

The Psychology of Poverty: Evidence from 43 Countries*

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Abstract

Does poverty have psychological consequences? Beginning with Easterlin (1974), a growing literature has investigated the association between income levels and psychological outcomes. However, this literature remains focused on happiness and life satisfaction, while little evidence exists about the link between income and other psychological outcomes. Using World Value Survey data from 114,378 respondents in 43 countries, I show here that income is associated with a host of additional psychological variables. Specifically, low incomes predict lower intrinsic motivation and trust, less prosocial attitudes, and more feelings of meaninglessness. These relationships hold for both poor compared to rich people in the same country, and for poor compared to rich countries. Income inequality is an additional predictor of psychological outcomes across countries, and is associated with loneliness, short-sightedness, risk-taking, and low trust; in contrast, GDP growth is not significantly associated with psychological outcomes. All results are robust to controls for individual-level socioeconomic and country-level geopolitical characteristics. Together, these results suggest that income and income inequality are related to a broad array of psychological outcomes.

JEL Codes: D03, D87, I30, O12C93, D03, D87, O12

Keywords: poverty, psychology, happiness, Easterlin paradox

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1 Introduction

Poverty is most frequently conceptualized in terms of material scarcity. However, a small number of scholars have suggested over the centuries that the lives of the poor may be characterized not only by material deprivation, but also negative psychological outcomes. In the *Theory of Moral Sentiments*, Adam Smith cast poverty in terms of its psychological consequences: “[t]he reason poverty causes pain is not just because it can leave people feeling hungry, cold and sick, but because it is associated with unfavourable regard. . . . The poor man . . . is ashamed of his poverty.” In his prominent ethnography *Five Families: Mexican Case Studies in the Culture of Poverty* (1959), anthropologist Oscar Lewis argued that the lives of the poor were characterized by “a strong feeling of marginality, of helplessness, of dependency, of not belonging . . . of inferiority, of personal unworthiness.” A few years later, the controversial *Moynihan Report* claimed that poor families in the United States were caught in a “tangle of pathology” (Moynihan, 1965).

These suggestions are easy to misunderstand as blaming the poor for their poverty by attributing to them certain psychological “shortcomings” which keep them mired in poverty. Possibly for this reason, the relationship between poverty and psychological outcomes has only recently limited attention in the literature. However, in 1970s, the question that follows from the assertions cited above was posed in earnest: is it true empirically that poverty has psychological correlates?

Most of the resulting literature has concerned itself with the empirical relationship between income and self-reported happiness. Are poor people unhappier than richer people? In a series of papers, Richard Easterlin found that happiness and income were correlated within countries, but not across countries; in addition, increases in national income over time did not translate into increases in average self-reported happiness. Within countries, however, the poor consistently reported lower levels of happiness than the rich (Easterlin, 1974, 1995, 2001, 2003; Easterlin & Angelescu, 2009).

More recently, however, Easterlin’s cross-country finding has been overturned by an analysis of a large number of datasets from a broad panel of countries by Stevenson, Wolfers, and Sacks (Stevenson & Wolfers, 2008; Sacks et al., 2010, 2012). These authors find a robust relationship between self-reported happiness and life satisfaction, both within and across countries. Similarly, Kahneman and Deaton (?) show that in the US, higher levels of income and education are correlated with life satisfaction. In addition, happiness has also been associated with income inequality; Oishi et al. (2011) find that years with lower levels of income inequality in the US are associated with higher levels of self-reported happiness. Thus, it appears that poverty and inequality are correlated with self-reported happiness and life

satisfaction. However, it remains unclear whether poverty and inequality affect psychological outcomes beyond self-reported happiness and life satisfaction. In this paper, we use World Value Survey data from 114,378 respondents in 43 countries and show that both within and across countries, low incomes are correlated with low intrinsic motivation and trust, less prosocial attitudes, and more feelings of meaninglessness. Income inequality across countries correlates with loneliness, short-sightedness, risk-taking, and low trust. These results suggest that poverty and income inequality have broad psychological consequences.

2 Data and Empirical Strategy

Psychological variables

The psychological outcome variables were taken from the *World Values Survey* and the *European Values Survey* (www.wvs.org). These surveys are administered in discrete waves; some of the variables used here were collected in several waves, while others were collected in only one wave (see Table [Psych1]). Most of the country-specific samples are nationally representative; I exclude countries for which the national samples are not representative or for which sampling weights are not available. For my variables of interest, the data cover the years 1980-2008, and 114,378 respondents in 43 countries.

Table [Psych1] summarizes the psychological variables of interest. They were chosen to approximate the following constructs: locus of control, intrinsic motivation, prosocial attitudes, feelings of loneliness and meaninglessness, short-sightedness, and risktaking. In the following, I briefly explain how each of these variables approximates the underlying construct.

Locus of control is the degree to which an individual thinks their life outcomes are determined by their own actions (internal locus of control) vs. by events beyond their control (external locus of control; Rotter, 1977). Here, I use the following WVS question to approximate this construct: “Some people believe that individuals can decide their own destiny, while others think that it is impossible to escape a predetermined fate. Please tell me which comes closest to your view on this scale on which 1 means ‘everything in life is determined by fate,’ and 10 means that ‘people shape their fate themselves’”. This question is similar to many of the questions on the standard instrument for locus of control, Rotter’s 1977 scale. For instance, Rotter’s scale asks for agreement with statements such as “Trusting fate has never turned out as well for me as making a decision to take a definite course of action” or “Becoming a success is a matter of hard work, luck has little or nothing to do with it”.

I approximate intrinsic motivation with two questions: agreement with the statements “Working for a living is a necessity; I wouldn’t work if I didn’t have to” and “I do the

best I can regardless of pay”. Deci (1971) defined intrinsic motivation as an interest in a task, or desire to complete it, without external rewards. Concomitantly, items on standard inventories of intrinsic motivation, such as Ryan’s (1982) Intrinsic Motivation Inventory, probe whether respondents try hard at and enjoy tasks and work for which they receive no compensation (e.g. “I enjoyed this task very much”, “I tried very hard” or “I put in a lot of effort”). The two items chosen here thus closely match the construct.

To approximate trust, I use the following item: “Do you trust people you meet for the very first time?” This item is similar to questions on standard trust scales such as that of Rotter (1967), which ask for agreement with statements such as: “In dealing with strangers one is better off to be cautious until they have provided evidence that they are trustworthy”.

The following item approximates pro-social attitudes: “Would you be prepared to actually do something to improve the conditions of your immediate family?” This item is similar to questions on standard scales of pro-social attitudes; e.g., Berkowitz & Daniel’s Revised Social Responsibility Scale asks respondents for agreement with statements such as “I am the kind of person that people can count on” or “I would never let a friend down when he expects something of me”.

Loneliness was approximated with the question: “During the past few weeks, did you ever feel very lonely or remote from other people?” This question is similar to questions on standard inventories such as the UCLA Loneliness Scale (Russell et al., 1978), which contains items such as “I feel completely alone” and “I feel isolated from others”.

Feelings of meaninglessness are a common feature of depression, and are probed here with the following question: “How often, if at all, do you have the feeling that life is meaningless?” This question is typical of depression questionnaires that measure meaninglessness (Yesavage et al., 1982; Hall & Davis, 2010; van Selm & Dittman-Kohli, 1998).

Finally, the WVS data contain two questions that measure constructs I call “short-sighted” and “risk-taking”. Short-sightedness is captured by agreement with the statement “The future is so uncertain that it is best to live from day to day.” Risk-taking is captured by asking whether a person described as follows is like the respondent: “Would you please indicate how much this person is like you? Adventure and taking risks are important to this person; to have an exciting life.” This question is closely related to the standard sensation-seeking scale, in particular its thrill and adventure seeking subscale (Zuckerman, 1971).

Before analysis, all of these variables are z-scored. For within-country regressions, this process is performed at the country level; for across-country regressions, it is performed at the global level.

Control variables

In addition to these outcome variables of interest, I use the following control variables. First, on the individual level, I use gender (female dummy), age up to a quartic, an interaction of age with the female dummy, also up to a quartic; a dummy for being married; and the number of children. Second, on the country level, I use dummies for being landlocked, socialist, in the Southern hemisphere, having had an external war between 1960 and 1985, and several regional dummies (Sub-Saharan Africa, Africa, EU, Latin America, South Asia, East and South-East Asia, Asia); the country's population, the percentage of the country's population classified as "urban", the country's land area (sq km), its average elevation, the percentage of its land area in geographical tropics, calculated in the equal area projection, and the percentage of its population in the geographical tropics, calculated using a geographical tropics mask. These variables all come from Gallup et al. (1999).

Economic data

Within-country income data was obtained from the *World Value Survey* and *European Value Survey* data. Specifically, the questionnaires for all countries contained a variable asking respondents about their household income. This variable was coded on a scale from 1-10, corresponding to income deciles for the country of residence. Thus, 1 means that the respondent was in the lowest 10% of income earners in their country of residence; 10 indicates that they were in the top 10%. We first z-score this variable and then use it as the main independent variable in the within-country regressions.

GDP and GDP growth data were taken from the *World Development Indicators* published by the World Bank. The data cover the years 1960-2010. GDP is measured per capita at purchasing power parity in constant 2005 US dollars. As is common practice, we use the natural logarithm of GDP. Growth is measured in % of real GDP. These variables are the main independent variables in the cross-country regressions.

Inequality was measured using the Gini coefficients provided by the University of Texas Inequality Project (<http://utip.gov.utexas.edu/data.html>). The Gini coefficient is a measure of inequality based on the Lorenz curve, which plots cumulative income in a population against the cumulative share of people in the population, ordered from lowest to highest shares of income. The Gini coefficient is computed from this curve as the ratio of the area between the Lorenz curve and the 45 degree line to the area between the 45 degree line and the x-axis. Mathematically, for a cumulative distribution function $F(y)$ with mean μ , the

Gini coefficient G is given by:

$$G = \frac{1}{\mu} \int_0^{\infty} F(y) (1 - F(y)) dy$$

Thus, the Gini coefficient is zero for perfect equality, i.e. all members of a population have the same income, and one for perfect inequality, i.e. one member of the population has all the income.

Econometric approach

Within countries Our first question is whether *within* countries, poorer respondents show different psychological outcomes compared to richer respondents. To answer this question, we regress each variable of interest on the within-country income categories for each respondent household. Specifically, we fit the following OLS model for each variable of interest:

$$Psych_{ict} = \alpha_{ct} + \beta_0 + \beta_1 Inc_{ict} + \gamma_{\mathbf{ict}} \mathbf{X}_{\mathbf{ict}} + \varepsilon_{ict}$$

where $Psych_{ict}$ is the household-, country-, and year-specific response on the psychological variable of interest, Inc_{ict} is the household's income category on a scale from 1 (low) to 10 (high), α_{ct} captures country and year fixed effects, and ε_{ict} is the error term. $\mathbf{X}_{\mathbf{ict}}$ is a vector of within-country controls, as described above. I run this specification both with and without the inclusion of this vector of controls. Observations are weighted with the survey weights provided in the *World Values Survey* dataset, and standard errors are clustered at the country-year level and adjusted for heteroskedasticity.

Across countries To assess whether respondents in poorer countries have different psychological outcomes on average than those in richer countries, we estimate the following models:

$$Psych_{ict} = \beta_0 + \beta_1 \ln y_{ct} + \gamma_{\mathbf{ict}} \mathbf{X}_{\mathbf{ict}} + \delta_{\mathbf{ct}} \mathbf{\Gamma}_{\mathbf{ct}} + \varepsilon_{ict} \quad (1)$$

$$Psych_{ict} = \beta_0 + \beta_1 G_{ct} + \gamma_{\mathbf{ict}} \mathbf{X}_{\mathbf{ict}} + \delta_{\mathbf{ct}} \mathbf{\Gamma}_{\mathbf{ct}} + \varepsilon_{ict} \quad (2)$$

$$Psych_{ict} = \beta_0 + \beta_1 \left(\frac{y_{c,t} - y_{c,t-1}}{y_{c,t-1}} \right) + \gamma_{\mathbf{ict}} \mathbf{X}_{\mathbf{ict}} + \delta_{\mathbf{ct}} \mathbf{\Gamma}_{\mathbf{ct}} + \varepsilon_{ict} \quad (3)$$

Here, y_{ct} is the GDP of country c in year t , and Γ_{ct} is the set of country-level controls described above. The three specifications thus test, respectively, the relationship between psychological outcomes and the log of GDP (equation 1), GDP growth (equation 3), and the Gini coefficient (equation 2). Again these equations are estimated both with and without the set of controls, and standard errors are adjusted for heteroskedasticity and clustered at the country-year level. Observations are weighted with the inverse frequency of observations per country, such that each country is weighted equally.

Joint significance The regressions of the psychological outcomes on income, growth, and inequality constitute a system of seemingly unrelated regression equations (SUR) that can be efficiently estimated with feasible generalized least squares (FGLS). This approach allows us to assess whether each of the independent variables of interest (income, log GDP, GDP growth, and Gini coefficient) has an effect on the psychological outcome variables that is jointly significant for the group of outcome variables. We report the test statistics for the SUR estimation in the last column of the results tables discussed below.

3 Results

Within-country results

Figure 4 plots responses to the psychological survey questions against within-country income category. The corresponding regression results are shown in Table 4. Each column represents one psychological outcome variable, corresponding to Table 4; the rows represent the regression coefficients on the predictor variables and their significance levels, both without the set of individual controls (top panel) and with these controls (bottom panel). It can be seen that all of the coefficients on the income variable are different from zero and highly significant. Specifically, poorer individuals show more internal locus of control, less intrinsic motivation, less prosocial attitudes, lower trust, more feelings of loneliness and meaninglessness, lower risk-taking, and more short-sightedness than richer individuals. All of these results are robust to the inclusion of individual-level control variables (note that country-level control variables would be collinear with the country-level fixed effects), and are jointly significant. Thus, this table reveals a robust relationship between my psychological outcomes of interest and household income.

Cross-country results

I next ask whether the relationship between income and psychological outcomes that I observe within countries is also evident across countries. In other words, do we see different psychological outcomes in countries that are richer, grow faster, or are more or less unequal than others?

Figure 4 illustrates the relationship between psychological outcomes and log GDP across countries. The corresponding cross-country regression results are shown in Table 4. The individual coefficients on log GDP are significant for several outcome variables; in particular, even after the inclusion of controls, poorer countries show less intrinsic motivation, trust, fewer prosocial attitudes, more feelings of meaninglessness, and higher risk aversion than richer countries. These results are all statistically significant, and so is test of joint significance. In addition, all coefficients are identical in sign compared to the within-country results, with one exception: risk aversion is increasing in across-country income, but decreasing in within-country income.

Turning next to inequality, I report the regression results using the Gini coefficient as an independent variable in Table 4. Both with and without control variables, the tests of joint significance are highly significant, suggesting that inequality is associated with psychological outcomes. The individual regression reveal that, after the inclusion of control variables, countries with higher levels of inequality have lower trust, more feelings of loneliness and meaninglessness, an increased willingness to help one's family, and more short-sightedness and risk-taking.

Finally, the results for GDP growth results are weaker; the test of joint significance is not significant when control variables are included, and no individual regression shows a significant coefficient on the GDP growth variables when controls are included. These results suggest that growth may not be significantly related to psychological outcomes.

4 Discussion

The purpose of this paper was to ask whether poverty has particular psychological consequences. A long-standing literature has investigated the association between income and happiness; the most recent contributions to this literature document an association between income and happiness that obtains both within countries, as well as across countries. Our findings add to this literature in three ways:

First, we extend previous findings to other psychological outcome variables. For decades, the literature on income and psychological outcomes has mainly been concerned with happiness

and life satisfaction; however, data for a host of other important psychological outcome variables is available, and our results show that these variables, too, show strong associations with income. In demonstrating the associations described above, our study lends support to a small number of studies that have shown similar associations for optimism, locus of control, and self-esteem (Maqsud & Rouhani, 1997; Sherman & Hofmann, 1978; Twenge & Campbell, 2002; Scheier & Carver, 1985; Robb et al., 2009; Lynch et al., 1997; Taylor & Seeman, 1999). However, note that these findings were largely obtained in much smaller samples, often in particular population subgroups.

Second, our findings lend support to the most recent results by Stevenson & Wolfers, which show that the correlation between income and happiness also holds across countries, in contrast to the early findings by Easterlin (1974). In particular, we find that for all variables under consideration, there is both a within-country correlation with income category, and a cross-country correlation with country GDP. In contrast, however, we find no association between any of our psychological outcome variables and GDP growth; thus, as countries get richer, they do not appear to change much in the psychological variables we consider here. A potential explanation for this somewhat surprising result is that yearly GDP growth, which we used here as the growth variable, may be too volatile and short-term to be reflected in psychological outcomes; a variable that aggregates growth over a longer time horizon may show more of an association with psychological outcomes in future work.

Finally, our findings show that inequality is associated with psychological outcomes. Previous studies have focused largely on the relationship between psychological outcomes and income variables. In one study using inequality as a predictor variable, Oishi et al. (2011) find that years with lower levels of income inequality in the US are associated with higher levels of self-reported happiness. We complement this finding by showing that a similar relationship holds *across* countries: more unequal countries have different psychological outcomes than more equal countries, *viz.* lower trust, more feelings of loneliness and meaninglessness, an increased willingness to help one's family, and more short-sightedness and risk-taking.

In sum, I show a robust effect of income and inequality on a variety of psychological outcomes. This relationship is robust to a number of control variables. It holds both within and across countries, and obtains in the cross-country specifications for GDP levels, but not GDP growth. Together, these findings suggest that poverty may have significant psychological costs that go beyond economic welfare. One might argue that these costs should be on the radar of policymakers, since they imply that poverty alleviation programs, to the extent that they affect these measures of psychological welfare, have to be evaluated not only in terms of their economic effects, but also on their contributions to psychological well-being.

References

Variable name	Survey question	Waves	Number of respondents	Number of countries
Control	Some people believe that individuals can decide their own destiny, while others think that it is impossible to escape a predetermined fate. Please tell me which comes closest to your view on this scale on which 1 means "everything in life is determined by fate," and 10 means that "people shape their fate themselves."	2005-2008	114,378	43
Intrinsic motivation	I do the best I can regardless of pay (0=no, 1=yes)	1989-1993	68,862	29
Wouldn't work	Working for a living is a necessity; I wouldn't work if I didn't have to (0=not mentioned, 1=mentioned)	1989-1993	68,862	29
Trust	Do you trust people you meet for the very first time? (1=not trust at all, 5=trust completely)	2005-2008	120,149	46
Help family	Would you be prepared to actually do something to improve the conditions of your immediate family? (1=absolutely no, 5=absolutely yes)	1999-2004	61,163	29
Lonely	During the past few weeks, did you ever feel very lonely or remote from other people? (0=no, 1=yes)	1981-1984	31,541	15
Meaningless	How often, if at all, do you have the feeling that life is meaningless? (1=never, 4=often)	1981-1984	31,302	15
Shortsighted	Do you tend to agree or disagree with the following statement: The future is so uncertain that it is best to live from day to day. (0=tend to disagree, 1=tend to agree)	1981-1984, 1999-2004	47,913	21
Risktaking	Would you please indicate how much this person is like you? Adventure and taking risks are important to this person; to have an exciting life. (1=not at all like me; 6=very much like me)	2005-2008	120,522	46

Table 1: Psychological variables of interest.

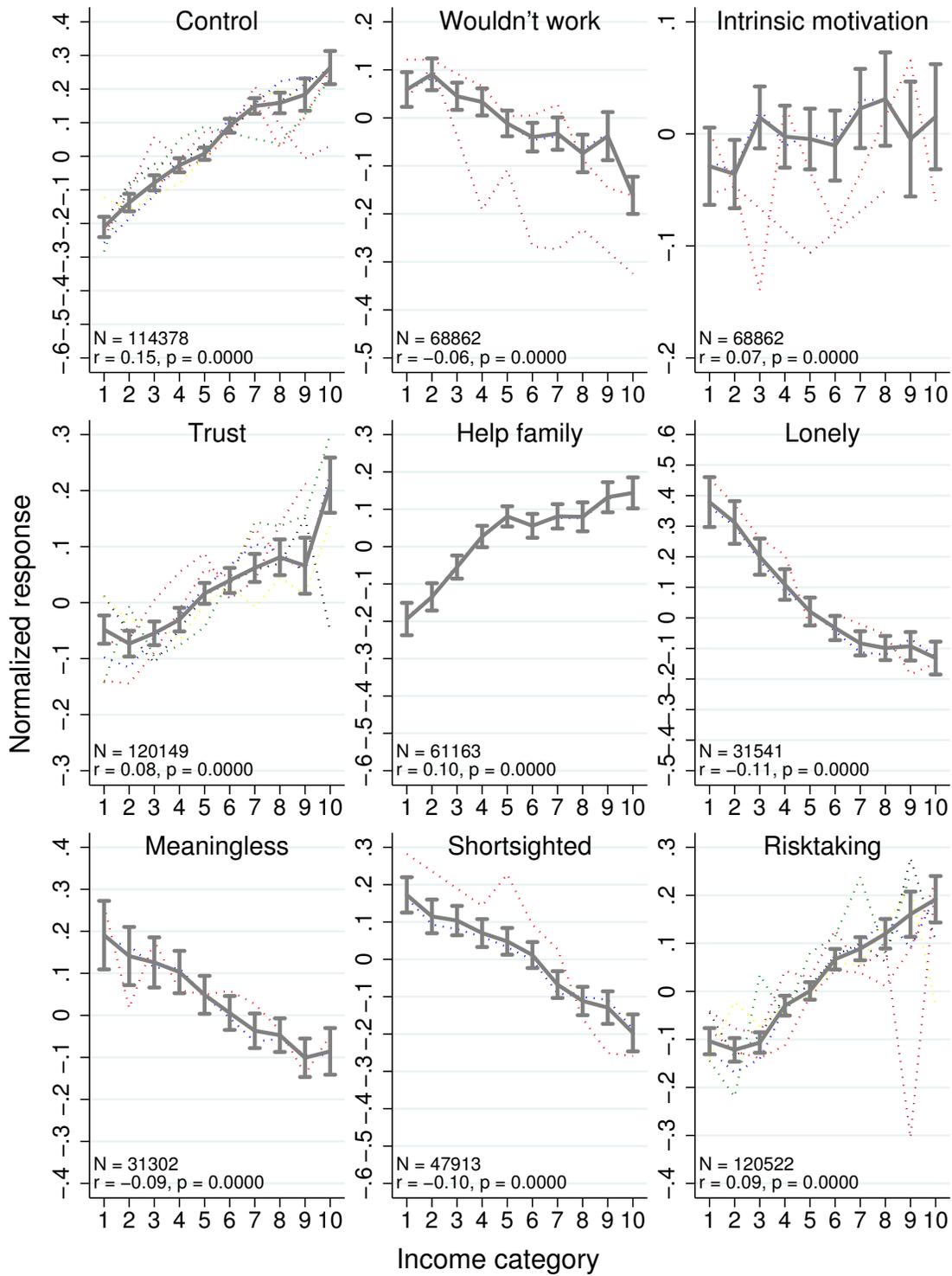


Figure 1: Relationship between psychological outcomes and income decile within countries.

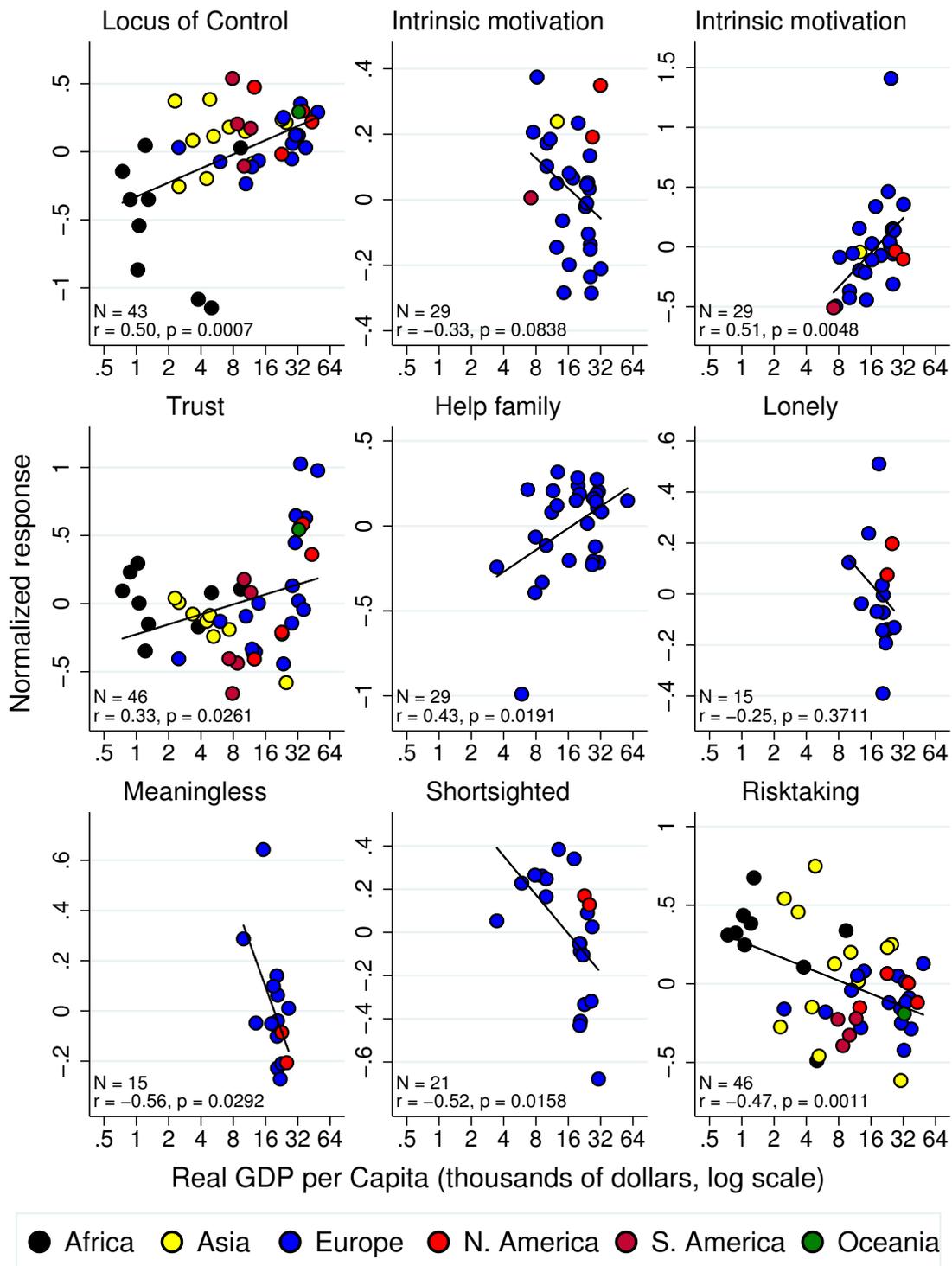


Figure 2: Relationship between psychological outcomes and log GDP across countries.

Table 2: Within-country results: Income decile and psychological outcomes

	(1) Control	(2) Wouldn't work	(3) Intrinsic motivation	(4) Trust	(5) Help family	(6) Lonely	(7) Meaningless	(8) Shortsighted	(9) Risktaking	(10) Joint test (chi2/p)
Income										
No controls	0.062*** (0.005)	-0.028*** (0.004)	0.005 (0.005)	0.030*** (0.004)	0.040*** (0.005)	-0.072*** (0.005)	-0.039*** (0.005)	-0.057*** (0.008)	0.044*** (0.006)	562.245*** (0.000)
With controls	0.054*** (0.004)	-0.036*** (0.003)	0.015*** (0.004)	0.033*** (0.004)	0.025*** (0.004)	-0.036*** (0.004)	-0.034*** (0.006)	-0.052*** (0.007)	0.032*** (0.004)	466.069*** (0.000)
<i>N</i>	59003	35096	35096	61882	31443	15823	15703	24009	62025	
Country-wave FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Notes: Relationship between income decile and psychological outcomes within countries. Columns (1)–(9) represent OLS regressions of the psychological variables of interest from the World Value Survey data on the income decile of each respondent relative to respondents in their country in the year of the survey. The dependent variables are z-scored, and thus each coefficient represents the standard deviation change in the dependent variable associated with a ten percentage point increase in income. Standard errors are clustered at the country-year level and reported in parentheses. All specifications include country-year fixed effects. Column (10) shows the chi2 statistic and *p*-value of the SUR test of joint significance on the income decile coefficients of all regressions. * denotes significance at 10 pct., ** at 5 pct., and *** at 1 pct. level.

Table 3: Cross-country results: Log GDP and psychological outcomes

	(1) Control	(2) Wouldn't work	(3) Intrinsic motivation	(4) Trust	(5) Help family	(6) Lonely	(7) Meaningless	(8) Shortsighted	(9) Risktaking	(10) Joint test (chi2/p)
Log GDP										
No controls	0.160*** (0.038)	-0.126 (0.075)	0.408*** (0.100)	0.100** (0.045)	0.223** (0.107)	-0.203 (0.122)	-0.363** (0.140)	-0.244** (0.101)	-0.122*** (0.030)	84.450*** (0.000)
With controls	-0.062 (0.083)	-0.617*** (0.122)	0.388** (0.177)	0.201** (0.094)	0.470* (0.252)	-0.188 (0.192)	-0.479*** (0.071)	-0.105 (0.176)	-0.184** (0.085)	128.695*** (0.000)
<i>N</i>	59882	39919	39919	63839	36123	18817	18657	28265	63605	

Notes: Relationship between log GDP and psychological outcomes across countries. Columns (1)–(9) represent OLS regressions of the psychological variables of interest from the World Value Survey data on the log GDP of the country of each respondent in the year of the survey. The dependent variables are z-scored, and thus each coefficient represents the standard deviation change in the dependent variable associated with a one log unit increase in GDP. Standard errors are clustered at the country-year level and reported in parentheses. Column (10) shows the chi2 statistic and *p*-value of the SUR test of joint significance on the income decile coefficients of all regressions. * denotes significance at 10 pct., ** at 5 pct., and *** at 1 pct. level.

Table 4: Cross-country results: Inequality and psychological outcomes

	(1) Control	(2) Wouldn't work	(3) Intrinsic motivation	(4) Trust	(5) Help family	(6) Lonely	(7) Meaningless	(8) Shortsighted	(9) Risktaking	(10) Joint test (chi2/p)
Inequality										
No controls	-0.020* (0.010)	0.020** (0.009)	-0.028 (0.017)	-0.030*** (0.010)	0.003 (0.013)	0.047** (0.016)	0.018 (0.017)	0.056*** (0.016)	0.021** (0.008)	77.592*** (0.000)
With controls	-0.013 (0.014)	0.015 (0.010)	-0.028 (0.022)	-0.060*** (0.017)	0.033*** (0.007)	0.021* (0.010)	0.023* (0.012)	0.056*** (0.014)	0.028** (0.012)	101.892*** (0.000)
<i>N</i>	49940	37769	37769	53811	33155	18817	18657	26404	53692	

Notes: Relationship between inequality and psychological outcomes across countries. Columns (1)–(9) represent OLS regressions of the psychological variables of interest from the World Value Survey data on inequality in the country of each respondent in the year of the survey. The dependent variables are z-scored, and thus each coefficient represents the standard deviation change in the dependent variable associated with a 100

Table 5: Cross-country results: Growth and psychological outcomes

	(1) Control	(2) Wouldn't work	(3) Intrinsic motivation	(4) Trust	(5) Help family	(6) Lonely	(7) Meaningless	(8) Shortsighted	(9) Risktaking	(10) Joint test (chi2/p)
Growth										
No controls	-0.000 (0.016)	-0.015*** (0.005)	0.019* (0.010)	-0.039*** (0.015)	0.001 (0.022)	-0.008 (0.018)	0.002 (0.016)	-0.008 (0.025)	0.016 (0.018)	29.161*** (0.001)
With controls	0.028 (0.017)	-0.016 (0.012)	-0.039 (0.031)	0.013 (0.016)	0.009 (0.030)	0.036 (0.039)	-0.004 (0.024)	0.038 (0.036)	0.018 (0.012)	10.700 (0.297)
<i>N</i>	59882	37061	37061	63839	36123	18817	18657	28265	63605	

Notes: Relationship between GDP growth and psychological outcomes across countries. Columns (1)–(9) represent OLS regressions of the psychological variables of interest from the World Value Survey data on the GDP growth of the country of each respondent in the year of the survey. The dependent variables are z-scored, and thus each coefficient represents the standard deviation change in the dependent variable associated with a 100