# Why Inequality Makes Europeans Less Happy: The Role of Distrust, Status Anxiety, and Perceived Conflict

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Abstract: Are more equal societies 'better' societies? This article addresses the question as to whether and why income inequality lowers the degree of Europeans' subjective well-being. While in broad international comparisons typically no clear-cut link between income inequality and (un)happiness exists, we can demonstrate that Europeans are somewhat less happy in more unequal places. We further discuss and empirically test three explanations as to why Europeans are inequality-averse, namely (dis)trust, status anxiety, and perceived conflicts. Each of these three potential mediators is hypothesized to be shaped by the extent of a nation's income inequality, and in turn to result in lower subjective well-being. A multilevel mediation analysis with data from the European Quality of Life Survey 2007 for 30 countries reveals that distrust and status anxiety are important mediators of inequality aversion, whereas perceived conflict is not. We can further show that trust is the crucial mediator among affluent societies, whereas status anxiety is crucial among the less affluent societies. The results are discussed with reference to the Spirit Level theory developed by Richard Wilkinson and Kate Pickett.

## Introduction

For many sociologists, it is close to axiomatic that inequality is either normatively bad or affects society and its members overall negatively (Jencks, 2002; Ringen, 2006). With the Spirit-Level theory (henceforth SL-theory) recently developed by Richard Wilkinson and Kate Pickett (2010), this discussion has entered a new stage. In affluent societies, the theory says, improvements in societal quality of life are no longer associated with economic growth, but rather with the level of *income inequality*. The wider income gaps are, the more society is plagued by social ills. Further, equality is said to be good not only for the poor but also the well-off. While for the leftist camp the SL-theory represents a new credo, the liberal and conservative camp is skeptical (for critical voices, see Saunders, 2010; Snowdon, 2010).

A related but currently largely separated debate in happiness research looks into the effect income inequality has on people's *subjective* well-being (SWB). The general assumption is that humans are inequality-averse,

so that people are less happy when experiencing gaping inequalities. Empirically, broad international comparisons typically do not find this negative effect (Berg and Veenhoven, 2010), but there are notable world-regional differences, suggesting that Europeans *are* inequality-averse. Since by world standards Europe is a rich region the latter finding dovetails with the SL-theory.

This article explores whether and why Europeans are unhappy with inequality. The 'why' question is one that has been largely neglected so far. A notable exception is the recent US study by Shigehiro Oishi et al. (Oishi, Kesebir and Diener, 2011), which emphasizes the role of trust as a mediator between inequality and happiness. Building on their approach—a multilevel mediation analysis (MMA)—we probe into the role that three potential mediators play: (dis)trust, status anxiety, and conflicts. Since Wilkinson and Pickett (2010) flag up status anxiety as the causal mechanism sitting between income inequality and national ill-being, analyzing the role of status anxiety for happiness explicitly ties together the SL-paradigm and the interdisciplinary debate about

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inequality aversion in happiness research. Although the former is mainly about 'objective' social ills, more than once Wilkinson and Pickett speak about individual happiness, and the German edition of their book is even titled 'Gleichheit ist Glück'.

The next section reviews previous research on inequality and happiness (section 'Does Inequality Make People Unhappy?'). Then we move to the discussion of the potential mediators (section 'Three Potential Mediators and a Theoretical Framework'). We then introduce our hypotheses and empirical strategy (section 'Hypotheses, Data, and Methodology'), before describing our findings in the section 'Results'. The final section, 'Discussion and Conclusion', summarizes and discusses our main findings.

# Does Inequality Make People Unhappy?

#### **Previous Evidence**

There is currently a growing interest in national well-being beyond the Gross Domestic Product (GDP), and measures of subjective quality of life have gained widespread currency. In particular, researchers are interested in happiness in the sense of life satisfaction: as citizens' enjoyment of life as a whole (Diener et al., 1999; Veenhoven, 2010). There is a long-standing tradition to see happiness, at least partly, as relative in the sense that social comparisons with others influence how happy and satisfied people are with their lot (Michalos, 1985). This has fuelled the expectation that people are less happy in more unequal places. Cross-national research, however, has not confirmed this expectation. Across 119 nations, of three concrete measures of SWB, only one is negatively correlated with income inequality, and after accounting for average income, all three measures change to the positive (Berg and Veenhoven, 2010). Other international studies presented similar evidence (Haller and Hadler, 2006; Verme, 2007).

The absence of inequality aversion in large international comparisons might point to the fact that evaluative standards—what constitutes a fair income distribution—vary greatly between countries (Gijsberts, 2002; Hadler, 2005; Kelley and Evans, 2009). Likewise, cross-cultural psychology holds that people accept hierarchies to a different extent (Hofstede, Hofstede and Minkov, 2010). These differences may work against a clear-cut inequality-happiness link in international comparisons. In this context it is telling that *widening* income inequalities are associated with a decrease in life satisfaction, since in this longitudinal perspective, diverging evaluative standards are less distorting (Verme, 2007). Further, single-country studies for the United

States (Oishi, Kesebir and Diener, 2011) and Japan (Oshio and Kobayashi, 2011) found people to be less happy in times or regions with a more uneven income distribution.

Most importantly, there are world-regional differences (Berg and Veenhoven, 2010). After controlling for wealth, within-nation inequality is positively linked to average SWB across Latin America, Eastern Europe, and Asia, which can be read as support for the tunnel effect (Hirschman, 1973): People tolerate inequalities if they expect that their own lot will improve soon as well. In contrast, in the Western world a negative link exists (Berg and Veenhoven, 2010). Within this camp, Western Europeans react more negatively to income inequality than US Americans, which is tentatively explained by different ideological stances towards social mobility (Alesina, Di Tella and MacCulloch, 2004). Finally, mental health is worse in more unequal European societies (Layte, 2012). In a nutshell, the evidence suggests that Westerners/Europeans dislike income inequality more than people in other corners of the globe, which justifies looking at Europe more closely, and investigating why they react this way.

#### The Search for Mechanisms

In general, few studies were concerned in-depth with the 'why' question. Oishi et al. (Oishi, Kesebir and Diener, 2011) suggest two explanations: trust and fairness. Tracking the United States from 1972 to 2008, they found the middle-income and lower-income groups to be happier in years of lower inequality *because* in those years they were more trustful towards fellow citizens, and perceived them to be fairer. Although this research is certainly pioneering, we see two concrete problems with their second mediator, fairness. While Oishi et al. aim at the perceived (un)fairness of the income distribution as a systemic feature, the concrete item used taps into individual honesty ('people try to be fair'), hence there is a mismatch between concept and operationalization. Further, many researchers use this 'fairness' item in conjunction with trust in most people for measuring one single underlying construct, dubbed either 'faith in people' (Rosenberg, 1957) or 'trust' (Reeskens and Hooghe, 2008). Hence, one can have doubts as to whether Oishi et al. have actually uncovered two different mediators, or just one.

# Three Potential Mediators and a Theoretical Framework

We build on the mediation approach and test whether (dis)trust mediates the effect of inequality in the

European context, too. But we go beyond this by suggesting two additional mechanisms: status anxiety, and perceived conflicts. We will briefly discuss each of these potential mediators in turn, with an eye on the logic of mediation analysis, which requires a conceptual link between inequality (a country characteristic) and the mediator (an individual property), and between the mediator and happiness (both individual properties). For this purpose we first sketch out a theoretical framework that integrates the three mechanisms and their links to both inequality and happiness, building on the sequence model of life evaluation (cf. Veenhoven, 2012). The aim of this model is to illustrate the process that forms the basis of people's evaluation of their life as-a-whole in terms of life satisfaction ('happiness'). We will introduce this model backwards. The overall life evaluation (the final outcome, step 4) draws on the flow of life experiences (step 3), particularly on positive and negative emotions and cognitions. These emotions and cognitions are, on their part, a reaction to the life events, bigger and smaller ones, a person encounters in daily life (step 2). The events themselves are partly random, but not completely so; they also depend systematically on a person's life chances (step 1), under which Veenhoven subsumes individual capabilities, personal resources, and external conditions, including large-scale conditions.

Now, all other life chances being equal, gaping inequalities as a contextual condition create—at least in theory—a greater number of unpleasant situations for individuals, and a smaller number of pleasant ones. These negative situations involve respective emotions and cognitions, with the probability of unpleasant emotions and cognitions being increased, and the probability of pleasant ones decreased. Based on these experiences, persons in a high-inequality environment will judge life-as-a-whole more negatively, mainly since their affect balance is shifted to the negative (the emotional path to life satisfaction), but probably also because the comparison of how life actually is with their cognitive standards of a good life turn out more negative (the cognitive path to life satisfaction). Within this framework we conceptualize distrust, status anxiety, and perceived conflict as mental states that tie together certain types of events and their emotional and cognitive correlates. In other words, our three mechanisms can be seen as representing classes of 'typical' recurrent negative life situations—all evoked by inequality as a societal condition—and their related feelings and cognitions.

Without a doubt our theoretical framework can accommodate further negative or positive life experiences that potentially mediate the effect of an unequal income distribution on SWB. In choosing our three mediators, however, we followed not only theoretical reasons but also the constraints imposed by the available data. In the next paragraphs we elaborate on the hypothesized mechanisms.

#### Trust

According to a widely shared definition, trust is 'a bet about the future contingent actions of others' (Sztompka 1999: p. 25)—that others behave in a predictable and friendly manner (cf. Inglehart, 1991). A common distinction is made between particular trust—trust in people we know personally—and general trust—trust in people we are unfamiliar with. It is this latter type that is seen as crucial in large-scale modern societies (Delhey and Newton, 2005). As a lubricant general trust helps individuals to interact with strangers in situations of uncertainty, while as a social glue it creates a sense of community to fellow citizens (Phillips, 2006). Those who trust commit themselves to others in a positive way; distrust, in contrast, '(...) involves negative, defensive commitment (avoiding, escaping, distancing myself, refusing actions, taking protective measures against those I distrust)' (Sztompka, 1999: p. 26).

We assume that repeated experiences of fellow citizens as unpredictable, unreliable, and malevolent lead people to develop a distrustful attitude, and that this happens more often under the condition of inequality. This is in line with other scholars' reasoning. According to Eric Uslaner and Mitchell Brown (2003), in unequal societies many fellow citizens are not like me socio-economically, thus the perception is stronger that their concerns and values are not mine (cf. also Earle and Cvetkovich, 1995). Further, inequality makes it more difficult to develop a sense of togetherness, which is important for trust.1 Consistent with these arguments, empirical research has found trust in most people to be lower in societies with greater income inequality (Bjornskov, 2008). Within the United States, the growing gap between rich and poor has been identified as the prime reason for declining social capital (Uslaner, 2003).

Since negative life experiences form the basis of distrust, it is intuitively plausible that the affect-balance of distrusters is more negative, as compared with trusting persons. Since distrust involves negative defensive commitment of the sort described above, it also decreases sociability, which is a crucial component of human well-being (Allardt, 1993). It is further possible that distrust lowers life satisfaction through missed-out opportunities for 'material' gains, which trusting persons will reap because of their greater preparedness to transact with strangers. Empirically, there is robust evidence that general trust is conducive to individuals' SWB

(Bjornskov, 2003; Helliwell and Putnam, 2004; Tokuda, Fuji and Inoguchi, 2010).

#### Status Anxiety

Status anxiety is a cornerstone in the SL-theory (Wilkinson and Pickett, 2010). It is a worry '...that we are in danger of failing to conform to the ideals of success laid down by our society and that we may as a result be stripped of dignity and respect (...)' (de Botton, 2004: pp. vii-viii). At the heart of status anxiety lies how others see us-or, to be more precise, how we think others see us. It should not be mixed up with the fear of downward mobility (status insecurity), which is predominantly self-regarding.<sup>2</sup> Consequently, Wilkinson and Pickett describe status anxiety as a result of status comparison: 'Higher status almost always carries connotations of being better, superior, more successful and more able. If you don't want to feel small, incapable, looked down on or inferior, it is not quite essential to avoid low social status, but the further up the social ladder you are, the easier it becomes to feel a sense of pride, dignity and self-confidence. Social comparisons increasingly show you in a positive light—whether they are comparisons of wealth, education, job status, where you live, holidays, or any marker of success' (Wilkinson and Pickett, 2010: p. 40).

Given this definition, it is more than plausible that status anxiety translates into lower overall happiness. The first reason is a person's hedonic level of affect, which is shifted to the negative when we lose out in status comparisons. Similarly, the SL-theory emphasizes the increased stress flowing from social evaluative threat. The second reason is that feeling inferior undermines self-esteem. Both the importance of affect balance and self-esteem for happiness has been repeatedly demonstrated (for a review, see Diener *et al.* 1999). We are aware of one piece of research that directly looked at the link between personal status anxiety and life satisfaction, finding a moderate to strong connection (Delhey, 2012).

That people down the social ladder experience more status anxiety than those at higher rungs is not an unusual idea since *The Hidden Injuries of Class* (Sennett and Cobb, 1972), and more recent research has demonstrated the emotional damage of 'McJobs' (Newman and Ellis, 1999). Yet, the SL-theory goes further in claiming a contextual effect of income inequality, so that in more unequal societies status anxiety is said to be *generally* more widespread. This seems plausible since for the average earner social comparisons turn out more negative and social evaluative threat is increased, but Wilkinson and Pickett do not provide any empirical evidence, despite the centrality

of this link for their entire theory. According to a recent study (Layte, 2012), income inequality does increase levels of status anxiety in a cross-European comparison, but here the measurement of status anxiety is too broad and hence unconvincing—besides one subjective measure we are also going to use, it is measured as crime rates and homicides, which should better be understood as *consequences* of status anxiety, not as a constitutive element.

#### Conflicts

Conflicts are antagonistic relationships between groups of people. In our context, material conflicts are key, in particular distributive conflicts over income and wealth. We are dealing here with people's *perceptions* of distributive conflicts. Our assumption is that people in unequal places make more unpleasant experiences of exploitation, confrontation, and unfairness, which then crystallize in conflict perceptions. This is in line with the so-called reflection thesis from social justice research: that conflict perception depends on how gaping the income inequalities in a country are. Surveys have revealed huge cross-national differences in levels of perceived conflicts (Haller, Mach, and Zwicky 1995; Hadler 2003; Delhey and Keck, 2008), lending some support to the reflection thesis.

Conflict perception could be negatively related to overall happiness for two reasons: Again, for those who perceive strong conflicts, the affect-balance will be shifted to the negative, since most people will feel uncomfortable when experiencing exploitation, confrontation, and unfairness. The human need for relationship harmony is a well-established fact in psychology (Suh, 2000), and it does not seem farfetched to assume that most people prefer harmony over conflict in larger settings as well. The cognitive path to life satisfaction suggests lower happiness as well. For those who perceive strong conflicts, society as-it-is will probably deviate more strongly from society as-it-should-be. Hence, either via the emotional path or the cognitive one, people who perceive strong conflicts in society should enjoy life less, for which there is some evidence for Europe (Böhnke, 2008).

# Hypotheses, Data, and Methods

## Hypotheses

Against this background of theories and previous research, we test the following hypotheses:

1. Within-nation income inequality contributes to differences in happiness among Europeans; there is a contextual inequality effect.

- 2. The negative contextual effect of inequality on happiness is mediated by (dis)trust, status anxiety, and perceived distributive conflicts.
- 3. Status anxiety is a particularly important mediator among affluent European countries.

#### Data and Variables

We use evidence for 30 countries from the second round of the European Quality of Life Survey (EQLS), conducted in 2007 on behalf of the European Foundation for the Improvement of Living and Working Conditions (Eurofound). The strength of this survey for our purpose is considerable. First, it provides two tried-and-tested measures of SWB, happiness, and life satisfaction. It further allows us to operationalize the three potential mediators discussed above. EQLS round two consists of representative samples of the population aged 18+ years, with sample sizes between 863 in Norway and 1,802 in Germany.3 Focusing on European countries only is advantageous because it decreases somewhat the cultural diversity with respect to fairness norms, as discussed in the section 'Does Inequality Make People Unhappy?'. Still, the countries in this study do vary in a number of aspects, most notably in levels of SWB, income inequality, and affluence.

To deal with missing values, we used listwise deletion and mean substitution to avoid further complicating our computations within the already sophisticated multilevel mediation framework (see below). First, we used listwise deletion for our categorically scaled variables, which reduced the original sample size from 33,634 to 30,626 cases, our total working sample. In a second step, we substituted missing values on our continuous scales with the respective country means, as nowhere did the percentage of these missing values exceed 10 percent.

The most important measures are as follows:

Happiness and life satisfaction:

'Taking all things together on a scale of 1 to 10, how happy would you say you are? Here 1 means you are very unhappy and 10 means you are very happy.'

'All things considered, how satisfied would you say you are with your life these days? Please tell me on a scale of 1 to 10, where 1 means very dissatisfied and 10 means very satisfied.'

Both items have been merged into an index of SWB running from 1 to 10, with higher values indicating higher SWB. Some scholars argue that reported happiness (more emotional) and life satisfaction (more

cognitive) are not exactly the same thing, and hence should be treated separately (e.g. Haller and Hadler, 2006). In merging the two, we follow another long-standing tradition that treats the two items as parts of the larger construct of SWB (Diener, Scollon and Lucas, 2003). To be on the safe side, we conducted an equality test on the correlation between the two EQLS items in a multi-group structural equation modeling framework; the results inform that happiness and life satisfaction can be assumed to be statistically equally strongly associated with one another across the 30 countries studied here (see Table A3 in the Appendix). Hence, we can legitimately use our SWB index.

Trust:

'Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people? Please tell me on a scale of 1 to 10, where 1 means that you can't be too careful and 10 means that most people can be trusted.'

Status anxiety:

'Please tell me whether you strongly agree, agree, neither agree nor disagree, disagree or strongly disagree with each statement [...].

- (f) I don't feel the value of what I do is recognized by others.
- (g) Some people look down on me because of my job situation or income.'

The original scale ranged from 1 (strongly agree) to 5 (strongly disagree), which we reversed. We then merged both items into one composite index running from 1 to 5, with higher values indicating stronger status anxiety. A multi-group equality test on the correlation between the two items legitimates the use of our status anxiety index (see Table A3).

Perceived conflicts:

'In all countries there sometimes exists tension between social groups. In your opinion, how much tension is there between each of the following groups in this country?

- (a) Poor and rich people.
- (b) Management and workers.'

We selected these two items since they address conflicts over economic resources most clearly. We reversed the scale such that 1 stands for 'no tension', 2 for 'some tension', and 3 for 'a lot of tension'. Then the

two items were merged into one composite index ranging from 1 to 3, but already having the properties of a continuous scale. Again, computing the index is justified given the result from the multi-group equality test on the association between the two items (Table A3).

Figure 1 displays by country the average levels of SWB, trust, status anxiety, and conflict. The rankings fit very well to conventional wisdom, e.g. the low levels of trust in ex-communist countries (Rose, 1994; Sztompka, 1999) and Italy (Banfield, 1958), as compared with high levels in the Scandinavian countries (Delhey and Newton, 2005). For SWB, the ranking is consistent with those produced by previous studies (Christoph and Noll, 2003; Böhnke, 2005), with people in the Nordic countries being most happy and satisfied.

Income inequality is measured as the Gini coefficient of the income distribution, as provided by the World Bank for 2006. Gaps in income are smallest in Denmark (24.0) and largest in Macedonia (39.4). In the analysis, we control for national affluence since richer countries tend to have a more egalitarian income distribution (Ferreira and Ravallion, 2009). The countries vary greatly

in GDP per capita in purchasing-power parities—World Bank data for 2006 give US\$90,032 for Luxembourg, and US\$3,211 for Macedonia. Considering this spread, we used a log transformation.

In some analyses, we stick to a subset of 'affluent' societies. Note that there is no agreed-upon income threshold, as the SL-controversy shows (Saunders, 2010), and any threshold seems arbitrary. We argue that what counts is not passing a certain income level recently, but more broadly having experienced existential security for a longer time, which comprises material resources, welfare state security, and political stability (Inglehart, 1997). In this context, Milanovic's (2005) classification of 'first world countries' is helpful. Applying his concept to Europe, our definition of 'affluent countries' includes the 15 old member states of the European Union, together with Norway (see Table A1 in the Appendix).

We control for various personal characteristics that are known to influence happiness: gender (1 = female); age and age squared (both continuous); marital status, with the married and cohabiting respondents forming the reference group compared with the separated, divorced,

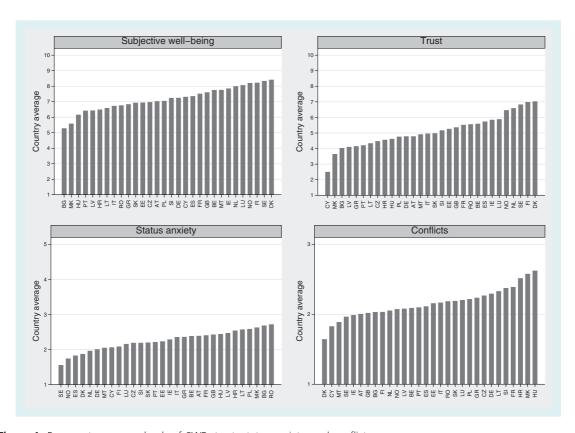


Figure 1 Per country average levels of SWB, trust, status anxiety, and conflicts

and widowed on the one hand, and singles on the other; education (several categories derived from the International Standard Classification of Education (ISCED), 1–7 scale); employment status, with the employed serving as a reference group in comparison with the unemployed, the homemakers, and the retired; and how easily people manage to make ends meet [continuous scale, from 1 (very easily) to 7 (with great difficulty)]. Descriptive information on the variables used is provided in Table A2 of the Appendix.

# **Methodology Used**

Because respondents are nested in countries (referred to as clusters) we use a multilevel approach. We aim at a socalled 2-1-1 mediation as inequality is a characteristic of societies (level 2), whereas our mediators and the dependent variable are individual-level characteristics (level 1). Consequently, we embed the multilevel analysis in a structural equation modeling framework. This strategy, besides being new, is particularly powerful, as it prevents us from wrongly conflating the between-cluster and within-cluster effects, which is typically the case in a standard multilevel model (Preacher, Zyphur and Zhang, 2010). The variances of the observed variables at level 1 are partitioned into a latent between-cluster component and a within-cluster component. Because inequality does not vary within clusters, the mediation can only take place among the between-cluster components (see Figure 2). Path a in this figure marks the slope of the effect of income inequality on the mediator at stake. Path bb stands for the purely contextual effect of the mediator on individual happiness. Further, by specifying a random slope of the typically within-cluster effect of the mediator on the dependent variable, we turn the random slope effectively, the mean of the random slopes-into a between-cluster component (bw). Hence, the between-cluster path from the mediator onto the dependent variable (SWB) is the sum of the components bb and bw. All in all, the indirect mediation effect will be estimated as  $a^*(bb+bw)$ . The general idea is to establish a mechanism, which mediates the effect of inequality on individual happiness in a way that this direct effect (c) is fully absorbed.

We first establish whether Europeans are less happy in more unequal places. This is tested in structural equation models that work one-to-one with the standard multilevel method (no mediation is involved here). We then use the MMA to test which of the three mechanisms would explain the expected negative effect of inequality on individuals' happiness. Although we have clear-cut expectations about the direction of effects, we report the more conservative two-tailed significance levels.

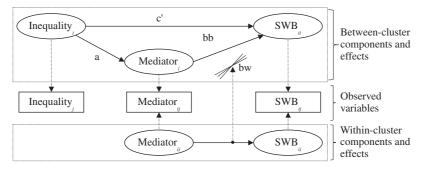
#### Results

### **Descriptive Findings**

At the country level, a negative association between income inequality and *average* SWB does indeed exist, which is suggested by the downward-directed regression line in Figure 3. More unequal societies tend to have a less happy citizenry. The correlation across the 30 countries is quite strong, with r(30) = -.65, P < .01.

#### The Contextual Effect of Inequality

Our first multilevel model (see Table 1, model 1) supports this finding for *individual* well-being: income inequality has a negative *contextual* effect on Europeans' SWB. Various individual-level determinants of happiness are included, so that the direct effect of inequality is not due to population composition. Model 2 reveals that



Paths: a slope of the effect of inequality on the mediator, bb pure contextual effect of the mediator on subjective well-being, bw mean of random slopes of the within-cluster effect of the mediator on subjective well-being. Indirect effect equals a\*(bb+bw). Figure adapted from Preacher et al. (2011).

Figure 2 Core of the multilevel model with a random slope for the mediated relationship between income inequality and SWB

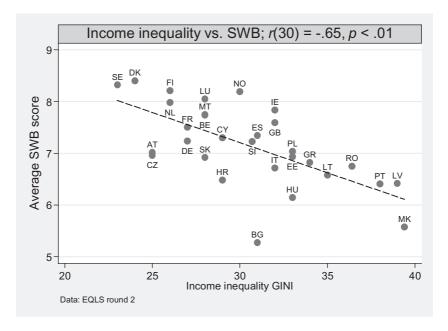


Figure 3 Raw correlation between income inequality and average SWB

Table 1 Contextual effect of income inequality on SWB

	Мо	del 1	Model 2			
	b	se	Ь	se		
Intercept	10.699	.597**	1.751	1.689		
Between-level $(N_2 = 30)$						
GINI	116	.019**	040	.020*		
GDP			.665	.121**		
Within-level ( $N_1 = 30626$ )						
Age	047	.005**	047	.005**		
Age squared	.000	.000***	.000	.000**		
Female	.107	.019**	.107	.019**		
Education	.055	.014**	.055	.014**		
Income satisfaction	.495	.026**	.495	.026**		
Married (ref. cat.)						
Separated/divorced/widowed	680	.038**	680	.038**		
Single	550	.037**	550	.037**		
Employed (ref. cat.)						
Unemployed	621	.067**	621	.067**		
Homemakers	058	.040	058	.040		
Retired	050	.038	050	.038		
Random part						
$\sigma_{2e}^{2}$	2.255	.098**	2.255	.098**		
$\sigma_{\mathrm{u0}}^{2}$	.335	.111**	.145	.034**		
Model fit						
$\chi^2(df)$ , P	61.667(1	(0), P < .01	35.395(10), <i>P</i> < .01			
CFI, TLI, RMSEA	*	968; .013	,	.993; .984; .009		

Source. Two-tailed significance tests:  $^*P < .05, ~^{**}P < .01.$ 

inequality still affects Europeans in their well-being even when national affluence is controlled for (see Table 1). In this model, affluence has a strong impact on how much Europeans enjoy their lives, and it reduces the negative impact of inequality considerably, as a comparison of models 1 and 2 shows. Yet it does not eliminate the inequality effect altogether.

# Mediation Analysis: Distrust, Status Anxiety, or Conflict?

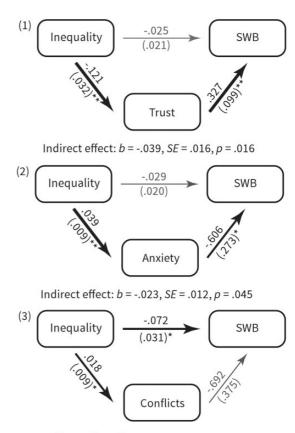
Which factors would actually explain the negative effect of inequality? Our MMA builds upon model 2 introduced above, so that national affluence is included as a control variable, together with the individual-level controls. We ran separate analyses, one for each mediator, and all models presented have a random slope specification for the mediator in question. The results are straightforward (see Figure 4). Starting with trust, we find people to be less trustful in nations with larger income disparities. In turn, distrust is detrimental to life enjoyment, so a mediation effect through trust is present (b = -.039, SE = .016, P = .016). Once trust was included, the direct effect of income inequality on SWB fully disappeared (Figure 4, panel 1).

For status anxiety, results are similar (Figure 4, panel 2). Inequality translates into widespread status worries, which in turn decrease well-being. Again, the inequality effect on SWB is fully mediated by the higher levels of status anxiety in unequal countries, although here the indirect effect (b = -.023, SE = .012, P = .045) is not as strong as for trust.

Finally, for perceived conflicts, results are different (Figure 4, panel 3). Although in more unequal nations stronger tensions are perceived (path a is significant), they do not harm individual well-being. Consequently, conflicts do not mediate the inequality effect (b=-.013, SE=.010, P=.192); the direct effect of inequality is still there. The bottom line is that (dis)trust and status anxiety do mediate the inequality effect on SWB, but perceived conflicts do not.

# Mediation analysis for rich countries and poor countries separately

In the final step we split the sample into 'affluent' and 'less affluent' countries. Please recall that the SL-theory suggests status anxiety as particularly important for rich societies. Interestingly, this is not what emerges from the data (see Figures 5 and 6). To start with, among affluent countries, perceived conflicts do not mediate the contextual effect of inequality on individual happiness (see Figure 5, panel 3). Nor does status anxiety: the contextual effect of inequality remains, whereas the components of the mediation effect



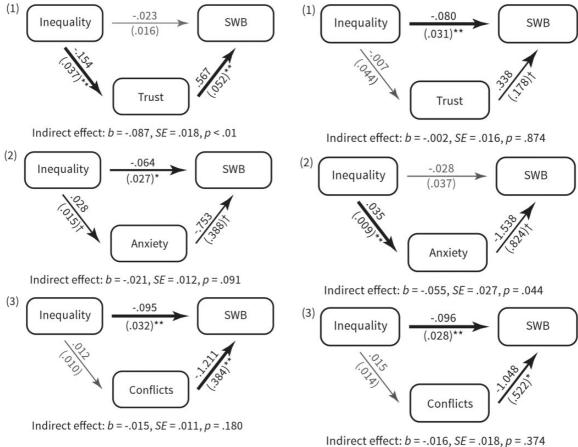
Indirect effect: b = -.013, SE = .010, p = .192

**Figure 4** Models for the relationship between income inequality and SWB as mediated by (1) trust, (2) status anxiety, and (3) perceived conflicts in the *total sample*  $(N_1 = 30,626, N_2 = 30)$ 

Unstandardized regression coefficients and standard errors in parentheses. Asterisks indicate significant effects (two-tailed tests: \*P < .05, \*\*P < .01)

are only significant at the 10% level in a two-tailed scenario (Figure 5, panel 2). Rather, (dis)trust is the prime reason why the affluent part of Europe dislikes inequality. For trust, we do find statistically significant associations along the entire mediation path (Figure 5, panel 1), and it is the mediation effect (b = -.087, SE = .018, P < .01) that takes away the direct multilevel effect of inequality on SWB.

In the less well-off countries, status anxiety is the key mechanism. Although the association between status anxiety and SWB (the path bb) is significant only in the one-tailed scenario, the overall indirect effect is significant (P<.05) and the mediating power of status anxiety is enough to reduce the contextual effect of inequality to insignificance (see Figure 6, panel 2). In contrast, neither conflicts (in line with affluent countries) nor distrust (in



**Figure 5** Models for the relationship between income inequality and SWB as mediated by (1) trust, (2) status anxiety, and (3) perceived conflicts in the *subsample of 'affluent' countries* ( $N_1 = 17,008,\ N_2 = 16$ )

Unstandardized regression coefficients and standard errors in parentheses. Asterisks indicate significant effects (two-tailed tests:  $\dagger P < .10$ , \*P < .05, \*\*P < .01).

contrast to affluent countries) play a role as mediators (Figure 6, panels 3 and 1, respectively).

# **Discussion and Conclusion**

Coming back to our three hypotheses, our main findings are as follows:

- Inequality lowers Europeans' sense of well-being, although the effect is not particularly strong if national income is simultaneously taken into account (the latter shapes SWB much stronger).
- Distrust and status anxiety are the main explanations for the negative effect of inequality.

**Figure 6** Models for the relationship between income inequality and SWB as mediated by (1) trust, (2) status anxiety, and (3) perceived conflicts in the *subsample of 'less affluent' countries* ( $N_1 = 13,618$ ,  $N_2 = 14$ )

Unstandardized regression coefficients and standard errors in parentheses. Asterisks indicate significant effects (two-tailed tests:  $\dagger P < .10$ ,  $^*P < .05$ ,  $^*P < .01$ )

 Whereas distrust is the crucial mediator among affluent countries, status anxiety is crucial among less well-off countries.

Our results confirm a number of previous findings. The national income level is far more important for life enjoyment than the income distribution, a fact that the SL-theory disregards. At the same time, our findings give additional credit to the notion that Europeans *are* sensitive towards income inequality. Finally, (dis)trust works as a mediator—not only in the United States in a longitudinal perspective, but also in Europe in a cross-sectional perspective. This strongly suggests that

(dis)trust is key to understanding inequality aversion, in particular, among rich societies.

We have generated two genuinely new insights. First, we have established status anxiety as another important mechanism for why Europeans are inequality-averse, in particular, in the less well-off countries (many of them post-communist). So far, much about the importance of status anxiety has been speculation, and to our knowledge our study is the first one that demonstrates with mass data that status anxiety—appropriately measured—plays a role in the happiness equation. Second, we can rule out that perceived conflicts are the reason behind inequality aversion.

Our findings contribute to the lively discussion about the SL theory, for which our evidence is mixed as best. Yes, Europeans are happier in egalitarian societies, as the SLtheory claims, but only slightly so. In comparison, affluence is by far the stronger factor in the happiness equation, and much of the bivariate inequality-SWB link is attenuated once national income is taken into account. This not only questions the sole focus of the SL-theory on inequality, but also suggests that it is premature to claim that economic growth has done its job in making life any better, in particular, when seen in conjunction with research that looks at national affluence and SWB from a dynamic perspective (Veenhoven and Hagerty, 2006). Disregarding positive prosperity effects seems to be a weak point of the theory. Secondly, whereas status anxiety indeed works as a causal link, we found it to be more important among less affluent nations (cf. Layte, 2012), and less so among the richest nations, as the SL-theory claims. In sum these results lend not more than lukewarm support to the SLtheory and particularly question the sole emphasis on income inequality.

Our study also contributes to the debate about the conceptual understanding of happiness as being 'absolute' (how well one lives) or 'relative' (how well one lives in comparison with others). Obviously both notions are true, but the absolute component is arguably the stronger one. Material life conditions in an absolute sense contribute more to SWB than social comparisons do. Future research should address the question of whether status anxiety is an important mediator outside Europe as well. It would be particularly interesting to see case studies on the United States, where popular wisdom has it that status anxiety approximates a national disease (de Botton, 2004). Another task is to search for other mechanisms through which inequality might harm people's well-being, such as perceived distributive justice, which is linked to SWB (Noll and Weick, 2012). The perceived amount of inequality strongly relates to the actual level of inequality in a society (e.g. Gijsberts, 2002), and in a German sample the mismatch between perceived inequality and what an individual considers legitimate has been shown to have a negative effect on SWB (Schneider, 2012). Finally, future research should engage with more sociological conceptions of inequality (class, status), as John Goldthorpe (2010) has suggested. In conclusion, Europeans want affluence *and* income equality (in that order), and public policies that serve both goals are best suited to make Europeans happy.

## **Notes**

- 1 Uslaner and Brown present a third argument as well, namely that inequality undermines optimism and thus also trust. However, quite consistent with the mainstream trust literature we see subjective well-being (and hence optimism) as a consequence rather than a precondition for trust. Most likely, however, there is a reciprocal relationship.
- 2 Those who have read *Status Anxiety* may have noticed that we deliberately cut out the final half-sentence from de Botton's definition, which is precisely about downward mobility.
- 3 We excluded Turkey from the analysis since it is not unambiguously a European country; further, historically Turkey did not experience the ideological struggle between liberalism, social democracy, and Marxism, which should be relevant for a population's outlook on inequality.
- 4 We thus classify Cyprus and Slovenia as 'less affluent', although they had a slightly higher GDP in 2006 than Portugal, the poorest EU-15 country. However, Slovenia only recently turned richer than Portugal and has a more turbulent, post-communist past. Likewise, Cyprus entered the EU more recently (in 2004) and hence has belonged to the Western zone of prosperity and security for fewer years than Portugal.
- From here on we document only relevant portions of the model output. The slope of the path from a mediator to individual SWB is the result of the purely contextual *bb* effect and the mean of the varying between-the-clusters-random-slope *bw* of the respective within-cluster path (see Figure 2).
- 6 We do not control for GDP p.c. in these analyses, since the grouping into 'affluent' and 'less affluent' countries already reduces the income range considerably, and also reduces the number of countries to just 16 and 14, respectively.

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# **APPENDIX**

 Table A1
 List of countries and country abbreviations

Affluent countries	Abbreviation	Less-affluent countries	Abbreviation	
Austria	AT	Bulgaria	BG	
Belgium	BE	Croatia	HR	
Denmark	DK	Cyprus	CY	
Germany	DE	Czech Republic	CZ	
Finland	FI	Estonia	EE	
France	FR	Hungary	HU	
Greece	GR	Latvia	LV	
Great Britain	GB	Lithuania	LT	
Ireland	IE	Macedonia	MK	
Italy	IT	Malta	MT	
Luxembourg	LU	Poland	PL	
Netherlands	NL	Romania	RO	
Norway	NO	Slovakia	SK	
Portugal	PT	Slovenia	SI	
Spain	ES			
Sweden	SE			

 Table A2
 Descriptive information on variables used

	Mean	SD	Min	Max
Dependent $(N_1 = 30626)$				
ŚWB	7.156	1.830	1	10
Between-level $(N_2 = 30)$				
GINI	30.417	4.373	23.0	39.4
log(GDP)	9.949	.835	8.074	11.408
Affluent country	.533	dummy	0	1
Within-level $(N_1 = 30626)$				
Trust	5.090	2.446	1	10
Status anxiety	2.250	.930	1	5
Conflicts	2.160	.543	1	3
Age	50.924	16.954	18	97
Age squared	2,880.644	1,783.213	324	9,409
Female	.573	dummy	0	1
Education	4.020	1.323	1	7
Income satisfaction	3.765	1.315	1	6
Married (ref. cat.)	.649	dummy	0	1
Separated/divorced/widowed	.227	dummy	0	1
Single	.124	dummy	0	1
Employed (ref. cat.)	.536	dummy	0	1
Unemployed	.057	dummy	0	1
Homemakers	.320	dummy	0	1
Retired	.087	dummy	0	1

Table A3 Testing equality of associations

	Chi2	df	P	GFI	CFI	TLI	RMSEA	SRMR
Correlation between	n life satisfaction	n and ha	ppiness <sup>a</sup>					
Unconstrained	0	0	_	1	1		.127	<.001
Constrained	727.341	29	<.001	.979	.953	.952	.028	.028
Correlation between the two conflict items <sup>a</sup>								
Unconstrained	0	0		1	1		.093	<.001
Constrained	667.186	29	<.001	.979	.919	.916	.027	.039
Correlation between the two status anxiety items <sup>a</sup>								
Unconstrained	0	0	_	1	1	_	.087	<.001
Constrained	461.259	29	<.001	.985	.938	.936	.022	.009
Effect of inequality on happiness and life satisfaction <sup>b</sup>								
Unconstrained	0	0		1	1		1.048	<.001
Constrained	.112	1	.737	.997	1	1.028	<.001	.003

Source. Chi2 = chi-square value; df = degrees of freedom; P = probability associated with Chi2 and df; GFI = Goodness of Fit Index; CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residuals

<sup>&</sup>lt;sup>a</sup>Results from multi-group models with countries (30) as groups, N = 30626.

<sup>&</sup>lt;sup>b</sup>Results from a model with aggregate data, N = 30 (countries).