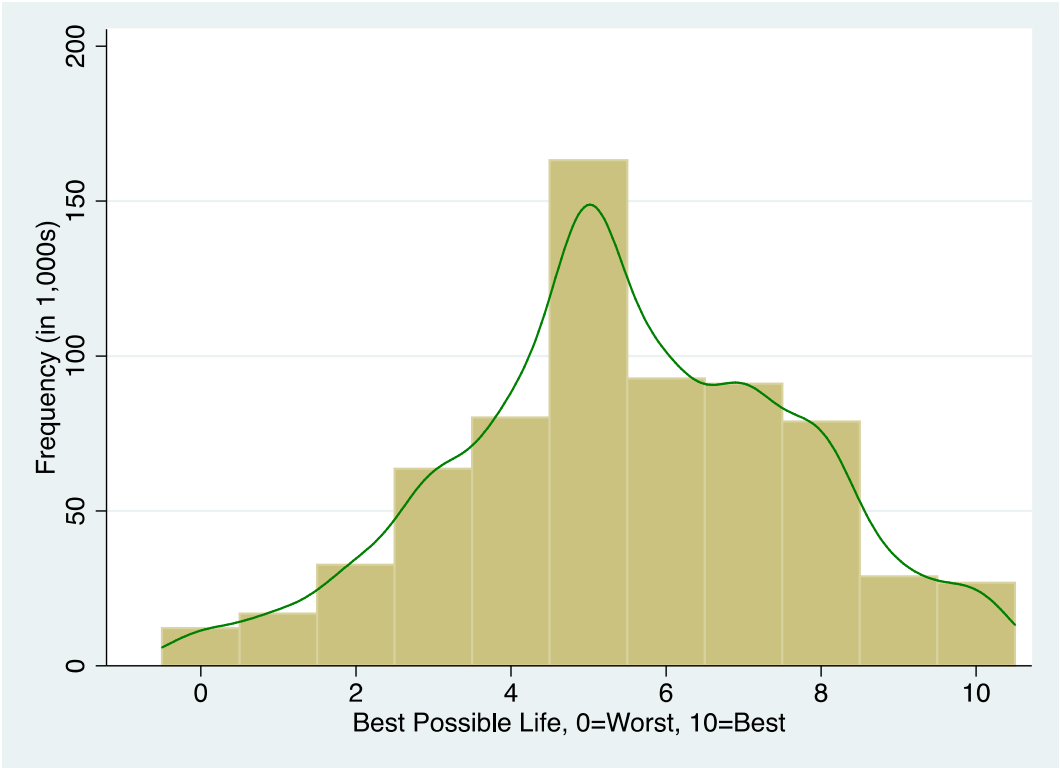
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**Figure 1: Histogram for the best possible life variable (BPL)**



*Source:* Gallup World Poll, 2010-2013.

Table 1: Perceived capabilities used in regression analyses

<i>Capability</i>	<i>GWP Question</i>	<i>Theoretical Association with Well-being</i>
<i>Absence of a health problem limiting ability</i>	WP23 Do you have any health problems that prevent you from doing any of the things people your age normally can do?	There is a strong positive association between health and well-being, which is even stronger than that between well-being and income, and that the causality runs both ways (Graham, 2008; Veenhoven, 2010). Furthermore, bodily health is one of Nussbaum's ten central capabilities (2011) and is important for allowing one to find a job, study, or choose alternative ways of being. Anand, et al. (2011) find that not having one's health limiting daily activities compared to other people at the respondent's age is not significant in their with well-being regression.
<i>Learned or did something interesting yesterday</i>	WP65 Did you learn or do something interesting yesterday?	Learning is likely positively correlated with well-being, especially for respondents who already have a capacity to control their lives. It may in fact be decreasing the well-being or adding to the stress of those who lack agency. Learning through technologies can provide capabilities on the one hand but produce frustration among poorer cohorts by providing new information about material goods or opportunities and choices they lack (Graham and Nikolova, 2013).
<i>People can get ahead through hard work</i>	WP128 Can people in this country get ahead by working hard, or not?	This variable likely reflects perceived social mobility and cultural norms of how markets function. For example, Americans tend to believe that they can get ahead by hard work and individual effort and have a lower inequality aversion than Europeans (Alesina, Di Tella, & MacCulloch, 2004). Therefore, inequality does not bother the poor in the United States whereas the happiness of poor Europeans is strongly negatively affected by inequality. The relationship between working hard and well-being may also depend on awareness about the extent of corruption. For example, Cojocaru (2012) finds that in transition countries, aversion to inequality is greater among those who believe that success today is due to political or criminal connections than among those who think that hard work leads to success. He also finds that those who believed in hard work as a driver of success in past have higher inequality aversion than those who believed in the power of corruption in the past. How much people value capabilities will in part be reflected in their response to whether they believe in getting ahead by hard work.
<i>Satisfied with Freedom in Life</i>	WP134 Satisfied/Dissatisfied with "Your freedom to choose what you do with your life"	People who believe that outcomes in their lives depend on internal factors such as effort have a greater appreciation for freedom than those who believe in the power of external factors such as destiny (Verme, 2009). How much people value capabilities will in part be reflected in their satisfaction with the freedom to choose what to do with their lives.

Table 2: Summary statistics, 2009-2012

Variable	Observations	Mean	Std. Dev.
Best Possible Life (0=Worst, 10=Best)	685,600	5.479	2.205
Experienced Happiness Yesterday (1=Yes)	674,039	0.700	0.458
Experienced Stress Yesterday (1=Yes)	641,611	0.294	0.456
Experienced Anger Yesterday (1=Yes)	643,278	0.199	0.399
Absence of a Health Problem Limiting Ability (1=Yes)	620,894	0.757	0.429
Learned or Did Something Interesting Yesterday (1=Yes)	676,166	0.502	0.500
People Can Get Ahead Through Hard Work (1=Yes)	623,707	0.808	0.394
Satisfied with Freedom in Life (1=Yes)	616,332	0.710	0.454
High School Education or Higher (1=Yes)	687,776	0.151	0.358
Household Income (in ID)	583,667	19,377	2,617,962
<i>Employment Categories</i>			
Employed Full-Time (1=Yes)	640,091	0.264	0.441
Self-Employed (1=Yes)	640,091	0.128	0.334
Voluntarily Employed Part-Time (1=Yes)	640,091	0.070	0.255
Unemployed (1=Yes)	640,091	0.059	0.236
Employed Part-Time, Wants Full-Time (1=Yes)	640,091	0.066	0.247
Out of the Labor Force (1=Yes)	640,091	0.413	0.492
Age	694,621	40.376	17.246
Female (1=Yes)	697,393	0.534	0.499
Married (1=Yes)	691,304	0.590	0.492
Urban Area (1=Yes)	663,623	0.445	0.497
Child in Household (1=Yes)	682,629	0.539	0.498
Household Size	682,652	3.257	1.901
Religion Important (1=Yes)	582,452	0.744	0.437
Smiled Yesterday (1=Yes)	635,826	0.708	0.455
Optimistic Even When Things Go Wrong (1=Yes)	219,312	0.761	0.427

*Source:* Gallup World Poll, 2010-2013.

*Notes:* All statistics are for 2009-2012 and show the number of observations, means, and standard deviations for each variable. Best Possible Life measures the respondent's assessment of her current life relative to her best possible life on a scale of 0 to 10, where 0 is the worst possible life, and 10 is the best possible life. Experienced Happiness Yesterday, Experienced Stress Yesterday, Experienced Anger Yesterday, and Smiled Yesterday are binary variables coded as 1 if the respondent experienced this type of affect the day before and 0 otherwise. Household income is in international dollars (ID), which allows comparisons across countries and time.

Table 3: Regression analysis of evaluative and hedonic well-being, 2009-2012

VARIABLES	(1) BPL	(2) Happy	(3) Stress	(4) Anger
Absence of a Health Problem Limiting Ability (1=Yes)	0.314*** (0.013)	0.342*** (0.017)	-0.440*** (0.016)	-0.372*** (0.018)
Learned or Did Something Interesting Yesterday (1=Yes)	0.305*** (0.011)	0.653*** (0.016)	-0.113*** (0.015)	-0.054*** (0.017)
People Can Get Ahead Through Hard Work (1=Yes)	0.265*** (0.015)	0.301*** (0.020)	-0.190*** (0.019)	-0.206*** (0.022)
Satisfied with Freedom in Life (1=Yes)	0.241*** (0.012)	0.353*** (0.017)	-0.305*** (0.016)	-0.302*** (0.018)
High School Education or Higher (1=Yes)	0.313*** (0.015)	0.030 (0.025)	0.069*** (0.022)	-0.093*** (0.026)
Log Household Income (in ID)	0.426*** (0.008)	0.160*** (0.008)	-0.046*** (0.008)	-0.052*** -0.009
Employment Categories ( <i>Ref. Group: Out of the Labor Force</i> )				
Employed Full-Time (1=Yes)	0.032** (0.015)	-0.077*** (0.022)	0.325*** (0.020)	0.094*** (0.023)
Self-Employed (1=Yes)	-0.074*** (0.017)	-0.065*** (0.025)	0.323*** (0.023)	0.126*** (0.026)
Voluntarily Employed Part-Time (1=Yes)	0.080*** (0.019)	0.057* (0.030)	0.107*** (0.028)	0.015 (0.032)
Unemployed (1=Yes)	-0.361*** (0.022)	-0.242*** (0.029)	0.397*** (0.027)	0.319*** (0.030)
Employed Part-Time, Wants Full-Time (1=Yes)	-0.148*** (0.021)	-0.118*** (0.031)	0.281*** (0.028)	0.219*** (0.032)
Age	-0.030*** (0.002)	-0.026*** (0.003)	0.035*** (0.002)	0.013*** (0.003)
Age Squared/100	0.029*** (0.002)	0.021*** (0.003)	-0.046*** (0.003)	-0.024*** (0.003)
Female (1=Yes)	0.095*** (0.010)	0.005 (0.015)	0.117*** (0.014)	0.048*** (0.016)

Table 3 (Continued)

VARIABLES	(1) BPL	(2) Happy	(3) Stress	(4) Anger
Married (1=Yes)	0.087*** (0.012)	0.202*** (0.017)	-0.036** (0.016)	0.070*** (0.018)
Urban Area (1=Yes)	0.122*** (0.012)	-0.033* (0.017)	0.127*** (0.015)	0.074*** (0.018)
Child in Household (1=Yes)	-0.120*** (0.012)	-0.017 (0.017)	0.108*** (0.016)	0.145*** (0.018)
Household Size	-0.001 (0.003)	0.006 (0.004)	0.006 (0.004)	0.011** (0.004)
Religion Important (1=Yes)	0.036** (0.015)	0.178*** (0.022)	0.054*** (0.020)	-0.006 (0.024)
Smiled Yesterday (1=Yes)	0.346*** (0.012)	1.631*** (0.016)	-0.838*** (0.016)	-0.740*** (0.017)
Optimistic (1=Yes)	0.168*** (0.012)	0.323*** (0.017)	-0.200*** (0.016)	-0.235*** (0.018)
Country Dummies	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes
Observations	124,214	125,014	125,873	125,985
Pseudo R-Squared	0.0910	0.2252	0.1015	0.0811

*Source:* Gallup World Poll, 2010-2013.

*Notes:* All regressions are for 2009-2012 and use robust standard errors; and country and year dummies. BPL measures the respondent's assessment of her current life relative to her best possible life on a scale of 0 to 10, where 0 is the worst possible life, and 10 is the best possible life. Happy, Stress, and Anger are binary variables coded as 1 if the respondent experienced this type of affect the day before and 0 otherwise. Household income is log-transformed and is in international dollars (ID), which allows comparisons across countries and time. Model (1) is estimated using an ordered logit, and models (2)-(4) are estimated using a logit.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1



Table 4: Best Possible Life quantile regressions, 2009-2012

VARIABLES	(1) Q25	(2) Q50	(3) Q75	(4) Q90
Absence of a Health Problem Limiting Ability (1=Yes)	0.430*** (0.010)	0.335*** (0.007)	0.300*** (0.009)	0.280*** (0.010)
Learned or Did Something Interesting Yesterday (1=Yes)	0.381*** (0.007)	0.352*** (0.005)	0.379*** (0.008)	0.403*** (0.008)
People Can Get Ahead Through Hard Work (1=Yes)	0.408*** (0.010)	0.339*** (0.009)	0.293*** (0.011)	0.271*** (0.013)
Satisfied with Freedom in Life (1=Yes)	0.369*** (0.007)	0.309*** (0.010)	0.282*** (0.008)	0.303*** (0.014)
High School Education or Higher (1=Yes)	0.380*** (0.011)	0.319*** (0.010)	0.282*** (0.008)	0.192*** (0.015)
Log Household Income (in ID)	0.471*** (0.006)	0.370*** (0.006)	0.289*** (0.005)	0.211*** (0.006)
Employment Categories ( <i>Ref. Group: Out of the Labor Force</i> )				
Employed Full-Time (1=Yes)	0.057*** (0.011)	0.034*** (0.006)	0.001 (0.009)	-0.048** (0.019)
Self-Employed (1=Yes)	-0.022 (0.015)	-0.021 (0.015)	-0.051*** (0.011)	-0.059*** (0.019)
Voluntarily Employed Part-Time (1=Yes)	0.137*** (0.015)	0.108*** (0.011)	0.079*** (0.014)	0.058** (0.026)
Unemployed (1=Yes)	-0.397*** (0.017)	-0.352*** (0.018)	-0.303*** (0.017)	-0.268*** (0.024)
Employed Part-Time, Wants Full-Time (1=Yes)	-0.165*** (0.018)	-0.133*** (0.014)	-0.124*** (0.013)	-0.127*** (0.020)
Age	-0.025*** (0.001)	-0.029*** (0.001)	-0.035*** (0.001)	-0.040*** (0.002)
Age Squared/100	0.020*** (0.001)	0.025*** (0.001)	0.033*** (0.002)	0.040*** (0.002)
Female (1=Yes)	0.083*** (0.009)	0.081*** (0.007)	0.084*** (0.010)	0.106*** (0.015)

Table 4 (Continued)

VARIABLES	(1) Q25	(2) Q50	(3) Q75	(4) Q90
Married (1=Yes)	0.116*** (0.009)	0.103*** (0.009)	0.107*** (0.007)	0.093*** (0.010)
Urban Area (1=Yes)	0.127*** (0.010)	0.127*** (0.007)	0.149*** (0.009)	0.162*** (0.016)
Child in Household (1=Yes)	-0.129*** (0.008)	-0.116*** (0.006)	-0.108*** (0.010)	-0.099*** (0.009)
Household Size	-0.006*** (0.002)	0.001 (0.002)	0.004 (0.003)	0.007** (0.003)
Religion Important (1=Yes)	-0.017* (0.009)	0.013 (0.012)	0.049*** (0.013)	0.112*** (0.014)
Constant	-0.339*** (0.055)	1.679*** (0.065)	3.677*** (0.055)	5.639*** (0.087)
Country Dummies	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes
Observations	352,046	352,046	352,046	352,046
Pseudo R-Squared	0.173	0.172	0.192	0.146

*Source:* Gallup World Poll, 2010-2013.

Notes: All quantile regressions are for 2009-2012 and use bootstrapped standard errors; and country and year dummies. The dependent variable in all regressions is BPL, which measures the respondent's assessment of her current life relative to her best possible life on a scale of 0 to 10, where 0 is the worst possible life, and 10 is the best possible life. Q25 corresponds to the 25th percent quantile, Q50 corresponds to the 50th percent quantile, Q75 corresponds to the 75th percent quantile, and Q90 is the 90th percent quantile. Household income is log-transformed and is in international dollars (ID), which allows comparisons across countries and time. The table reports the Pseudo R-Squared for each quantile regression.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 5: Regressions of evaluative and hedonic well-being, by income quintiles, 2009-2012

VARIABLES	(1) BPL Q1	(2) BPL Q2	(3) BPL Q3	(4) BPL Q4	(5) BPL Q5	(6) Happy Q1	(7) Happy Q2	(8) Happy Q3	(9) Happy Q4	(10) Happy Q5
Absence of a Health Problem										
Limiting Ability (1=Yes)	0.257*** (0.025)	0.280*** (0.027)	0.332*** (0.028)	0.299*** (0.031)	0.408*** (0.037)	0.376*** (0.033)	0.305*** (0.037)	0.354*** (0.038)	0.348*** (0.043)	0.306*** (0.055)
Learned or Did Something										
Interesting Yesterday (1=Yes)	0.356*** (0.023)	0.286*** (0.024)	0.257*** (0.024)	0.288*** (0.025)	0.318*** (0.028)	0.667*** (0.031)	0.581*** (0.034)	0.593*** (0.035)	0.699*** (0.037)	0.782*** (0.043)
People Can Get Ahead Through										
Hard Work (1=Yes)	0.166*** (0.033)	0.195*** (0.035)	0.236*** (0.034)	0.343*** (0.033)	0.386*** (0.036)	0.258*** (0.043)	0.346*** (0.046)	0.201*** (0.044)	0.391*** (0.046)	0.275*** (0.052)
Satisfied with Freedom in Life										
(1=Yes)	0.170*** (0.025)	0.264*** (0.026)	0.187*** (0.027)	0.309*** (0.030)	0.359*** (0.038)	0.308*** (0.032)	0.389*** (0.036)	0.374*** (0.036)	0.365*** (0.041)	0.304*** (0.053)
High School Education or Higher										
(1=Yes)	0.590*** (0.077)	0.330*** (0.046)	0.325*** (0.037)	0.233*** (0.031)	0.250*** (0.029)	-0.115 (0.101)	0.077 (0.073)	0.240*** (0.058)	-0.003 (0.049)	-0.101** (0.047)
Log Household Income (in ID)	0.186*** (0.017)	0.607*** (0.052)	0.567*** (0.062)	0.702*** (0.057)	0.483*** (0.032)	0.066*** (0.018)	0.338*** (0.074)	0.231*** (0.090)	0.250*** (0.085)	0.143*** (0.050)
Employment Categories ( <i>Ref. Group: Out of the Labor Force</i> )										
Employed Full-Time (1=Yes)	0.087** (0.040)	0.034 (0.035)	0.002 (0.032)	0.016 (0.032)	-0.056 (0.037)	0.024 (0.053)	-0.010 (0.049)	-0.110** (0.047)	-0.113** (0.049)	-0.135** (0.057)
Self-Employed (1=Yes)	-0.053* (0.031)	-0.120*** (0.035)	-0.064* (0.038)	-0.023 (0.044)	-0.088 (0.057)	-0.016 (0.043)	-0.069 (0.052)	-0.026 (0.057)	-0.129* (0.070)	-0.098 (0.085)
Voluntarily Part-Time (1=Yes)	0.064 (0.039)	0.006 (0.041)	0.071 (0.043)	0.132*** (0.051)	0.105** (0.052)	0.045 (0.055)	0.054 (0.064)	0.017 (0.069)	0.083 (0.080)	0.156* (0.090)
Unemployed (1=Yes)	-0.275*** (0.042)	-0.275*** (0.044)	-0.356*** (0.047)	-0.451*** (0.057)	-0.614*** (0.080)	-0.181*** (0.052)	-0.268*** (0.058)	-0.240*** (0.064)	-0.358*** (0.080)	-0.139 (0.121)
Involuntarily Part-Time (1=Yes)	-0.073** (0.037)	-0.167*** (0.044)	-0.124** (0.049)	-0.135** (0.059)	-0.377*** (0.073)	-0.083 (0.051)	-0.014 (0.063)	-0.090 (0.073)	-0.290*** (0.085)	-0.236** (0.114)

Table 5 (Continued)

VARIABLES	(1) BPL Q1	(2) BPL Q2	(3) BPL Q3	(4) BPL Q4	(5) BPL Q5	(6) Happy Q1	(7) Happy Q2	(8) Happy Q3	(9) Happy Q4	(10) Happy Q5
Age	-0.021*** (0.004)	-0.030*** (0.004)	-0.027*** (0.004)	-0.039*** (0.004)	-0.049*** (0.006)	-0.021*** (0.005)	-0.027*** (0.005)	-0.022*** (0.005)	-0.027*** (0.006)	-0.048*** (0.009)
Age Squared/100	0.020*** (0.004)	0.031*** (0.004)	0.025*** (0.004)	0.036*** (0.005)	0.051*** (0.006)	0.014*** (0.005)	0.025*** (0.006)	0.017*** (0.006)	0.021*** (0.007)	0.044*** (0.009)
Female (1=Yes)	0.064*** (0.022)	0.100*** (0.024)	0.139*** (0.023)	0.143*** (0.025)	0.120*** (0.026)	0.002 (0.030)	0.019 (0.034)	0.013 (0.034)	-0.014 (0.038)	0.046 (0.042)
Married (1=Yes)	0.055** (0.025)	0.072*** (0.027)	0.025 (0.027)	0.089*** (0.029)	0.180*** (0.033)	0.125*** (0.033)	0.155*** (0.038)	0.137*** (0.039)	0.301*** (0.042)	0.422*** (0.051)
Urban Area (1=Yes)	0.270*** (0.031)	0.107*** (0.026)	0.080*** (0.024)	0.041 (0.026)	-0.052* (0.028)	0.040 (0.040)	-0.064* (0.036)	-0.070** (0.035)	-0.059 (0.039)	-0.108** (0.048)
Child in Household (1=Yes)	-0.114*** (0.028)	-0.168*** (0.027)	-0.131*** (0.026)	-0.119*** (0.027)	-0.061** (0.030)	-0.027 (0.035)	-0.018 (0.038)	-0.044 (0.038)	-0.018 (0.041)	0.022 (0.047)
Household Size	0.021*** (0.006)	-0.009 (0.006)	-0.019*** (0.006)	-0.040*** (0.008)	-0.016 (0.013)	0.010 (0.008)	-0.008 (0.009)	-0.002 (0.010)	0.016 (0.012)	-0.016 (0.012)
Religion Important (1=Yes)	-0.008 (0.046)	0.081** (0.041)	0.061* (0.034)	0.027 (0.030)	0.067** (0.030)	0.126** (0.058)	0.217*** (0.055)	0.199*** (0.047)	0.179*** (0.045)	0.181*** (0.049)
Smiled Yesterday (1=Yes)	0.221*** (0.024)	0.340*** (0.026)	0.379*** (0.027)	0.356*** (0.029)	0.449*** (0.033)	1.566*** (0.031)	1.694*** (0.033)	1.620*** (0.035)	1.617*** (0.039)	1.749*** (0.045)
Optimistic (1=Yes)	0.120*** (0.027)	0.049* (0.027)	0.204*** (0.028)	0.237*** (0.029)	0.275*** (0.030)	0.275*** (0.034)	0.291*** (0.037)	0.369*** (0.038)	0.349*** (0.042)	0.384*** (0.047)
Observations	27,926	26,439	26,611	23,298	19,940	28,895	26,744	26,473	23,055	19,722
Pseudo R-Squared	0.041	0.046	0.053	0.057	0.075	0.213	0.224	0.225	0.232	0.230

Source: Gallup World Poll, 2010-2013.

Notes: All quintile regressions are for 2009-2012 and use robust standard errors; and country and year dummies. BPL measures the respondent's assessment of her current life relative to her best possible life on a scale of 0 to 10, where 0 is the worst possible life, and 10 is the best possible life. Happy is a binary variable coded as 1 if the respondent experienced this type of affect the day before and 0 otherwise. Q1 corresponds to the poorest income quintile, and Q5 corresponds to the richest income quintile. Household income is log-transformed and is in international dollars (ID), which allows comparisons across countries and time. Models (1)-(5) are estimated using an ordered logit, and Models (6)-(10) are estimated using a logit.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 6: Regression analysis of evaluative and hedonic well-being, by region, 2009-2012

VARIABLES	<i>EU15 Countries</i>			<i>LAC Countries</i>			<i>Transition Countries</i>		
	(1) BPL	(2) Happy	(3) Stress	(4) BPL	(5) Happy	(6) Stress	(7) BPL	(8) Happy	(9) Stress
Absence of a Health Problem									
Limiting Ability (1=Yes)	0.578*** (0.054)	0.199*** (0.075)	-0.352*** (0.066)	0.346*** (0.029)	0.388*** (0.043)	-0.540*** (0.036)	0.392*** (0.035)	0.219*** (0.045)	-0.435*** (0.049)
Learned or Did Something									
Interesting Yesterday (1=Yes)	0.313*** (0.045)	0.689*** (0.066)	0.105* (0.056)	0.294*** (0.025)	0.586*** (0.039)	-0.103*** (0.032)	0.290*** (0.032)	0.811*** (0.043)	-0.047 (0.048)
People Can Get Ahead Through									
Hard Work (1=Yes)	0.305*** (0.058)	0.224*** (0.081)	-0.131* (0.069)	0.120*** (0.039)	0.265*** (0.056)	-0.205*** (0.048)	0.436*** (0.034)	0.302*** (0.043)	-0.119** (0.048)
Satisfied with Freedom in Life									
(1=Yes)	0.390*** (0.070)	0.190** (0.092)	-0.337*** (0.084)	0.163*** (0.029)	0.414*** (0.043)	-0.251*** (0.037)	0.299*** (0.034)	0.299*** (0.044)	-0.300*** (0.048)
High School Education or Higher									
(1=Yes)	0.268*** (0.050)	-0.207*** (0.079)	0.168*** (0.065)	0.338*** (0.033)	0.148** (0.066)	0.133*** (0.049)	0.298*** (0.037)	-0.020 (0.050)	0.158*** (0.057)
Log Household Income (in ID)	0.508*** (0.040)	0.229*** (0.052)	-0.142*** (0.044)	0.201*** (0.014)	0.092*** (0.016)	-0.005 (0.015)	0.712*** (0.031)	0.155*** (0.032)	-0.064* (0.035)
Employment Categories ( <i>Ref. Group: Out of the Labor Force</i> )									
Employed Full-Time (1=Yes)	0.031 (0.059)	-0.077 (0.087)	0.465*** (0.073)	0.093*** (0.032)	0.054 (0.054)	0.393*** (0.042)	-0.043 (0.041)	-0.119** (0.055)	0.284*** (0.061)
Self-Employed (1=Yes)	0.119 (0.100)	-0.081 (0.153)	0.615*** (0.128)	-0.098** (0.040)	0.043 (0.064)	0.337*** (0.052)	0.045 (0.057)	0.104 (0.082)	0.289*** (0.091)
Voluntarily Part-Time (1=Yes)	0.223*** (0.085)	0.457*** (0.148)	-0.053 (0.111)	0.007 (0.048)	0.045 (0.080)	0.114* (0.063)	0.177*** (0.057)	0.217** (0.084)	0.093 (0.095)
Unemployed (1=Yes)	-0.573*** (0.107)	-0.344** (0.144)	0.343*** (0.119)	-0.463*** (0.048)	-0.272*** (0.071)	0.452*** (0.057)	-0.372*** (0.067)	-0.278*** (0.087)	0.420*** (0.090)
Involuntarily Part-Time (1=Yes)	-0.140 (0.112)	0.201 (0.181)	0.532*** (0.140)	-0.137*** (0.049)	-0.012 (0.078)	0.285*** (0.062)	-0.211*** (0.067)	0.056 (0.100)	0.167 (0.110)

Table 6 (Continued)

VARIABLES	<i>EU15 Countries</i>			<i>LAC Countries</i>			<i>Transition Countries</i>		
	(1) BPL	(2) Happy	(3) Stress	(4) BPL	(5) Happy	(6) Stress	(7) BPL	(8) Happy	(9) Stress
Age	-0.060*** (0.008)	-0.040*** (0.012)	0.015 (0.011)	-0.052*** (0.004)	-0.034*** (0.006)	0.031*** (0.005)	-0.035*** (0.005)	-0.039*** (0.007)	0.032*** (0.008)
Age Squared/100	0.059*** (0.009)	0.033*** (0.012)	-0.041*** (0.011)	0.048*** (0.004)	0.034*** (0.006)	-0.041*** (0.005)	0.027*** (0.005)	0.027*** (0.007)	-0.050*** (0.008)
Female (1=Yes)	0.182*** (0.042)	0.060 (0.064)	0.295*** (0.054)	0.130*** (0.024)	-0.108*** (0.041)	0.360*** (0.032)	0.041 (0.030)	0.093** (0.041)	0.188*** (0.045)
Married (1=Yes)	0.209*** (0.053)	0.520*** (0.077)	-0.022 (0.065)	0.040 (0.026)	0.188*** (0.040)	0.046 (0.033)	0.081** (0.034)	0.337*** (0.045)	0.002 (0.050)
Urban Area (1=Yes)	-0.136*** (0.043)	-0.102 (0.065)	0.088 (0.054)	0.136*** (0.025)	0.016 (0.040)	0.223*** (0.032)	0.012 (0.033)	-0.110*** (0.042)	0.100** (0.047)
Child in Household (1=Yes)	-0.118** (0.051)	0.116 (0.082)	0.228*** (0.063)	-0.119*** (0.025)	-0.065 (0.042)	0.108*** (0.033)	-0.083** (0.034)	0.110** (0.046)	0.077 (0.052)
Household Size	-0.031 (0.023)	0.005 (0.035)	0.022 (0.028)	0.007 (0.009)	0.036*** (0.014)	-0.007 (0.011)	-0.038*** (0.012)	0.021 (0.017)	-0.012 (0.019)
Religion Important (1=Yes)	-0.032 (0.049)	0.190*** (0.073)	0.175*** (0.060)	0.044 (0.030)	0.248*** (0.050)	0.030 (0.041)	-0.021 (0.032)	0.228*** (0.043)	-0.021 (0.049)
Smiled Yesterday (1=Yes)	0.688*** (0.053)	1.604*** (0.069)	-0.753*** (0.063)	0.370*** (0.033)	1.735*** (0.043)	-0.962*** (0.040)	0.303*** (0.032)	1.388*** (0.041)	-0.864*** (0.047)
Optimistic (1=Yes)	0.385*** (0.046)	0.586*** (0.067)	-0.348*** (0.058)	0.200*** (0.030)	0.515*** (0.044)	-0.131*** (0.038)	0.328*** (0.034)	0.476*** (0.045)	-0.384*** (0.048)
Country Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7,539	7,499	7,551	23,583	23,476	23,513	15,712	15,196	15,697
Pseudo R-Squared	0.093	0.232	0.104	0.045	0.162	0.078	0.078	0.227	0.120

Source: Gallup World Poll, 2010-2013.

Notes: All regressions are for 2009-2012 and use robust standard errors; and country and year dummies. BPL measures the respondent's assessment of her current life relative to her best possible life on a scale of 0 to 10, where 0 is the worst possible life, and 10 is the best possible life. Happy, Stress, and Anger are binary variables coded as 1 if the respondent experienced this type of affect the day before and 0 otherwise. Household income is log-transformed and is in international dollars (ID), which allows comparisons across countries and time. Models (1), (4), and (7) are estimated using an ordered logit, and models (2)-(3); (5)-6); and (8)-(9) are estimated using a logit. EU15 includes: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and United Kingdom. Transition economies: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kosovo, Kyrgyz Republic, Latvia, Lithuania, Macedonia FYR, Moldova, Mongolia, Montenegro, Poland, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. LAC countries are: Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Trinidad and Tobago, Uruguay, and Venezuela.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 7: Regression analysis of evaluative and hedonic well-being, transition countries, by EU status, 2009-2012

VARIABLES	<i>EU Transition Countries</i>				<i>Non-EU Transition Countries</i>			
	(1) BPL	(2) Happy	(3) Stress	(4) Anger	(5) BPL	(6) Happy	(7) Stress	(8) Anger
Absence of a Health Problem Limiting Ability (1=Yes)	0.360*** (0.053)	0.168** (0.071)	-0.342*** (0.071)	-0.212*** (0.082)	0.411*** (0.046)	0.252*** (0.059)	-0.537*** (0.068)	-0.371*** (0.067)
Learned or Did Something Interesting Yesterday (1=Yes)	0.305*** (0.049)	0.860*** (0.064)	0.045 (0.066)	-0.076 (0.078)	0.265*** (0.042)	0.768*** (0.058)	-0.181** (0.073)	-0.074 (0.070)
People Can Get Ahead Through Hard Work (1=Yes)	0.382*** (0.046)	0.225*** (0.062)	-0.103* (0.062)	-0.218*** (0.073)	0.456*** (0.049)	0.367*** (0.061)	-0.173** (0.076)	-0.049 (0.074)
Satisfied with Freedom in Life (1=Yes)	0.442*** (0.053)	0.208*** (0.069)	-0.367*** (0.068)	-0.284*** (0.078)	0.188*** (0.045)	0.357*** (0.058)	-0.228*** (0.070)	-0.229*** (0.069)
High School Education or Higher (1=Yes)	0.443*** (0.059)	-0.062 (0.081)	0.140* (0.081)	-0.025 (0.095)	0.180*** (0.048)	-0.001 (0.065)	0.181** (0.080)	0.078 (0.079)
Log Household Income (in ID)	0.714*** (0.061)	0.118** (0.050)	-0.046 (0.051)	-0.100** (0.050)	0.731*** (0.036)	0.186*** (0.042)	-0.083* (0.050)	-0.154*** (0.047)
Employment Categories ( <i>Ref. Group: Out of the Labor Force</i> )								
Employed Full-Time (1=Yes)	0.012 (0.065)	-0.099 (0.085)	0.330*** (0.085)	0.100 (0.101)	-0.115** (0.056)	-0.128* (0.073)	0.151* (0.091)	0.113 (0.089)
Self-Employed (1=Yes)	0.216** (0.109)	0.368** (0.152)	0.454*** (0.146)	0.258 (0.170)	-0.032 (0.069)	0.005 (0.098)	0.168 (0.119)	0.247** (0.111)
Voluntarily Part-Time (1=Yes)	0.259** (0.101)	0.390** (0.154)	0.259* (0.149)	0.122 (0.175)	0.120* (0.070)	0.128 (0.101)	-0.064 (0.126)	-0.041 (0.125)
Unemployed (1=Yes)	-0.515*** (0.107)	-0.249* (0.134)	0.362*** (0.130)	0.410*** (0.139)	-0.218** (0.087)	-0.312*** (0.115)	0.492*** (0.125)	0.381*** (0.117)
Involuntarily Part-Time (1=Yes)	-0.330** (0.130)	0.127 (0.186)	0.163 (0.176)	0.203 (0.197)	-0.192** (0.079)	0.015 (0.118)	0.121 (0.141)	-0.006 (0.138)

Table 7 (Continued)

VARIABLES	<i>EU Transition Countries</i>				<i>Non-EU Transition Countries</i>			
	(1) BPL	(2) Happy	(3) Stress	(4) Anger	(5) BPL	(6) Happy	(7) Stress	(8) Anger
Age	-0.055*** (0.008)	-0.043*** (0.010)	0.023** (0.011)	0.008 (0.013)	-0.025*** (0.007)	-0.041*** (0.009)	0.020* (0.011)	-0.004 (0.011)
Age Squared/100	0.044*** (0.009)	0.030*** (0.010)	-0.049*** (0.012)	-0.026* (0.014)	0.016** (0.007)	0.030*** (0.010)	-0.026** (0.012)	-0.009 (0.012)
Female (1=Yes)	0.034 (0.046)	0.053 (0.063)	0.252*** (0.062)	-0.044 (0.071)	0.040 (0.040)	0.126** (0.054)	0.126* (0.067)	-0.098 (0.063)
Married (1=Yes)	0.092* (0.055)	0.304*** (0.069)	-0.002 (0.069)	0.150* (0.081)	0.098** (0.045)	0.376*** (0.060)	0.041 (0.074)	0.206*** (0.073)
Urban Area (1=Yes)	-0.001 (0.047)	-0.118* (0.062)	0.137** (0.062)	-0.004 (0.072)	0.008 (0.047)	-0.102* (0.058)	0.076 (0.073)	0.131* (0.071)
Child in Household (1=Yes)	-0.043 (0.057)	0.202*** (0.078)	0.026 (0.075)	0.139 (0.085)	-0.129*** (0.044)	0.058 (0.058)	0.101 (0.073)	0.156** (0.071)
Household Size	-0.131*** (0.026)	0.016 (0.033)	0.024 (0.032)	0.002 (0.036)	-0.005 (0.015)	0.026 (0.020)	-0.043* (0.025)	0.016 (0.023)
Religion Important (1=Yes)	-0.004 (0.048)	0.305*** (0.066)	0.076 (0.066)	-0.122 (0.077)	-0.017 (0.044)	0.176*** (0.058)	-0.086 (0.073)	0.054 (0.069)
Smiled Yesterday (1=Yes)	0.371*** (0.049)	1.454*** (0.064)	-0.898*** (0.066)	-0.597*** (0.077)	0.247*** (0.042)	1.345*** (0.054)	-0.859*** (0.068)	-0.614*** (0.066)
Optimistic (1=Yes)	0.318*** (0.047)	0.465*** (0.063)	-0.418*** (0.063)	-0.261*** (0.072)	0.325*** (0.049)	0.506*** (0.066)	-0.338*** (0.074)	-0.253*** (0.075)
Country Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,671	6,466	6,674	6,681	9,041	8,730	9,023	9,017
Pseudo R-Squared	0.0903	0.231	0.115	0.0615	0.0695	0.222	0.0922	0.104

Source: Gallup World Poll, 2010-2013.

Notes: All regressions are for 2009-2012 and use robust standard errors; and country and year dummies. BPL measures the respondent's assessment of her current life relative to her best possible life on a scale of 0 to 10, where 0 is the worst possible life, and 10 is the best possible life. Happy, Stress, and Anger are binary variables coded as 1 if the respondent experienced this type of affect the day before and 0 otherwise. Household income is log-transformed and is in international dollars (ID), which allows comparisons across countries and time. Models (1) and (5) are estimated using an ordered logit, and models (2)-(4); (6)-(8) are estimated using a logit. The transition economies include: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kosovo, Kyrgyz Republic, Latvia, Lithuania, Macedonia FYR, Moldova, Mongolia, Montenegro, Poland, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. The EU transition countries are: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, and Slovenia.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1



## APPENDIX

Table A1: Regression analysis of evaluative and hedonic well-being, by income quintile, EU15 countries, 2009-2012

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	BPL Q2	BPL Q3	BPL Q4	BPL Q5	Happy Q2	Happy Q3	Happy Q4	Happy Q5
Absence of a Health Problem Limiting Ability (1=Yes)	1.151** (0.548)	1.269*** (0.260)	0.558*** (0.098)	0.458*** (0.071)	-0.942 (1.166)	0.564 (0.352)	0.357*** (0.136)	0.046 (0.103)
Learned or Did Something Interesting Yesterday (1=Yes)	1.314** (0.582)	0.190 (0.255)	0.346*** (0.092)	0.260*** (0.055)	2.269*** (0.783)	0.845** (0.375)	0.508*** (0.124)	0.728*** (0.082)
People Can Get Ahead Through Hard Work (1=Yes)	1.750** (0.705)	0.285 (0.259)	0.324*** (0.108)	0.294*** (0.075)	-0.435 (1.094)	0.150 (0.329)	0.282* (0.145)	0.233** (0.106)
Satisfied with Freedom in Life (1=Yes)	-0.105 (0.706)	-0.319 (0.291)	0.404*** (0.114)	0.467*** (0.099)	2.347** (1.172)	-0.309 (0.415)	0.277* (0.151)	0.091 (0.132)
High School Education or Higher (1=Yes)	0.022 (0.578)	0.910** (0.460)	0.340** (0.140)	0.242*** (0.057)	2.524 (2.015)	-0.198 (0.558)	-0.043 (0.189)	-0.238*** (0.091)
Log Household Income (in ID)	1.135 (1.055)	0.129 (0.637)	0.517*** (0.189)	0.634*** (0.065)	5.719** (2.777)	-1.215 (1.043)	0.692** (0.273)	0.258*** (0.099)
Employment Categories ( <i>Ref. Group: Out of the Labor Force</i> )								
Employed Full-Time (1=Yes)	0.087 (0.904)	0.514 (0.414)	0.150 (0.124)	-0.015 (0.075)	2.079 (1.492)	1.456** (0.612)	0.183 (0.177)	-0.209* (0.112)
Self-Employed (1=Yes)	0.438 (0.962)	-0.147 (0.401)	0.481** (0.212)	0.019 (0.125)	-2.437 (2.161)	-0.924 (1.484)	0.333 (0.285)	-0.332* (0.185)
Voluntarily Part-Time (1=Yes)	0.849 (0.816)	-0.234 (0.524)	0.411** (0.168)	0.135 (0.104)	-0.728 (2.280)	0.862 (0.730)	0.795*** (0.286)	0.217 (0.179)
Unemployed (1=Yes)	-0.408 (0.647)	-0.700** (0.337)	-0.383** (0.178)	-0.729*** (0.161)	-0.989 (1.022)	0.064 (0.449)	-0.338 (0.245)	-0.271 (0.226)
Involuntarily Part-Time (1=Yes)	0.689 (0.819)	-0.558 (0.368)	-0.199 (0.214)	-0.076 (0.149)	1.906 (1.469)	1.629** (0.822)	0.184 (0.314)	0.037 (0.247)

Table A1 (Continued)

VARIABLES	(1) BPL Q2	(2) BPL Q3	(3) BPL Q4	(4) BPL Q5	(5) Happy Q2	(6) Happy Q3	(7) Happy Q4	(8) Happy Q5
Age	-0.135** (0.058)	-0.001 (0.033)	-0.082*** (0.014)	-0.057*** (0.011)	0.054 (0.137)	0.011 (0.064)	-0.023 (0.021)	-0.053*** (0.018)
Age Squared/100	0.169*** (0.053)	-0.004 (0.031)	0.077*** (0.014)	0.061*** (0.012)	-0.067 (0.140)	-0.006 (0.057)	0.021 (0.020)	0.045** (0.018)
Female (1=Yes)	0.131 (0.447)	0.106 (0.237)	0.235** (0.091)	0.200*** (0.051)	-0.066 (1.084)	-0.291 (0.365)	0.127 (0.124)	0.082 (0.080)
Married (1=Yes)	0.772 (0.497)	-0.157 (0.280)	-0.032 (0.110)	0.261*** (0.065)	1.349 (1.043)	0.662 (0.424)	0.279* (0.146)	0.607*** (0.097)
Urban Area (1=Yes)	-0.172 (0.479)	-0.279 (0.229)	0.017 (0.089)	-0.221*** (0.052)	2.453** (1.013)	0.029 (0.333)	-0.186 (0.123)	-0.112 (0.082)
Child in Household (1=Yes)	0.913 (0.565)	-0.236 (0.377)	-0.064 (0.121)	-0.100* (0.060)	0.318 (1.118)	0.181 (0.523)	0.234 (0.167)	0.117 (0.100)
Household Size	-0.206 (0.294)	-0.130 (0.109)	-0.028 (0.050)	-0.043 (0.028)	-0.618 (0.579)	-0.284* (0.169)	0.054 (0.069)	-0.001 (0.044)
Religion Important (1=Yes)	-0.357 (0.544)	0.157 (0.238)	-0.023 (0.094)	-0.044 (0.061)	-1.735 (1.762)	0.039 (0.368)	0.169 (0.130)	0.240** (0.096)
Smiled Yesterday (1=Yes)	1.443** (0.596)	1.092*** (0.260)	0.614*** (0.103)	0.645*** (0.067)	5.089*** (1.540)	3.039*** (0.428)	1.558*** (0.128)	1.534*** (0.087)
Optimistic (1=Yes)	-0.237 (0.497)	0.456** (0.216)	0.440*** (0.096)	0.408*** (0.057)	1.057 (0.801)	0.703** (0.329)	0.343*** (0.125)	0.697*** (0.084)
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	114	363	1,795	5,246	105	358	1,787	5,215
R-squared	0.186	0.131	0.0683	0.0667	0.623	0.463	0.225	0.198

Source: Gallup World Poll, 2010-2013.

Notes: All quintile regressions are for 2009-2012 and use robust standard errors; and country and year dummies. BPL measures the respondent's assessment of her current life relative to her best possible life on a scale of 0 to 10, where 0 is the worst possible life, and 10 is the best possible life. Happy is a binary variable coded as 1 if the respondent experienced this type of affect the day before and 0 otherwise. Q1 corresponds to the poorest income quintile (but is omitted in this regression due to lack of observations) and Q5 corresponds to the richest income quintile. Household income is log-transformed and is in international dollars (ID), which allows comparisons across countries and time. EU15 includes: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and United Kingdom. Models (1)-(4) are estimated using an ordered logit, and Models (5)-(8) are estimated using a logit.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A2: Regression analysis of evaluative and hedonic well-being, by income quintile, LAC countries, 2009-2012

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	BPL Q1	BPL Q2	BPL Q3	BPL Q4	BPL Q5	Happy Q1	Happy Q2	Happy Q3	Happy Q4	Happy Q5
Absence of a Health Problem Limiting Ability (1=Yes)	0.444*** (0.075)	0.371*** (0.059)	0.326*** (0.053)	0.235*** (0.062)	0.242** (0.116)	0.289*** (0.106)	0.359*** (0.085)	0.344*** (0.079)	0.563*** (0.094)	0.494*** (0.182)
Learned or Did Something Interesting Yesterday (1=Yes)	0.428*** (0.073)	0.248*** (0.053)	0.200*** (0.046)	0.311*** (0.049)	0.360*** (0.087)	0.513*** (0.101)	0.606*** (0.078)	0.530*** (0.072)	0.669*** (0.081)	0.768*** (0.156)
People Can Get Ahead Through Hard Work (1=Yes)	-0.075 (0.096)	0.109 (0.092)	0.173** (0.078)	0.215*** (0.075)	0.145 (0.119)	0.185 (0.137)	0.231* (0.118)	0.115 (0.108)	0.361*** (0.117)	0.549*** (0.194)
Satisfied with Freedom in Life (1=Yes)	0.107 (0.074)	0.221*** (0.059)	0.095* (0.054)	0.235*** (0.060)	0.233** (0.103)	0.628*** (0.105)	0.325*** (0.090)	0.430*** (0.080)	0.358*** (0.094)	0.257 (0.172)
High School Education or Higher (1=Yes)	0.171 (0.160)	0.231** (0.109)	0.282*** (0.073)	0.185*** (0.059)	0.279*** (0.094)	0.175 (0.322)	-0.010 (0.208)	0.206 (0.145)	0.034 (0.112)	0.260 (0.172)
Log Household Income (in ID)	-0.009 (0.022)	0.330*** (0.124)	0.357*** (0.125)	0.608*** (0.103)	0.079 (0.099)	-0.012 (0.033)	0.088 (0.190)	0.374* (0.202)	0.323* (0.180)	0.365* (0.210)
Employment Categories ( <i>Ref. Group: Out of the Labor Force</i> )										
Employed Full-Time (1=Yes)	0.080 (0.109)	0.149** (0.073)	0.098* (0.059)	0.011 (0.060)	0.015 (0.116)	0.279 (0.178)	0.103 (0.117)	0.021 (0.099)	-0.083 (0.110)	-0.273 (0.199)
Self-Employed (1=Yes)	-0.157 (0.104)	-0.146* (0.082)	-0.026 (0.077)	-0.120 (0.081)	-0.236 (0.150)	0.080 (0.149)	0.207 (0.133)	0.225* (0.124)	-0.323** (0.135)	-0.120 (0.263)
Voluntarily Part-Time (1=Yes)	0.009 (0.125)	-0.046 (0.100)	0.063 (0.088)	-0.086 (0.101)	0.174 (0.164)	0.135 (0.188)	0.064 (0.168)	0.066 (0.148)	0.019 (0.175)	-0.078 (0.309)
Unemployed (1=Yes)	-0.439*** (0.116)	-0.343*** (0.094)	-0.383*** (0.085)	-0.554*** (0.104)	-0.493** (0.224)	0.008 (0.153)	-0.357*** (0.131)	-0.302** (0.126)	-0.334* (0.173)	0.188 (0.493)
Involuntarily Part-Time (1=Yes)	0.024 (0.113)	-0.206** (0.097)	-0.057 (0.088)	-0.084 (0.116)	-0.298 (0.205)	0.360* (0.189)	0.170 (0.148)	-0.026 (0.146)	-0.363** (0.170)	-0.491 (0.341)

Table A2 (Continued)

VARIABLES	(1) BPL Q1	(2) BPL Q2	(3) BPL Q3	(4) BPL Q4	(5) BPL Q5	(6) Happy Q1	(7) Happy Q2	(8) Happy Q3	(9) Happy Q4	(10) Happy Q5
Age	-0.049*** (0.010)	-0.073*** (0.008)	-0.049*** (0.007)	-0.038*** (0.008)	0.049*** (0.017)	-0.032** (0.014)	-0.037*** (0.011)	-0.036*** (0.011)	-0.023 (0.014)	-0.073*** (0.028)
Age Squared/100	0.046*** (0.011)	0.072*** (0.008)	0.045*** (0.008)	0.033*** (0.009)	0.042** (0.019)	0.031** (0.015)	0.039*** (0.012)	0.036*** (0.012)	0.020 (0.016)	0.067** (0.030)
Female (1=Yes)	-0.024 (0.070)	0.174*** (0.054)	0.243*** (0.046)	0.159*** (0.048)	0.017 (0.086)	-0.148 (0.104)	-0.040 (0.085)	-0.121 (0.076)	-0.128 (0.085)	0.058 (0.153)
Married (1=Yes)	0.078 (0.071)	0.058 (0.054)	-0.064 (0.047)	0.004 (0.052)	0.132 (0.094)	0.236** (0.101)	0.276*** (0.081)	0.083 (0.074)	0.177** (0.087)	0.219 (0.173)
Urban Area (1=Yes)	0.212*** (0.074)	0.082 (0.051)	0.063 (0.045)	0.068 (0.052)	-0.093 (0.105)	0.057 (0.110)	0.061 (0.079)	-0.120 (0.073)	-0.040 (0.092)	-0.278 (0.214)
Child in Household (1=Yes)	-0.031 (0.072)	-0.115** (0.056)	-0.123*** (0.047)	-0.129*** (0.049)	-0.185** (0.090)	-0.035 (0.107)	0.041 (0.085)	-0.191** (0.080)	-0.025 (0.087)	-0.147 (0.158)
Household Size	0.046* (0.024)	-0.020 (0.019)	0.004 (0.016)	-0.030* (0.017)	-0.019 (0.033)	0.084** (0.039)	-0.023 (0.028)	0.019 (0.025)	0.042 (0.030)	-0.026 (0.055)
Religion Important (1=Yes)	-0.174* (0.098)	0.052 (0.075)	0.107* (0.058)	0.133** (0.056)	-0.023 (0.093)	0.209 (0.149)	0.264** (0.110)	0.332*** (0.092)	0.149 (0.101)	0.390** (0.168)
Smiled Yesterday (1=Yes)	0.249*** (0.086)	0.436*** (0.066)	0.360*** (0.064)	0.309*** (0.068)	0.476*** (0.127)	1.611*** (0.112)	1.640*** (0.084)	1.748*** (0.081)	1.875*** (0.091)	2.125*** (0.175)
Optimistic (1=Yes)	0.217*** (0.075)	0.114* (0.062)	0.263*** (0.058)	0.157** (0.061)	0.337*** (0.111)	0.545*** (0.101)	0.500*** (0.088)	0.373*** (0.083)	0.647*** (0.094)	0.427** (0.179)
Country Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,973	5,221	7,058	6,260	2,071	2,971	5,213	7,013	6,219	2,057
Pseudo R-Squared	0.038	0.035	0.034	0.035	0.049	0.174	0.159	0.150	0.166	0.197

Source: Gallup World Poll, 2010-2013.

Notes: All quintile regressions are for 2009-2012 and use robust standard errors; and country and year dummies. BPL measures the respondent's assessment of her current life relative to her best possible life on a scale of 0 to 10, where 0 is the worst possible life, and 10 is the best possible life. Happy is a binary variable coded as 1 if the respondent experienced this type of affect the day before and 0 otherwise. Q1 corresponds to the poorest income quintile, and Q5 corresponds to the richest income quintile. Household income is log-transformed and is in international dollars (ID), which allows comparisons across countries and time. Models (1)-(5) are estimated using an ordered logit, and Models (6)-(10) are estimated using a logit. LAC countries are: Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Trinidad and Tobago, Uruguay, and Venezuela.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A3: Regression analysis of evaluative and hedonic well-being, by income quintile, transition countries, 2009-2012

VARIABLES	(1) BPL Q1	(2) BPL Q2	(3) BPL Q3	(4) BPL Q4	(5) BPL Q5	(6) Happy Q1	(7) Happy Q2	(8) Happy Q3	(9) Happy Q4	(10) Happy Q5
Absence of a Health Problem Limiting Ability (1=Yes)	0.554*** (0.126)	0.426*** (0.077)	0.420*** (0.065)	0.290*** (0.063)	0.357*** (0.106)	0.145 (0.163)	0.266** (0.104)	0.343*** (0.085)	0.112 (0.081)	0.206 (0.137)
Learned or Did Something Interesting Yesterday (1=Yes)	0.158 (0.148)	0.273*** (0.081)	0.342*** (0.061)	0.254*** (0.054)	0.327*** (0.080)	0.564*** (0.197)	0.787*** (0.114)	0.847*** (0.084)	0.850*** (0.071)	0.857*** (0.106)
People Can Get Ahead Through Hard Work (1=Yes)	0.444*** (0.132)	0.348*** (0.085)	0.474*** (0.066)	0.407*** (0.058)	0.474*** (0.086)	0.145 (0.179)	0.307*** (0.112)	0.324*** (0.085)	0.424*** (0.075)	0.145 (0.111)
Satisfied with Freedom in Life (1=Yes)	0.530*** (0.127)	0.239*** (0.080)	0.194*** (0.067)	0.366*** (0.060)	0.307*** (0.098)	0.210 (0.169)	0.486*** (0.107)	0.315*** (0.085)	0.233*** (0.077)	0.173 (0.128)
High School Education or Higher (1=Yes)	0.308 (0.193)	0.229** (0.103)	0.274*** (0.071)	0.249*** (0.059)	0.281*** (0.091)	-0.291 (0.247)	-0.294** (0.149)	0.180* (0.101)	-0.009 (0.081)	-0.112 (0.123)
Log Household Income (in ID)	0.055 (0.094)	0.678*** (0.167)	0.520*** (0.157)	1.117*** (0.124)	0.945*** (0.144)	0.111 (0.104)	0.418* (0.239)	0.324 (0.212)	0.080 (0.166)	0.224 (0.177)
Employment Categories ( <i>Ref. Group: Out of the Labor Force</i> )										
Employed Full-Time (1=Yes)	0.248 (0.213)	0.055 (0.109)	-0.137* (0.080)	-0.107 (0.072)	-0.132 (0.120)	0.418 (0.317)	0.283* (0.145)	-0.212** (0.107)	-0.240** (0.094)	-0.069 (0.146)
Self-Employed (1=Yes)	0.146 (0.229)	0.021 (0.113)	0.036 (0.105)	-0.009 (0.115)	0.028 (0.187)	0.362 (0.264)	0.093 (0.172)	-0.034 (0.152)	0.047 (0.173)	0.614** (0.251)
Voluntarily Part-Time (1=Yes)	-0.029 (0.240)	0.082 (0.113)	0.184* (0.106)	0.326*** (0.115)	-0.050 (0.170)	-0.460 (0.321)	0.761*** (0.193)	0.088 (0.164)	0.093 (0.156)	0.284 (0.220)
Unemployed (1=Yes)	-0.168 (0.190)	-0.313** (0.140)	-0.486*** (0.116)	-0.324** (0.144)	-0.555** (0.230)	-0.553** (0.251)	0.003 (0.192)	-0.342** (0.167)	-0.364** (0.172)	0.043 (0.309)
Involuntarily Part-Time (1=Yes)	-0.152 (0.185)	-0.301** (0.133)	-0.126 (0.121)	-0.082 (0.136)	-0.478* (0.256)	-0.247 (0.322)	0.390* (0.206)	0.004 (0.184)	-0.015 (0.196)	-0.164 (0.384)

Table A3 (Continued)

VARIABLES	(1) BPL Q1	(2) BPL Q2	(3) BPL Q3	(4) BPL Q4	(5) BPL Q5	(6) Happy Q1	(7) Happy Q2	(8) Happy Q3	(9) Happy Q4	(10) Happy Q5
Age	-0.057*** (0.020)	-0.023* (0.012)	-0.043*** (0.009)	-0.035*** (0.010)	-0.042*** (0.016)	-0.063** (0.026)	-0.057*** (0.015)	-0.009 (0.012)	-0.045*** (0.012)	-0.062*** (0.020)
Age Squared/100	0.061*** (0.021)	0.019 (0.013)	0.033*** (0.010)	0.024** (0.010)	0.036** (0.017)	0.058** (0.027)	0.049*** (0.016)	-0.004 (0.012)	0.030** (0.013)	0.052** (0.022)
Female (1=Yes)	0.362*** (0.115)	-0.022 (0.072)	0.145** (0.060)	-0.003 (0.053)	-0.012 (0.078)	0.266* (0.159)	0.384*** (0.102)	0.065 (0.081)	-0.022 (0.071)	-0.010 (0.106)
Married (1=Yes)	0.109 (0.137)	0.036 (0.083)	0.085 (0.067)	0.082 (0.061)	0.011 (0.095)	0.610*** (0.180)	0.355*** (0.114)	0.166* (0.090)	0.481*** (0.078)	0.398*** (0.128)
Urban Area (1=Yes)	-0.067 (0.176)	0.015 (0.094)	-0.099 (0.063)	-0.029 (0.054)	0.094 (0.080)	0.024 (0.218)	0.105 (0.114)	-0.170** (0.082)	-0.107 (0.071)	-0.220** (0.108)
Child in Household (1=Yes)	-0.018 (0.133)	-0.163* (0.084)	-0.087 (0.069)	-0.116* (0.061)	-0.030 (0.085)	-0.055 (0.179)	0.052 (0.119)	0.081 (0.094)	0.159** (0.079)	0.166 (0.115)
Household Size	0.090** (0.040)	-0.031 (0.025)	-0.093*** (0.023)	-0.090*** (0.025)	-0.036 (0.036)	0.117* (0.061)	0.024 (0.038)	0.013 (0.033)	0.004 (0.033)	0.023 (0.049)
Religion Important (1=Yes)	0.090 (0.139)	0.042 (0.079)	-0.033 (0.063)	-0.017 (0.055)	0.013 (0.084)	0.165 (0.184)	0.205* (0.108)	0.233*** (0.084)	0.189*** (0.073)	0.395*** (0.118)
Smiled Yesterday (1=Yes)	0.441*** (0.125)	0.369*** (0.075)	0.387*** (0.061)	0.189*** (0.056)	0.251*** (0.091)	1.842*** (0.161)	1.587*** (0.098)	1.414*** (0.079)	1.261*** (0.072)	1.363*** (0.115)
Optimistic (1=Yes)	0.571*** (0.132)	0.236*** (0.083)	0.287*** (0.067)	0.382*** (0.059)	0.341*** (0.087)	0.615*** (0.182)	0.622*** (0.114)	0.526*** (0.087)	0.455*** (0.080)	0.273** (0.117)
Country Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,104	2,926	4,302	5,089	2,291	1,085	2,837	4,171	4,892	2,206
Pseudo R2	0.074	0.047	0.051	0.044	0.046	0.260	0.292	0.247	0.203	0.181

Source: Gallup World Poll, 2010-2013.

Notes: All quintile regressions are for 2009-2012 and use robust standard errors; and country and year dummies. BPL measures the respondent's assessment of her current life relative to her best possible life on a scale of 0 to 10, where 0 is the worst possible life, and 10 is the best possible life. Happy is a binary variable coded as 1 if the respondent experienced this type of affect the day before and 0 otherwise. Q1 corresponds to the poorest income quintile, and Q5 corresponds to the richest income quintile. Household income is log-transformed and is in international dollars (ID), which allows comparisons across countries and time. Models (1)-(5) are estimated using an ordered logit, and Models (6)-(10) are estimated using a logit. Transition economies are: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kosovo, Kyrgyz Republic, Latvia, Lithuania, Macedonia FYR, Moldova, Mongolia, Montenegro, Poland, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1