

The Cost of Being Too Patient

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ABSTRACT

The researchers study the cost of being too patient on happiness. They find that the relationship between patience and various measures of subjective well-being is hump-shaped: it exists an optimal amount of patience that maximizes happiness. Beyond this optimal level, higher levels of patience have a negative impact on well-being.

The Cost of Being too Patient

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Theoretical and empirical evidence show that patience, the ability to sacrifice the present for future rewards, helps explain economic decisions such as savings, investment in human capital, and even the wealth of nation (Chen, 2013 ; Falk et al., 2018; Figlio et al., 2019; Galor et al., 2016).

However, an excessive tendency to delay gratification can have psychological costs, as measured by many indicators of subjective well-being. Recent evidence shows that Asian-American students, a group scoring high in the level of patience, suffer psychological and social costs despite their strong academic success. One possible interpretation advanced in the literature is that they may suffer immediate psychological costs as a result of sacrificing the present for the future (Hsin and Xie, 2014).

In this paper, we test systematically the potential cost of being too patient by using the

Global Preference Survey (GPS) developed by Falk et al. (2018) within the framework of the 2012 Gallup World Poll data.

We focus on life satisfaction, the variable most commonly used in the existing happiness literature (Di Tella et al, 2003; Layard, 2011; Stevenson and Wolfers, 2008) and also use a variety of alternative measures of subjective well-being.

We find that excessive patience is costly for individual well-being. This result is consistent across nine different measures of subjective well-being. Our measure of patience varies from a minimum of -1.31 to a maximum of 2.76 (this measure has standardized mean of zero and standard deviation of 1). For one of the main well-being indices, the life evaluation index, the level of patience that maximizes happiness is equal to 1.56, a numerical value similar to the one obtained using other well-being indicators.

The economic magnitude of the cost of being too patient is also significant. Moving from the highest level of life satisfaction (reached at a level of patience equal to 1.56) to the one associated with the 99th percentile of patience implies a reduction in happiness of 0.025,

equivalent to roughly 22% of the estimated difference between having completed college (0.200) and having a high school diploma (0.086). When we use the “positive experience index,” a summary measure about experienced well-being the day before the interview, the results are of similar magnitude: moving from a level of patience of 1.40 corresponding to the peak in the positive experience index to the 99th percentile in patience reduces the positive experienced index by 1.07, equivalent to 26% of the difference in happiness between those who completed college (7.16) and those with a high school diploma (3.12).

As robustness check, we present the results splitting the sample along many observable characteristics. The results confirm that the relationship is hump shaped within each group suggesting that our main findings are not driven by compositional effects.

Overall, our results suggest that excessively delaying present gratification for future rewards can have substantial well-being effects. A moderate amount of patience appears to be associated with a higher level of life satisfaction and emotional well-being.

I. Data and variables of interest

Our analysis uses data from the 2012 Gallup World Poll and the Global Preference Survey. The Gallup World Poll includes a wide range

of individual-level background variables, such as socio-demographic information (age, gender and marital status), a large set of economic variables (income, educational attainment and labor market status), and various measures of well-being.

Falk et al. (2018) developed the Global Preference Survey by adding to the 2012 Gallup questionnaire a set of survey items to measure time preferences, risk preferences, and social preferences (altruism, positive/negative reciprocity, and trust) for representative population samples in 76 countries. Our measure of patience comes from the Global Preference Survey.

A. Patience

Falk et al. (2018) construct the patience measure using responses to two survey items, one with a quantitative and one with a qualitative format. The quantitative survey item consists of a series of five interdependent hypothetical binary choices between immediate and delayed financial rewards, a format commonly referred to as the “staircase” (or unfolding brackets) procedure. In each of the five questions, participants had to decide between receiving a payment today and a larger payment in 12 months: “Suppose you were given the choice between receiving a payment today or a payment in 12 months. We will now present to you five situations. The payment

today is the same in each of these situations. The payment in 12 months is different in every situation. For each of these situations we would like to know which one you would choose. Please assume there is no inflation, i.e., future prices are the same as today's prices. Please consider the following: Would you rather receive amount x today or y in 12 months?"¹

The qualitative measure of patience is given by the respondents' self-assessment of their willingness to wait on an 11-point Likert scale: "We now ask for your willingness to act in a certain way. Please indicate your answer on a scale from 0 to 10, where 0 means you are "completely unwilling to do so" and a 10 means you are "very willing to do so". How willing are you to give up something that is beneficial for you today in order to benefit more from that in the future?"

The summary measure of patience is a linear combination of the quantitative and qualitative survey items, using the weights obtained from the experimental validation procedure (see Falk et al. (2016) for details).

Figure 1 shows the distribution of patience in our sample (the variable is standardized with

mean zero and standard deviation one). Patience is quite heterogeneous across individuals and most people appear to be impatient (the median is -0.29, and the minimum and maximum are -1.31 and 2.76).

[Insert Figure 1 Here]

B. Subjective well-being

The Gallup World Poll includes a measure of subjective well-being in which respondents were shown a picture and told, "Here is a ladder representing the 'ladder of life.' Let's suppose the top of the ladder represents the best possible life for you; and the bottom, the worst possible life for you. On which step [between 0 and 10] of the ladder do you feel you personally stand at the present time?"² There are two versions of this question, one for life today and one for life in five years. Gallup also has a Life Evaluation Index which combines the two questions of well-being about life today and life in the future. This summary index can take values from 1 to 3, where 1 indicates "suffering", 2 indicates "struggling" and 3 indicates "thriving".³

¹ See Falk et al. (2018) for further details.

² This measure of subjective well-being has been shown to be correlated with physical measures of well-being such as overall health, heart rate, sleep quality, sociability and propensity to laugh and smile (Diener, 1984, Kahneman and Krueger, 2006). This measure also tends to be relatively stable over time and it has a high test-retest correlation (Diner and Tov, 2007).

³ The index is calculated using the following procedure. Individuals who rate their current lives at 7 or higher, and their future at 8 or higher are coded as "thriving". Individuals are coded as "suffering" if they report their current and future lives as a 4 or lower. All other individuals are coded as "struggling".

Gallup asks a series of more specific questions about the feelings of the person the day before the interview, which aim at capturing various aspects of emotional health and daily experience. We analyze all the questions related to happiness. More specifically, we select answers regarding enjoyment, happiness, worry, and sadness from the following question: “Did you experience the following feelings during a lot of the day yesterday?” (the available answers to this question were simply yes/no).⁴ We also use the following question: “Now, please think about yesterday, from the morning until the end of the day. Think about where you were, what you were doing, who you were with, and how you felt. Did you smile or laugh a lot yesterday?” (the available answers to this question were also yes/no).

As an additional proxy of happiness, we report results using the Positive Experience Index, a measure of experienced well-being on the day before the survey. The index can take values from 0 to 100.⁵

⁴ We coded all of the answers in such a way that “1” corresponds to positive feelings and a “0” corresponds to negative feelings.

⁵ Gallup uses the following five questions to calculate the index: i) “Did you feel well-rested yesterday?”; ii) “Were you treated with respect all day yesterday?”; iii) “Did you smile or laugh a lot yesterday?”; iv) “Did you learn or do something interesting yesterday?”; v) “Did you experience the following feelings during a lot of the day yesterday? What about enjoyment?”. To calculate the index, Gallup applies the following procedure. The five items are recoded so

II. Estimation results

We study the relationship between individual well-being and patience by estimating the following model in the pooled sample of countries in Gallup Poll.

$$(1) \text{Happiness}_{ic} = \alpha \text{Patience}_{ic} + \beta \text{Patience}_{ic}^2 + \gamma X_{ic} + \delta C + \varepsilon_{ic}$$

where Happiness_{ic} is one of the well-being measures described above, X_{ic} is a vector of characteristics that could influence individual well-being (level of education, household income, labor market and marital status of the person, in addition to a female dummy and a quadratic for age) and C are country-fixed effects, to control for systematic differences in the level of average well-being across countries. Standard errors are clustered at the country level.⁶

Table 1, columns 1 to 3, shows a quadratic relationship between well-being and patience for all the measures of life satisfaction (life satisfaction today, in five years, or the life evaluation index). When patience is equal to 1.56 the life evaluation index reaches its peak, while for higher levels in patience, the life

that positive answers are scored as a “1” and all other answers (including don’t know and refused) are scored as “0”. If a record has no answer from an item, that item is not eligible for inclusion in the calculations. An individual record has an index calculated if it has at least four out of five valid scores (0 or 1). The record’s final score is the mean of valid items multiplied by 100.

⁶ Descriptive statistics are reported in Table A1 of the On-line Appendix.

evaluation index decreases. Similar results are obtained by using measures of life satisfaction today and in five years.

The magnitude of the well-being cost of being too patient is also economically and statistically significant. Moving from a level of patience corresponding to the peak in the life evaluation index to the 99th percentile in patience reduces the life evaluation index by 0.025, equivalent to 22% of the differential effect in happiness of having a college degree (0.200) with respect to a high school diploma (0.086).⁷

Table 1, columns 4-9, shows the relationship between patience and a variety of alternative measures of self-reported well-being on the day before the interview, capturing various aspects of emotional health and daily experience, as well as the summary measure “positive experience index.” With the exception of one variable (whether the person was worried the day before the survey), all of these additional measures confirm our main finding. When we use the “positive experience index” (column 9), the level of patience maximizing this index is 1.40. The magnitude of the effect is of the same

order of Table 1: moving the level of patience from 1.40 to 2.64 (99th percentile) implies a reduction in the positive experience index of 1.07, equivalent to 26% of the difference in happiness between having a college degree (7.16) and having a high school diploma and no high school diploma (3.12).

[Insert Table 1 Here]

While these results are correlational, since the relationship is hump shaped, we believe it is unlikely that they are driven by standard concerns of omitted variables and reverse causality. The results also hold when we split the sample along all observable characteristics included in the regression or when we split the sample by countries with a level of patience below or above the median, ruling out that our findings are driven by compositional effects.⁸

The relationship between patience and well-being is always hump-shaped: there is a moderate amount of patience that maximizes the level of happiness.

⁷ All of the controls' coefficients have signs and magnitudes consistent with the literature (Di Tella et al., 2003, Stevenson and Wolfers, 2008): income positively correlates with happiness, together with education and employment (see Table A2 of the On-line appendix). In the On-line Appendix (Table A3), we also report a specification which includes just the demographic controls (age and

gender), together with country fixed effects and the results are very similar.

⁸ In the on-line appendix (Tables A4-A5), we report the results of different splits of our sample based on age, gender, education, income, marital and labor market status, for the life evaluation and the positive experience indices. In the same Tables we also report the split by countries below or above (or equal) the level of patience in the sample.

III. Conclusions

This paper explores the cost of being too patient. We establish that the relationship between patience and various measures of subjective and experienced well-being is hump-shaped: there exists an optimal amount of patience that maximizes happiness. Beyond this optimal level, higher levels of patience have a negative impact on well-being. The data suggests that only very high levels of patience are costly, therefore the societal benefits of delaying gratification on average exceeds the cost of being too patient. This result helps us reconcile our findings with the literature that emphasized the economic benefits of patience.

REFERENCES

- Chen, M. Keith. 2013. "The Effect of Language on Economic Behavior: Evidence from Savings Rates, Health Behavior, and Retirement Assets", *American Economic Review*, 103, 690-731.
- Diener, Ed, 1984. "Subjective Well-Being", *Psychological Bulletin*, 95 (3): 542-75.
- Diener, Ed and William Tov, 2007. "Culture and Subjective Well-Being". In Shinobu Kitayama and Dov Cohen, eds. *Handbook of Cultural Psychology*. New York: Guilford.
- Di Tella, Rafael, Robert MacCulloch and Andrew Oswald, 2003. "The Macroeconomics of Happiness", *Review of Economics and Statistics*, 85 (4), 809-827.
- Falk, Armin, Benke Anke, Dohmen Thomas and Benjamin Enke. 2018. "Global Evidence on Economic Preferences", *Quarterly Journal of Economics*, 133 (4), 1645-1692 .
- Falk, Armin, Anke Becker, Thomas Dohmen, David Huffman and Uwe Sunde, "The Preference Survey Module: A Validated Instrument for Measuring Risk, Time and Social Preferences". 2016. IZA DP 9674
- Figlio, David, Paola Giuliano, Umut Ozek and Paola Sapienza, 2019. "Long-Term Orientation and Educational Performance", *American Economic Journal: Economic Policy*, 11 (4): 272-309.
- Galor, Oded and Omer Ozak, 2016, "The Agricultural Origins of Time Preference", *American Economic Review*, 106, 3064-3103
- Hsin, Amy and Yu Xie, 2014, "Explaining Asian Americans' academic advantage over white", *Proceedings of the National Academy of Science*, 111 (23), 8416-8421.
- Kahneman, Daniel and Alan B. Krueger, 2006. "Developments in the Measurement of Subjective Well-Being", *Journal of Economic Perspectives*, 20 (1): 3-24.
- Layard, Richard, 2011. *Happiness: Lessons from a New Science*, Penguin, UK.
- Stevenson, Betsey and Justin Wolfers, 2008, "Economic Growth and Subjective Well-

Being: Reassessing the Easterlin Paradox”,
Brookings Papers on Economic Activity, 39
(1), 1-102.

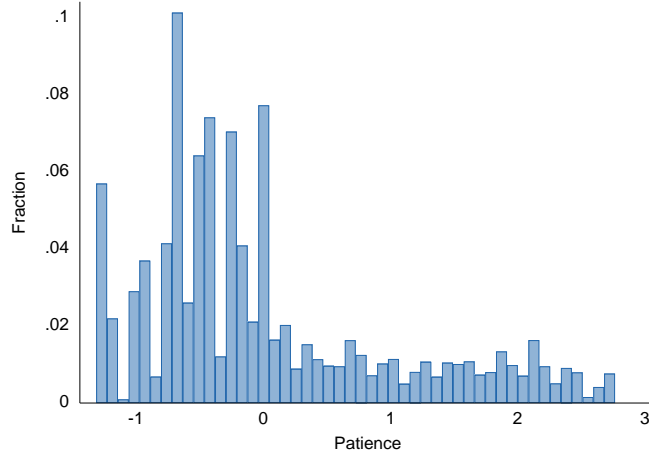


FIGURE 1.
PATIENCE, DENSITY FUNCTION

Note: The measure of patience is taken by Falk et al. (2018).

TABLE 1—LIFE SATISFACTION, EXPERIENCED WELL-BEING AND PATIENCE: INDIVIDUAL-LEVEL OLS ESTIMATES

	(1) Life Today	(2) Life in Five Years	(3) Life Evaluation Index	(4) Happiness	(5) Smile or Laugh	(6) Enjoyment	(7) Worry	(8) Sadness	(9) Positive Experience Index
Patience	0.251***	0.273***	0.069***	0.018***	0.017***	0.022***	0.011***	0.014***	1.960***
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.005]	[0.000]	[0.000]
Patience Squared	-0.085***	-0.100***	-0.022***	-0.006***	-0.008***	-0.007***	-0.002	-0.005***	-0.698***
	[0.000]	[0.000]	[0.000]	[0.004]	[0.001]	[0.003]	[0.361]	[0.003]	[0.000]
Measures of well-being (mean and st. dev.)	5.625 (2.284)	6.655 (2.417)	1.156 (0.621)	0.712 (0.453)	0.722 (0.448)	0.707 (0.455)	0.630 (0.483)	0.761 (0.426)	68.610 (28.560)
Patience (mean and st. dev.)	-0.022 (0.992)	-0.001 (0.996)	-0.001 (0.996)	-0.031 (0.987)	-0.033 (0.986)	-0.032 (0.986)	-0.033 (0.985)	-0.033 (0.986)	-0.034 (0.985)
Optimal amount of patience	1.48	1.36	1.56	1.52	1.04	1.63	2.91	1.37	1.40
No. of Countries	71	71	71	70	70	70	70	70	70
Observations	73,164	67,740	67,634	70,996	71,449	71,784	72,300	72,228	72,802
R-squared	0.265	0.244	0.23	0.111	0.094	0.087	0.079	0.079	0.135

Notes: The unit of observation is an individual. The different measures of happiness are defined in the text. The measure of patience comes from Falk et al. (2018). All regressions include country fixed effects and the following individual controls: a quadratic in age, gender (a female dummy), education (dummies for having high school and up to some college, college or more – the excluded group is individuals with less than high school), marital status (dummies indicating if a person is married or in a domestic partnership, separated or divorced, single – the excluded group is widows), labor market status (dummies for unemployed and out of the labor force – the excluded group is employed individuals), and household income (expressed in log). Coefficients are reported with standard errors clustered at the country level. *** Significant at the 1 percent level. ** Significant at the 5 percent level. * Significant at the 10 percent level.

Online Appendix for

THE COST OF BEING TOO PATIENT

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A1. Introduction

This appendix accompanies “The cost of being too-patient” by Paola Giuliano and Paola Sapienza. Section A2 reports additional tables that were referenced in the body of the paper, but not reported there.

A2. Appendix Tables

Table A1. Descriptive statistics

VARIABLES	(1) Obs.	(2) Mean	(3) SD
Dependent Variables			
Life Today (0,10)	73,164	5.62	2.28
Life in Five Years (0,10)	67,740	6.65	2.42
Life Evaluation Index (1,3)	67,634	2.16	0.62
Happiness (yes-no)	70,996	0.71	0.45
Smile or Laugh (yes-no)	71,449	0.72	0.45
Enjoyment (yes-no)	71,784	0.71	0.46
Worry (yes-no), recoded	72,300	0.63	0.48
Sadness (yes-no), recoded	72,228	0.76	0.43
Positive Experience Index (0,100)	72,802	68.61	28.56
Independent Variables			
Patience	73,164	-0.02	0.99
Age (divided by 10)	73,164	4.15	1.73
Female	73,164	0.55	0.5
Log(Household Income)	73,164	9.15	1.49
Married/Domestic Partner	73,164	0.59	0.49
Separated/Divorced	73,164	0.06	0.24
Single/Never Married	73,164	0.28	0.45
Unemployed	73,164	0.06	0.25
Out of labor force	73,164	0.39	0.49
High school and some college	73,164	0.54	0.5
College and more	73,164	0.16	0.37

Table A2. Life satisfaction and patience: individual level OLS estimates

	(1) Life Today	(2) Life in Five Years	(3) Life Evaluation Index
Patience	0.251***	0.273***	0.069***
	[0.000]	[0.000]	[0.000]
Patience Squared	-0.085***	-0.100***	-0.022***
	[0.000]	[0.000]	[0.000]
Age	-0.444***	-0.426***	-0.098***
	[0.000]	[0.000]	[0.000]
Age Squared	0.039***	0.016**	0.005***
	[0.000]	[0.037]	[0.004]
Female	0.154***	0.187***	0.043***
	[0.000]	[0.000]	[0.000]
Log(Income)	0.253***	0.238***	0.061***
	[0.000]	[0.000]	[0.000]
Married	0.288***	0.168***	0.054***
	[0.000]	[0.006]	[0.000]
Separated/Divorced	-0.011	0.015	-0.017
	[0.848]	[0.807]	[0.270]
Single	0.258***	0.206***	0.049***
	[0.000]	[0.001]	[0.001]
Unemployed	-0.450***	-0.323***	-0.099***
	[0.000]	[0.000]	[0.000]
Out of labor force	-0.010	-0.105***	-0.018**
	[0.744]	[0.001]	[0.044]
Secondary and some college	0.414***	0.390***	0.086***
	[0.000]	[0.000]	[0.000]
College and more	0.799***	0.766***	0.200***
	[0.000]	[0.000]	[0.000]
Observations	73,164	67,740	67,634
R-squared	0.265	0.244	0.230
Measures of well-being mean	5.625	6.655	2.156
Measures of well-being st. dev.	2.284	2.417	0.621
Patience mean	-0.0217	-0.00136	-0.00114
Patience st. dev.	0.992	0.996	0.996
Optimal amount of patience	1.483	1.361	1.564
No. of Countries	71	71	71

Notes: The unit of observation is an individual. The different measures of happiness are defined in the text. The measure of patience comes from Falk et al. (2018). All regressions include country fixed effects and the following individual controls: a quadratic in age, gender (a female dummy), education (dummies for having high school and up to some college, college or more – the excluded group is individuals with less than high school), marital status (dummies indicating if a person is married or in a domestic partnership, separated or divorced, single – the excluded group is widows), labor market status (dummies for unemployed and out of the labor force – the excluded group is employed individuals), and household income (expressed in log). Coefficients are reported with standard errors clustered at the country level. *** Significant at the 1 percent level. ** Significant at the 5 percent level. * Significant at the 10 percent level.

Table A2. Experienced well-being and patience: individual level OLS estimates (continued)

	(4)	(5)	(6)	(7)	(8)	(9)
	Happiness	Smile of Laugh	Enjoyment	Worry	Sadness	Positive Experience Index
Patience	0.018*** [0.000]	0.017*** [0.000]	0.022*** [0.000]	0.011*** [0.005]	0.014*** [0.000]	1.960*** [0.000]
Patience Squared	-0.006*** [0.004]	-0.008*** [0.001]	-0.007*** [0.003]	-0.002 [0.361]	-0.005*** [0.003]	-0.698*** [0.000]
Age	-0.086*** [0.000]	-0.069*** [0.000]	-0.069*** [0.000]	-0.089*** [0.000]	-0.054*** [0.000]	-5.167*** [0.000]
Age Squared	0.007*** [0.000]	0.005*** [0.000]	0.005*** [0.000]	0.008*** [0.000]	0.004*** [0.000]	0.400*** [0.000]
Female	0.012** [0.025]	0.024*** [0.000]	0.006 [0.198]	-0.035*** [0.000]	-0.040*** [0.000]	0.012 [0.968]
Log(Income)	0.027*** [0.000]	0.025*** [0.000]	0.026*** [0.000]	0.026*** [0.000]	0.025*** [0.000]	2.142*** [0.000]
Married	0.074*** [0.000]	0.053*** [0.000]	0.053*** [0.000]	0.031*** [0.002]	0.088*** [0.000]	3.450*** [0.000]
Separated/Divorced	0.005 [0.635]	0.014 [0.180]	0.002 [0.896]	-0.006 [0.577]	0.024** [0.036]	0.431 [0.571]
Single	0.040*** [0.000]	0.051*** [0.000]	0.048*** [0.000]	0.041*** [0.000]	0.069*** [0.000]	4.179*** [0.000]
Unemployed	-0.059*** [0.000]	-0.053*** [0.000]	-0.048*** [0.000]	-0.099*** [0.000]	-0.087*** [0.000]	-2.496*** [0.000]
Out of labor force	-0.006 [0.220]	-0.012** [0.027]	-0.003 [0.608]	0.009 [0.214]	-0.015** [0.011]	0.957** [0.026]
Secondary and some college	0.031*** [0.000]	0.017** [0.034]	0.047*** [0.000]	0.024*** [0.007]	0.037*** [0.000]	3.119*** [0.000]
College and more	0.053*** [0.000]	0.030*** [0.002]	0.075*** [0.000]	0.028** [0.018]	0.053*** [0.000]	7.160*** [0.000]
Observations	70,996	71,449	71,784	72,300	72,228	72,802
R-squared	0.111	0.094	0.087	0.079	0.079	0.135
Measures of well-being mean	0.712	0.722	0.707	0.630	0.761	68.61
Measures of well-being st. dev.	0.453	0.448	0.455	0.483	0.426	28.56
Patience mean	-0.0312	-0.0327	-0.0322	-0.0334	-0.0331	-0.0337
Patience st. dev.	0.987	0.986	0.986	0.985	0.986	0.985
Optimal amount of patience	1.517	1.042	1.633	2.907	1.370	1.404
No. of Countries	70	70	70	70	70	70

Notes: The unit of observation is an individual. The different measures of happiness are defined in the text. The measure of patience comes from Falk et al. (2018). All regressions include country fixed effects and the following individual controls: a quadratic in age, gender (a female dummy), education (dummies for having high school and up to some college, college or more – the excluded group is individuals with less than high school), marital status (dummies indicating if a person is married or in a domestic partnership, separated or divorced, single – the excluded group is widows), labor market status (dummies for unemployed and out of the labor force – the excluded group is employed individuals), and household income (expressed in log). Coefficients are reported with standard errors clustered at the country level. *** Significant at the 1 percent level. ** Significant at the 5 percent level. * Significant at the 10 percent level.

Table A3. Life satisfaction and patience: individual level OLS estimates, with limited set of controls

	(1) Life Today	(2) Life in Five Years	(3) Life Evaluation Index
Patience	0.312***	0.327***	0.084***
	[0.000]	[0.000]	[0.000]
Patience Squared	-0.101***	-0.114***	-0.026***
	[0.000]	[0.000]	[0.000]
Age	-0.357***	-0.325***	-0.069***
	[0.000]	[0.000]	[0.000]
Age Squared	0.024***	-0.001	0.001
	[0.000]	[0.840]	[0.683]
Female	0.079***	0.105***	0.024***
	[0.003]	[0.001]	[0.001]
Observations	76,802	71,205	71,088
R-squared	0.229	0.217	0.203
Measures of well-being mean	5.663	6.704	2.167
Measures of well-being st. dev.	2.286	2.410	0.621
Patience mean	0.00153	0.0221	0.0224
Patience st. dev.	1.002	1.006	1.006
Optimal amount of patience	1.553	1.430	1.627
No. of Countries	74	74	74

Notes: The unit of observation is an individual. The different measures of happiness are defined in the text. The measure of patience comes from Falk et al. (2018). All regressions include country fixed effects, a quadratic in age and gender (a female dummy). Coefficients are reported with standard errors clustered at the country level. *** Significant at the 1 percent level. ** Significant at the 5 percent level. * Significant at the 10 percent level.

Table A3. Experienced well-being and patience: individual level OLS estimates, with limited set of controls (continued)

	(4) Happiness	(5) Smile of Laugh	(6) Enjoyment	(7) Worry	(8) Sadness	(9) Positive Experience Index
Patience	0.023*** [0.000]	0.021*** [0.000]	0.027*** [0.000]	0.014*** [0.000]	0.019*** [0.000]	2.373*** [0.000]
Patience Squared	-0.008*** [0.000]	-0.009*** [0.000]	-0.008*** [0.000]	-0.003 [0.193]	-0.007*** [0.000]	-0.804*** [0.000]
Age	-0.058*** [0.000]	-0.055*** [0.000]	-0.058*** [0.000]	-0.093*** [0.000]	-0.027*** [0.000]	-5.297*** [0.000]
Age Squared	0.003*** [0.000]	0.002*** [0.002]	0.003*** [0.001]	0.008*** [0.000]	0.000 [0.602]	0.346*** [0.000]
Female	0.001 [0.883]	0.014*** [0.004]	-0.006 [0.223]	-0.041*** [0.000]	-0.054*** [0.000]	-0.614** [0.045]
Observations	73,538	74,011	74,362	74,903	74,822	75,415
R-squared	0.097	0.085	0.075	0.070	0.064	0.115
Measures of well-being mean	0.714	0.724	0.708	0.633	0.763	68.77
Measures of well-being st. dev.	0.452	0.447	0.455	0.482	0.425	28.53
Patience mean	-0.0196	-0.0210	-0.0207	-0.0218	-0.0215	-0.0222
Patience st. dev.	0.990	0.990	0.990	0.989	0.989	0.989
Optimal amount of patience	1.508	1.116	1.609	2.679	1.450	1.476
No. of Countries	72	72	72	72	72	72

Notes: The unit of observation is an individual. The different measures of happiness are defined in the text. The measure of patience comes from Falk et al. (2018). All regressions include country fixed effects, a quadratic in age and gender (a female dummy). Coefficients are reported with standard errors clustered at the country level. *** Significant at the 1 percent level. ** Significant at the 5 percent level. * Significant at the 10 percent level.

Table A4. Life evaluation index and patience: individual level OLS estimates, by sub-groups

	Dependent Variable: Life Evaluation Index																											
	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)		(10)		(11)		(12)		(13)		(14)	
	Country-Level Patience		Age		Age		Gender		Gender		Household Income		Household Income		Marriage Status		Marriage Status		Employment		Employment		Education		Education		Education	
	Below Median	Above Median	Below Median	Above Median	Below Median	Above Median	Male	Female	Male	Female	Below Median	Above Median	Below Median	Above Median	Married	Other	Married	Other	Employed	Other	Employed	Other	No College	College+	No College	College+	No College	College+
Patience	0.066***	0.073***	0.064***	0.070***	0.081***	0.058***	0.071***	0.061***	0.067***	0.071***	0.063***	0.074***	0.073***	0.056***														
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Patience Squared	-0.021***	-0.024***	-0.020***	-0.022***	-0.025***	-0.020***	-0.028***	-0.014***	-0.022***	-0.022***	-0.019***	-0.025***	-0.024***	-0.017***														
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Observations	35,520	32,114	36,687	31,111	30,935	36,699	34,310	34,299	39,474	28,448	37,163	32,388	56,914	10,929														
R-squared	0.207	0.226	0.223	0.240	0.229	0.236	0.164	0.193	0.234	0.231	0.247	0.222	0.209	0.226														
Measures of well-being mean	2.075	2.245	2.201	2.103	2.141	2.169	1.997	2.315	2.146	2.171	2.201	2.128	2.114	2.374														
Measures of well-being st. dev.	0.619	0.611	0.600	0.642	0.620	0.623	0.595	0.602	0.623	0.618	0.614	0.630	0.616	0.603														
Patience mean	-0.267	0.293	-0.00628	0.00678	0.0387	-0.0347	-0.184	0.185	0.00858	-0.0145	0.0813	-0.0475	-0.0605	0.308														
Patience st. dev.	0.827	1.080	0.962	1.035	1.013	0.980	0.899	1.051	1.006	0.981	1.023	0.985	0.962	1.106														
Optimal amount of patience	1.547	1.533	1.597	1.591	1.647	1.456	1.264	2.233	1.551	1.576	1.635	1.499	1.522	1.642														
No. of Countries	37	34	71	71	71	71	71	72	71	71	71	73	71	71														

Notes: The unit of observation is an individual. The life evaluation index is defined in the text. The measure of patience comes from Falk et al. (2018). All regressions include country fixed effects and the following individual controls: a quadratic in age, gender (a female dummy), education (dummies for having high school and up to some college, college or more – the excluded group is individuals with less than high school), marital status (dummies indicating if a person is married or in a domestic partnership, separated or divorced, single – the excluded group is widows), labor market status (dummies for unemployed and out of the labor force – the excluded group is employed individuals), and household income (expressed in log). Coefficients are reported with standard errors clustered at the country level. *** Significant at the 1 percent level. ** Significant at the 5 percent level. * Significant at the 10 percent level.

Table A5. Positive experience index and patience: individual level OLS estimates, by sub-groups

Dependent Variable: Positive Experience Index														
	(1) Country-Level Patience		(3) Age		(5) Gender		(7) Household Income		(9) Marriage Status		(11) Employment		(13) Education	
	Below Median	Above Median	Below Median	Above Median	Male	Female	Below Median	Above Median	Married	Other	Employed	Other	No College	College+
Patience	1.775*** [0.000]	2.214*** [0.000]	1.634*** [0.000]	2.134*** [0.000]	2.143*** [0.000]	1.760*** [0.000]	1.920*** [0.000]	1.786*** [0.000]	1.807*** [0.000]	2.154*** [0.000]	1.685*** [0.000]	2.066*** [0.000]	2.167*** [0.000]	1.052** [0.028]
Patience Squared	-0.544** [0.012]	-0.837*** [0.000]	-0.576*** [0.002]	-0.719*** [0.000]	-0.746*** [0.000]	-0.652*** [0.000]	-0.711*** [0.000]	-0.540*** [0.002]	-0.618*** [0.000]	-0.816*** [0.000]	-0.604*** [0.000]	-0.682*** [0.000]	-0.793*** [0.000]	-0.270 [0.304]
Observations	39,421	33,381	38,801	34,166	32,950	39,852	37,717	36,082	42,677	30,448	39,152	34,626	61,821	11,239
R-squared	0.147	0.117	0.105	0.162	0.136	0.137	0.148	0.106	0.124	0.154	0.116	0.160	0.137	0.105
Measures of well-being mean	67.60	69.81	71.15	65.73	68.86	68.41	66.02	71.54	68.01	69.38	69.60	67.67	67.91	72.43
Measures of well-being st. dev.	29.12	27.84	27.70	29.22	28.47	28.63	29.51	27.21	28.29	28.95	28.12	28.96	28.74	27.22
Patience mean	-0.281	0.258	-0.0236	-0.0438	0.00410	-0.0649	-0.202	0.146	-0.0254	-0.0448	0.0533	-0.111	-0.0858	0.252
Patience st. dev.	0.825	1.074	0.955	1.019	1.002	0.970	0.893	1.042	0.994	0.972	1.013	0.955	0.954	1.096
Optimal amount of patience	1.633	1.323	1.417	1.484	1.436	1.349	1.350	1.652	1.463	1.320	1.394	1.514	1.366	1.948
No. of Countries	37	33	70	70	70	70	70	71	70	70	70	71	70	70

Notes: The unit of observation is an individual. The positive experience index is defined in the text. The measure of patience comes from Falk et al. (2018). All regressions include country fixed effects and the following individual controls: a quadratic in age, gender (a female dummy), education (dummies for having high school and up to some college, college or more – the excluded group is individuals with less than high school), marital status (dummies indicating if a person is married or in a domestic partnership, separated or divorced, single – the excluded group is widows), labor market status (dummies for unemployed and out of the labor force – the excluded group is employed individuals), and household income (expressed in log). Coefficients are reported with standard errors clustered at the country level. *** Significant at the 1 percent level. ** Significant at the 5 percent level. * Significant at the 10 percent level.