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Agency, Human Dignity and Subjective Well-Being

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Agency, Human Dignity and Subjective Well-Being

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Abstract

In the last decades, our understanding of human well-being and development has shifted from a traditional focus on income and consumption towards a richer multidimensional approach. This shift has been strongly influenced by a body of research in subjective well-being (SWB) and the capabilities approach, which emphasizes the role of freedom and opportunities on well-being. This paper explores the relationship between different measures of subjective well-being and two "hidden dimensions" of development, agency and discrimination. Using statistical techniques that allow to isolate personal traits that could affect both SWB and capabilities perceptions, we document a strong relationship between life satisfaction and agency, comparable to the effect of income variables. Discrimination perceptions seem to affect more job satisfaction than life satisfaction for those who work.

Keywords. subjective well-being, agency, human dignity, capabilities.
JEL Classification: D14, G2.

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1 Introduction

Over the last two decades there has been an important shift in the way economists understand welfare and development. The discipline has gone from assessing wellbeing in terms of an unideminsional measure like income, to multidimensional measures that take into account non-economic variables such as what individuals do and can do, how they feel, and the natural environment they live in (Alkire, 2002; Stiglitz et al., 2009; Alkire and Foster, 2011; Alkire and Santos, 2014).

In the vein of Amartya Sen's influential work, development is seen as the process of expanding freedoms that people value and have reason to value (Sen, 1999). Two important aspects of this freedom linked to the basis of social rights are agency and human dignity (Gauri, 2004). Agency freedom *refers to what the person is free to do and achieve in pursuit of whatever goals or values he or she regards as important* (Sen, 1985). On the other hand, dignity is related with social inclusion, taking part in the life of the community (Sen, 1999).[1]

This paper explores the importance of agency, and dignity in explaining subjective well-being. We are specifically interested in measures of life satisfaction and job satisfaction. Our work uses a unique dataset of Chilean households, the "Other Dimensions of Household Quality of Life" survey, especially designed by the Oxford Poverty and Human Development Initiative (OPHI) to gather internationally comparable indicators on employment quality, empowerment, physical safety, human dignity and psychological and subjective wellbeing, sometimes referred as the missing dimensions of poverty (Alkire, 2007).

Our hypothesis is that agency is positively correlated with individual's subjective wellbeing, because it reflects the capacity the individual has to do what he values. The measure we use for agency is related with the individual's perception of freedom to decide for himself how to lead his life. A natural interpretation of the hypothesis is thus that the more freedom an individual has to decide how to lead her life, more wellbeing she experiences.

On the other hand, our hypothesis is that individuals less likely to regularly experience shame in public are associated with higher subjective wellbeing. In particular, we focus on two aspects of dignity: shame proneness and discrimination. Therefore, individuals that experience more shame or feel discriminated should experience less wellbeing.

[1] As Adam Smith described it, to have the *the ability to appear in public without shame.*

Our first set of results provides correlational evidence on the importance of agency, shame and discrimination in life satisfaction. The results suggest that agency, shame and discrimination are correlated with life satisfaction. Next, we explore if agency and discrimination at work are correlated with job satisfaction. The results show that both agency and discrimination at work explain job satisfaction.

An important potencial source of bias in our estimates is the absence of personality traits. It has been shown that genetics factor are strongly correlated with happiness (Lykken and Tellegen, 1996; Inglehart and Klingemann, 2000). Moreover, personality traits as repressive-defensiveness, trust, emotional stability, locus of control-chance, desire for control, hardiness, positive affectivity, private collective self-esteem, and tension have been linked to subjective wellbeing (DeNeve and Cooper, 1998; Diener et al., 2003).

In order to attenuate the potencial bias for omitting personality traits, we follow Van Praag and Ferrer-i Carbonell (2008) and we construct a measure of personality traits that we include in our regressions.The results show an important positive bias in the estimates of the relationship between subjective wellbeing, agency, shame and discrimination. In particular, after controlling by personality traits the OLS parameters associated with agency and shame decrease their magnitude in nearly 50% in the life satisfaction estimates. Also, the parameter associated with discrimination decreases in magnitude and becomes statistically insignificant. On the other hand, the bias is less important in the estimates of job satisfaction, agency and discrimination.

Overall, our results show that the difference in life satisfaction between individuals who feel they have freedom to decide for themselves how to lead their life in comparison with the individuals that don't, has the same magnitude as the difference in life satisfaction between people from the first and fifth quintile of income. Also, being in the fifth quintile of the shame proneness index in comparison with the first quintile has the same effect on life satisfaction as the difference in life satisfaction between the people from the second and fifth quintile of income. Finally, perceived discrimination is not associated with life satisfaction.

On the other hand, individuals with more agency at work are more satisfied with their job. In particular, individuals that do their job only because they need the money are less satisfied with their job in comparison with the individuals that do their job because they find

it personally important. This effect is comparable with a 2% increase in the hourly wage or almost twice the effect related with working part-time.

This study contributes to the recent but vast literature on subjective wellbeing and the literature on multidimensional wellbeing in development, more specifically to recent studies emphasizing the importance of measuring dimensions of wellbeing that seem central to human development traditionally ignored in empirical work. Our results related with the relationship between agency and subjective wellbeing are consistent with international evidence (Veenhoven, 2000; Welzel et al., 2003; Inglehart et al., 2008; Verme, 2009; Welzel and Inglehart, 2010; Fischer and Boer, 2011; Victor et al., 2013). The same can be said with respect to the results related with the relationship between perceived discrimination and subjective wellbeing (Werkuyten and Nekuee, 1999; Pascoe and Smart Richman, 2009). To our knowledge the association between subjective wellbeing and shame proneness has not been explored before. More closely related to our paper, Inglehart et al. (2008) and Welzel and Inglehart (2010) provide cross country evidence of the link between subjective wellbeing and freedom. In particular, Welzel and Inglehart (2010) presents a human development model that links agency to subjective wellbeing. Using data form the World Values Survey, they show that people that have more opportunities in life put more emphasis on emancipative values, and, in turn, their gains in agency have a greater impact in their subjective wellbeing.

On the other hand, Verme (2009) tries to address the role of personality traits in the relationship of agency and subjective wellbeing. He argue that the locus of control plays an important role in how humans value freedom of choice. Using a combination of all rounds of the World and European Value Surveys, he finds that the variables that measures freedom of choice and the locus of control predicts life satisfaction better than any other factors included in the study. In particular, people who believe that the outcome of their actions depends on internal factors appreciate more having freedom than people who believe that the results of their actions are determined by external factors. This work, highlights the importance of taking into account personality traits when analyzing the relationship between agency and subjective wellbeing.

Our paper contributes to the literature mainly in three ways. First, alongside with Verme (2009) we make a special effort in order to control by personality traits which allow us avoid

bias in the estimates of the relationship between subjective wellbeing, agency, shame and discrimination. Second, we explore the relationship between subjective wellbeing and shame. Third, we analyze the relationship between job satisfaction, agency and discrimination.

The rest of the paper is organized as follows: Section 2 describes the data and introduces our measures of agency and dignity. Section 3 presents the empirical strategy. Section 4 presents the estimation results. Section 5 concludes.

2 Data

The main source for our data is the "Other Dimensions of Household Quality of Life" survey. The survey was conducted in Chile in 2009 as result of the collaboration between the Oxford Poverty and Human Development Initiative (OPHI), the Ministry of Social Development and Microdatos Center at the University of Chile. It was administered to 2052 households corresponding to a sub-sample of 2006 round of the CASEN survey (National Socioeconomic Characterization Survey), the main nationally representative household survey used to characterize the socioeconomic situation and the impact of social policies in Chile.

In addition to detailed data on income, health, education, housing quality and employment, the survey contains information on employment quality, empowerment, physical safety, human dignity and psychological and subjective wellbeing, sometimes referred as the missing dimensions of poverty (Alkire, 2007; Lugo, 2007; Ibrahim and Alkire, 2007; Diprose, 2007; Samman, 2007; Zavaleta, 2007). The dataset is unique and it allows us to study the importance of agency and dignity in subjective well being.

2.1 Subjective well being measures

We use two different measures of subjective well being: *life satisfaction* and *job satisfaction*. The job satisfaction measure applies only to the restricted sample of workers.
The respondents are asked the following question:

In general, how satisfied or unsatisfied are you with your life over-all?.

Their are four possible answers: (i) Very satisfied; (ii) Fairly satisfied; (iii) Not very satisfied; and (iv) Not satisfied at all. In order to facilitate an interpretation we code these answers from one to four, with one being "not satisfied at all" and four being "very satisfied". For job satisfaction there is an analogue question (replacing "life" with "job"). The answers to these two questions are our main dependent variables.

2.2 Agency measures

The survey contains a full set of questions that aim to measure agency (Ibrahim and Alkire, 2007; Samman and Santos, 2009). Specifically, the first question of the survey's section on self determination and autonomy is as follows:

How true is the following statement for you?: I feel free to decide for myself how to lead my life.

There are four possible answers : (i) Not at all true; (ii) Somewhat true; (iii) Fairly true; and (iv) Completely true. We use four dummy variables that identify the answer given by each individual.[2]

To analyze the relation between agency and job satisfaction we take advantage of additional questions that try to elicit the motivation of individuals to work (Ibrahim and Alkire, 2007):

I will now ask you to express your level of disagreement or agreement with the following statements, where 1 is greatly disagree with the statement and 4 is strongly agree, regarding why you do the job you do.:

1. *I do this job only because I need the money.*

2. *I do this job because I personally consider it important*

We observe individuals who agree and strongly agree with one of these statements only and others who agree with both. To keep track of tall possible combinations we use four dummies. The first one identifies the individuals who agree with the first statement, the

[2]As a robustness check, we also used the second question of the section: *How true are the following statements for you?: I generally feel free to express my ideas and opinions* . The results using this question are consistent with the ones presented herein and are available upon request.

second identifies those who only agree with the second one, the third one identifies those individuals who agree with both and, finally, we identify the individuals that disagree with both.

2.3 Human dignity measures

The dataset contains several internationally comparable measures related with human dignity and social isolation (Zavaleta, 2007; Samuel et al., 2014). We focus on two aspects of dignity: shame proneness and perceived discrimination. In oder to measure shame we take advantage of the Personal Feelings Questionnaire-2 (PFQ-2), that includes the shame proneness questionnaire developed by Harder and Zalma (1990). This measure refers to the tendency to experience the emotion of shame in response to specific events (Tangney and Dearing, 2002). We construct an index of shame proneness using the answer to the following question:

For each of the following listed feelings please place a number from 1 to 4, reflecting how common the feeling is for you: embarrassment, feeling ridiculous, self-consciousness, feeling humiliated, feeling stupid, feeling childish, feeling helpless, paralyzed, feelings of blushing, feeling laughable, feeling disgusting to others.

We scale the answer of each question from 0 to 3, with 0 being "rarely or never " and 3 being "always or almost always". Then we add the points across questions, resulting in the shame proneness index. This index can take values between 0 and 30. In the sample, the index has a mean of 3.54 and a standard deviation of 3.74. The index 25th percentile is equal to 0 and the 75th percentile is equal to 5. [3]

The second measure of dignity used is perceived discrimination. Individuals are asked: *Have you been treated in a way that you felt was prejudiced during the last three months?*. We construct a dummy variable that equals one if the individual declares that he/she has been treated in a prejudiced way and zero, otherwise. Additionally, individuals are asked if they have been treated with prejudice at work. We use another dummy variable that equals one if he/she if the answer is yes and zero, otherwise.

[3]To evaluate the reliability of this measure in our sample, namely, how much information about the construct is contained in the index, we compute the Cronbach's alpha value. It's value is 0.83, which is greater than 0.7, the threshold value proposed by Nunnally (1978) to consider a measure reliable.

2.4 Descriptive statistics

Table 1 presents descriptive statistics of life satisfaction for different individual characteristics. A lower household income or education level is associated with lower life satisfaction. Average life satisfaction is higher for individuals who are employed relative to unemployed and inactive individuals. Having savings to go by for three months is associated with higher levels of life satisfaction.

Table 1: Life Satisfaction by individual characteristics

		%	Mean	S.D.
Total		100	3.02	0.79
Male		48.3	3.10	0.78
Female		51.7	2.94	0.80
18-24 years old		2.90	3.05	0.70
25-34 years old		13.5	3.13	0.77
35-44 years old		26.5	3.01	0.80
45-54 years old		28.8	2.99	0.80
55-64 years old		17.2	3.02	0.78
65 + years old		11.1	2.96	0.85
Income quintile I		22.1	2.73	0.85
Income quintile II		22.1	2.93	0.76
Income quintile III		21.4	3.00	0.79
Income quintile IV		19.0	3.23	0.72
Income quintile V		15.4	3.32	0.69
Primary education		42.1	2.91	0.85
Secondary education		42.9	3.03	0.76
Tertiary education		15.0	3.29	0.65
Employed		67.6	3.10	0.77
Unemployed		3.30	2.72	0.81
Inactive		29.1	2.88	0.83
Married		83.9	3.05	0.78
Separate		6.40	2.82	0.84
Widower		3.30	2.72	0.92
Single		6.30	3.02	0.84
Head of Household	No	34.3	2.99	0.79
	Yes	65.7	3.03	0.79
Has children	No	22.6	3.06	0.78
	Yes	77.4	3.01	0.80
Has physical and/or mobility impairment	No	93.8	3.03	0.79
	Yes	6.20	2.79	0.86
Has a psychiatric problem	No	99.0	3.02	0.79
	Yes	1.00	2.65	0.75
Has a chronic disease	No	79.0	3.06	0.78
	Yes	21.0	2.88	0.84
Has Cancer	No	98.5	3.02	0.79
	Yes	1.50	2.64	0.91
Indigenous	No	91.6	3.01	0.79
	Yes	8.40	3.09	0.85
Religious	No	34.1	2.94	0.79
	Yes	65.9	3.06	0.79
Have savings to go by 3 months	No	74.3	2.92	0.81
	Yes	25.7	3.29	0.67

Table 2 shows life satisfaction levels across groups with different levels of agency, shame proneness and perceived discrimination. First, there is a positive bivariate relation between agency and life satisfaction, the more freedom to decide the individuals feel they have, more life satisfied are. In particular, the difference in the mean between the group that answers "not at all" and "completely true" is 1.4 standard deviations of the life satisfaction measure. Second, there is a negative relationship between life satisfaction and the shame proneness index. In fact, the difference between the mean of life satisfaction of the first quintile and the fifth quintile of the shame index is equivalent to 0.93 standard deviations. Finally, individuals that felt discriminated report lower life satisfaction than those who have not felt that way.

Table 2: Life Satisfaction for each level of agency, shame and discrimination

		%	Mean	S.D.
Agency				
I Feel free to decide for myself how to lead my life:				
Not at all true		4.30	2.24	0.98
Somewhat true		15.0	2.65	0.75
Fairly true		41.2	2.94	0.70
Completely true		39.5	3.32	0.74
Shame				
Shame proneness index quintile I		25.7	3.28	0.70
Shame proneness index quintile II		22.2	3.18	0.76
Shame proneness index quintile III		20.5	3.04	0.72
Shame proneness index quintile IV		14.1	2.94	0.79
Shame proneness index quintile V		17.4	2.55	0.83
Discrimination				
Have been treated in a way he felt prejudiced	No	81.6	3.08	0.76
	Yes	18.4	2.74	0.90

In table 3 we present descriptive statistics of job satisfaction by individual characteristics. A lower wage or education level is associated with lower job satisfaction. Also, working part-time is associated with lower job satisfaction. Individuals who contribute to a retirement pension system have a higher average job satisfaction relative to those who don't.

Table 3: Job Satisfaction by individual characteristics

		%	Mean	S.D.
Total			2.79	0.91
Male		61.9	2.79	0.92
Female		38.1	2.80	0.91
18-24 years old		2.50	2.52	0.81
25-34 years old		13.5	2.87	0.92
35-44 years old		30.9	2.71	0.96
45-54 years old		30.8	2.80	0.86
55-64 years old		17.6	2.88	0.89
65 + years old		4.60	2.89	1.01
Primary education		37.7	2.67	0.93
Secondary education		44.9	2.78	0.90
Tertiary education		17.4	3.11	0.82
Wage per hour quintile I		21.7	2.42	0.96
Wage per hour quintile II		26.5	2.67	0.91
Wage per hour quintile III		18.7	2.84	0.92
Wage per hour quintile IV		17.6	3.05	0.83
Wage per hour quintile V		15.5	3.17	0.69
Married		84.5	2.79	0.90
Separated		6.80	2.80	0.96
Widower		1.00	3.00	1.20
Single		7.80	2.84	1.00
Head of Household	No	23.4	2.77	0.91
	Yes	76.6	2.80	0.91
Has Children	No	22.1	2.95	0.93
	Yes	77.9	2.75	0.91
Employee		73.5	2.82	0.88
Self-employed		26.5	2.74	0.99
Contributes to a retirement pension	No	33.4	2.57	1.01
	Yes	66.6	2.91	0.84
Full-Time		91.3	2.82	0.91
Part-Time		8.70	2.54	0.95
Indigenous	No	89.7	2.82	0.91
	Yes	10.3	2.55	0.94
Religious	No	36.7	2.66	0.93
	Yes	63.3	2.87	0.90
Have savings to go by 3 months	No	73.3	2.65	0.91
	Yes	26.7	3.19	0.79

Finally, table 4 shows the bivariate relationship between job satisfaction and the measures of agency and discrimination at work, respectively. Individuals who declare doing their job because they consider it important are more satisfied with their job. Indeed, their average satisfaction is 1.1 standard deviations higher than for those who only work because they need the money. Individuals declaring that they work for both reasons are more satisfied than those who declare to work because they need money and less satisfied that those who only work because they consider it personally important.

Table 4: Job Satisfaction by agency and external humiliation

		%	Mean	S.D.
Agency at work (Reasons to work)				
Needs the money		4.90	2.20	0.76
Personally consider it's important		37.6	3.05	0.86
Both reasons		56.3	2.69	0.92
Another reason		1.20	2.50	0.85
Discrimination at work				
Have been treated at work in a way he/she felt prejudiced	No	94.1	2.82	0.90
	Yes	5.00	2.39	1.02

3 Empirical Strategy

Our main focus is to identify the association between subjective well being and agency, shame and discrimination. In order to do so we estimate variations of the following linear model:

$$SWB_i = X_i'\beta + M_i'\delta + u_i \quad (1)$$

where SWB_i is the measure of subjective well being, either life satisfaction or job satisfaction, X_i is a vector of controls, M_i is a vector with the variables related to agency, shame and discrimination we focus on, and u_i is the error term.

A central concern, is the omission of personality traits, a variable that the literature has shown to hold considerable explanatory power on subjective well being(DeNeve and Cooper, 1998; Diener et al., 2003). The basic idea is that people with certain personality traits -for example, optimism- may lead responses that express both high subjective well being and agency. This poses to potential problems. The first one is a classic omitted variables

bias. Indeed, as shown shortly, ignoring this issue leads to estimating a stronger association between subjective well being and the dimensions that we are interested in.

A second issue is more conceptual. Indeed, since both the left and the right-hand variables of interest are subjective, this correction is central to interpret the results. In principle, individual agency measures could be associated to personality traits and other factors associated to more objective individual conditions that allow him/her to control him/her destiny. These latter conditions can also vary across individuals but, in contrast to personality traits, they might be systematically affected by political, social, and economic institutions (e.g. labor market conditions, social security, gender inequality, political participation, etc). A strong association between subjective wellbeing and agency would still be interesting regardless of whether or not it is driven primarily by personality traits. However, if the relationship survives after controlling for personality traits, it might suggest that there are objective conditions that affect individual perceptions of freedom and autonomy that are consistently reflected in subjective wellbeing measures.

Personality traits may cause two individuals facing the same situation or stimulus to react differently. For example, optimism plays an important role in coping with stressful situations (Scheier and Carver, 1992). IMore specifically, there is evidence that optimism helps to better cope with discrimination (Williams et al., 2003).Since subjective perceptions of agency, shame and discrimination are likely to be mediated by personality traits, controlling for a measure personality traits is important to attempt to isolate the variation of "objective" or external determinants faced by individuals

If for each individual i, we had a measure of personality traits Z_i, we can estimate a version of the model that corrects the potencial bias related with the omission of personality traits:

$$SWB_i = X_i^{'}\beta + M_i^{'}\delta + \gamma Z_i + u_i. \quad (2)$$

Our dataset allows us to construct a measure of personality traits Z_i developed by Van Praag and Ferrer-i Carbonell (2008). This method is now relatively standard in the happiness literature. How is the measure of Z_i constructed? Our dataset contains questions that asses individual satisfaction in a number of domains. Specifically, in addition the "gen-

eral" life satisfaction question used as our basic subjective wellbeing measure, the survey addresses five satisfaction domains: feeding, income, health, family, and freedom. Following Van Praag and Ferrer-i Carbonell (2008), we assume that there is an unobserved component (Z_i) reflecting common personality traits that codetermine "general" life satisfaction and each domain satisfaction. Let k stand for a specific satisfaction dimension and $S_{k,i}$ be a variable measuring satisfaction in dimension k for agent i. Each domain is a function of observed characteristics X_i and an unobserved component. In concrete, we estimate the relationship between each domain and this variables:

$$S_{k,i} = S_k(X_i) + u_{k,i},$$

where $S_k(\cdot)$ is a function that we assume to be linear and $u_{k,i}$ is an error term specific to each dimension k. Next, compute the predicted residuals $\hat{u}_{k,i}$ from each regression. These residuals contain common factors that are unobserved and determines their subjective well being such as personality traits (e.g., optimism or pessimism). Indeed, in Appendix A, we present the detailed estimation and show the correlations between the predicted error terms terms and find that these correlations are quite high. In order to isolate these personality traits, a principal component analysis is performed. The first component is used as a measure of these personality traits. Thus, Z_i is the linear combination of the residuals -with one coefficient for each dimension- that maximizes the variance across agents. More detailed information on the procedure and its application to our estimation is in the Appendix.

In what follows, the models 1 and 2 are estimated using OLS as a benchmark. We also estimate an ordered probit account for the ordinal nature of the dependent variable.

4 Results

4.1 Life Satisfaction

We present our estimates of the association between life satisfaction and the measures of agency, shame and discrimination introduced earlier. We compare the "first pass" regression that ignores the personal traits control (equation 1) with the one that includes it (equation 2). Columns (1) and (2) in table 5 show the OLS estimates of models 1 and 2, respectively.

Columns (3) and (4) show the ordered probit estimates.[4]

The OLS results in column (1) shows a strong correlation between agency and life satisfaction. On the other hand, the shame proneness index is strongly and negatively correlated with life satisfaction. Also, individuals that felt discriminated are associated with less life satisfaction.

Regarding some of the control variables, the results show that there is an important socioeconomic gradient in life satisfaction. Individuals in income quintiles I, II and III are significantly less satisfied than individuals in quintile V. In addition, married individuals are more satisfied than separated individuals. Individuals who suffer from a chronic illness or have cancer are associated with lower levels of the life satisfaction measure. Finally, individuals who declare themselves religious and/or having savings to go by three months are associated with higher life satisfaction.

Column (2) of Table 5 present the estimates of model 2, that is, including the proxy of personality traits. First of all, the non-observed component is highly significant to explain life satisfaction. In particular, the $R - squared$ increases from 25% in column (1) to 49% in column (2).

The strong and positive correlation between agency and life satisfaction survives, but the significance and the magnitude of the parameter decreases. In fact, the magnitude of the parameter associated to the dummy variable for the individuals that answer the agency question "completely true" decreasing 58%. Hence, not including a correction for personality traits introduces a sizable bias in the estimates of the relationship between agency and life satisfaction. On the other hand, the parameter associated with the individuals that are in the fifth quintile of the shame proneness index relative to the first one decreases around 41%. Moreover, the measure of perceived discrimination is not significant after controlling for personal traits.

The statistical and economic significance of control variables also change. For example, the relation between life satisfaction and age is now convex. In addition, differences between quintiles I, II and III with respect to V are a little bigger than before. Also, being employed is significant and relates positively with life satisfaction relative to being unemployed. Instead,

[4] All estimates include dummy variables for missing values not shown in the tables (see Maddala, 1977, p. 202). Most of them are not statistically significant.

being inactive is not significant and negatively related with life satisfaction relative to being inactive.

The ordered probit estimates in columns (3) and (4) yield qualitatively similar results. Namely, agency and the shame proneness index are strongly related with life satisfaction. Instead, perceived discrimination does not to be related with life satisfaction in our sample.

In order to determine the magnitude of the effects of agency and shame we compute the average marginal effect of the probability that the individual declares being very satisfied. To calibrate the relative importance of these effects we compute the marginal effects associated to income quintile dummies and the religiosity dummy.

The average marginal effects are reported in Table 6. The probability to be very satisfied for individuals who answer the agency question "completely true" is 13.8 percentage points higher than for individuals who answer "not at all true". On the other hand, the probability to be very satisfied for individuals in the fifth income quintile is 14.7 percentage points higher than for those in first income quintile. Thus, the effect a change from the best to the worst agency level is comparable to the effect of change from the first first income quintile to the fifth quintile. This suggests that the effect of agency on life satisfaction is important.

Moving to the impact of shame proneness, the probability to be very satisfied for individuals in the fifth quintile of the shame proneness index is 10.5 percentage points lower than for those in the first quintile. This is equivalent to 70% of the effect of being in the first quintile relative to the fifth quintile.

Table 5: Life Satisfaction, Agency, Shame, and Discrimination: OLS and Ordered Probit estimation

	Dependent variable: Life Satisfaction			
	OLS		Ordered Probit	
	(1)	(2)	(3)	(4)
Agency				
I Feel free to decide for myself how to lead my life:				
Somewhat true	0.315***	0.171**	0.437***	0.244*
	(0.107)	(0.0816)	(0.140)	(0.147)
Fairly true	0.480***	0.209***	0.672***	0.289**
	(0.102)	(0.0780)	(0.132)	(0.140)
Completely true	0.785***	0.323***	1.196***	0.561***
	(0.104)	(0.0813)	(0.135)	(0.144)
Shame				
Shame proneness index quintile II	-0.0396	-0.0268	-0.0720	-0.0851
	(0.0481)	(0.0378)	(0.0805)	(0.0859)
Shame proneness index quintile III	-0.108**	-0.0979**	-0.192**	-0.243***
	(0.0483)	(0.0399)	(0.0831)	(0.0883)
Shame proneness index quintile IV	-0.172***	-0.0678	-0.292***	-0.179*
	(0.0577)	(0.0460)	(0.0921)	(0.0977)
Shame proneness index quintile V	-0.416***	-0.235***	-0.655***	-0.479***
	(0.0568)	(0.0469)	(0.0908)	(0.0963)
Discrimination				
Felt discriminated	-0.125***	0.0215	-0.185***	0.0666
	(0.0484)	(0.0411)	(0.0691)	(0.0733)
Non Observed component				
Z		0.282***		0.567***
		(0.00992)		(0.0225)
Socio Economic and Demographic				
Female	-0.0436	-0.0573	-0.0761	-0.113
	(0.0467)	(0.0383)	(0.0784)	(0.0831)
Age	-0.0110	-0.0138**	-0.0176	-0.0275**
	(0.00770)	(0.00639)	(0.0124)	(0.0131)
Squared Age	8.90e-05	0.000131**	0.000140	0.000257*
	(7.92e-05)	(6.59e-05)	(0.000126)	(0.000133)
Income quintile I	-0.290***	-0.340***	-0.472***	-0.682***
	(0.0617)	(0.0507)	(0.101)	(0.108)
Income quintile II	-0.174***	-0.198***	-0.303***	-0.429***
	(0.0578)	(0.0484)	(0.0972)	(0.103)
Income quintile III	-0.158***	-0.173***	-0.281***	-0.386***
	(0.0558)	(0.0460)	(0.0952)	(0.101)
Income quintile IV	-0.0236	-0.0186	-0.0521	-0.0627
	(0.0518)	(0.0420)	(0.0945)	(0.101)
Years of Schooling	0.00241	0.00787**	0.00412	0.0174**
	(0.00495)	(0.00392)	(0.00804)	(0.00856)
Employed	0.0906	0.184**	0.136	0.349**
	(0.0915)	(0.0718)	(0.145)	(0.154)
Inactive	0.0569	0.129*	0.0885	0.243
	(0.0955)	(0.0746)	(0.152)	(0.161)

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 5: Life Satisfaction, Agency, Shame, and Discrimination: OLS and Ordered Probit estimation (continuation)

	Dependent variable: Life Satisfaction			
	OLS		Ordered Probit	
	(1)	(2)	(3)	(4)
Family Characteristics				
Married	0.141**	0.164***	0.213*	0.319***
	(0.0703)	(0.0563)	(0.114)	(0.121)
Widower	-0.0780	-0.0757	-0.118	-0.137
	(0.123)	(0.101)	(0.180)	(0.190)
Single	0.0753	0.0923	0.102	0.153
	(0.0924)	(0.0773)	(0.149)	(0.157)
Head of the household	-0.0243	-0.00890	-0.0442	-0.0199
	(0.0483)	(0.0388)	(0.0803)	(0.0850)
Has children	-0.0271	-0.0403	-0.0420	-0.0862
	(0.0425)	(0.0346)	(0.0694)	(0.0737)
Health Problems				
Has a physical impairment	-0.0251	-0.0603	-0.0409	-0.117
	(0.0774)	(0.0602)	(0.109)	(0.115)
Has a psychiatric problem	0.133	-0.00857	0.192	-0.0559
	(0.151)	(0.142)	(0.253)	(0.264)
Has a chronic disease	-0.0989**	-0.120***	-0.162**	-0.243***
	(0.0433)	(0.0367)	(0.0673)	(0.0710)
Has cancer	-0.345**	-0.368***	-0.541**	-0.746***
	(0.139)	(0.137)	(0.217)	(0.226)
Other Controls				
Indigenous	0.0833	0.0748	0.152	0.173*
	(0.0608)	(0.0491)	(0.0963)	(0.102)
Religious	0.141***	0.155***	0.231***	0.310***
	(0.0346)	(0.0284)	(0.0562)	(0.0596)
Have savings to go by 3 months	0.160***	0.203***	0.267***	0.428***
	(0.0396)	(0.0323)	(0.0669)	(0.0714)
Regional Dummies	YES	YES	YES	YES
Observations	1,924	1,924	1,924	1,924
R-squared	0.248	0.487		

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6: Average marginal effects for the ordered probit estimation of Life Satisfaction

	Pr(Life Satisfaction=Very Satisfied)
Agency	
I Feel free to decide for myself how to lead my life:	
Somewhat true	0.0578
	(0.0356)
Fairly true	0.0660**
	(0.0314)
Completely true	0.138***
	(0.0371)
Shame	
Shame proneness index quintile II	-0.0196
	(0.0196)
Shame proneness index quintile III	-0.0551***
	(0.0193)
Shame proneness index quintile IV	-0.0407*
	(0.0217)
Shame proneness index quintile V	-0.105***
	(0.0195)
Income Quintiles	
I	-0.147***
	(0.0209)
II	-0.0960***
	(0.0219)
III	-0.0865***
	(0.0216)
IV	-0.0145
	(0.0231)
Other Controls	
Religious	0.0710***
	(0.0133)

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

4.2 Job Satisfaction, agency and discrimination

Table 7 presents the results of the OLS and ordered probit estimates of job satisfaction, agency measures and perceived discrimination at work. Column (1) shows the OLS estimation without controlling by non observables. Individuals that do their job because they need money are less satisfied with their job in comparison to those who declare doing their job because they consider it personally important. In addition, individuals who declare doing their job for both reason are less satisfied than those who do it only because they consider it important.

Turning to the controls variables we see that the wage per hour and contributing to a retirement pension are positively correlated with job satisfaction. Working part-time and

having children is negatively correlated with job satisfaction.

Column (2) in Table 7 shows the results of the OLS estimates controlling for non observables. We observe that the magnitude and statistical significance of the coefficients change. Moreover, the $R - squared$ increases from 18% to 42%. In particular, the effect of working only because of the money relative to work because consider it personally important decrease it's size in 45%. Also, the the effect of working for both reason in comparison with working because he consider's it personally important decrease in 40%. On the other hand, feeling discriminated at work becomes statistically insignificant.Therefore, neglecting to control by personality traits generates a huge bias in the estimates.

Column (3) and (4) contains the ordered probit estimates. Results are qualitatively similar than OLS estimation.

The average marginal effect of being very satisfied with their job is shown in Table 8. To asses the relative importance of agency and perceived discrimination we present the average marginal effect of the ln(Wage per hour), part time and the religiosity dummy. An 1% increase of the wage per hour is associated with a 4.82 percentage points increase in the probability of being very satisfied.

If we analyze the effect of the agency measures we see that individuals that do their job only because of the money in comparison with individuals that do their job because they consider it personally important have 9.5 percentage points less in the probability of being very satisfied with their job. This is equivalent to an decrease of 1.97% in the wage per hour, or 1.8 times the effect of working part-time.

On the other hand, individuals that do their job for both reasons in comparison with those who do their job because they consider it personally important have 5.5 percentage points less in the probability of being very satisfied with job. This is equivalent to a decrease of 1.15% in wage per hour or to the effect of working part-time.

Table 7: OLS and Ordered Probit estimation of Job Satisfaction, Agency and Discrimination

	Dependent variable: Job Satisfaction			
	OLS		Ordered Probit	
	(1)	(2)	(3)	(4)
Agency at work (reasons to work)				
Need the money	-0.580***	-0.317***	-0.738***	-0.472***
	(0.123)	(0.112)	(0.155)	(0.174)
Both reasons	-0.244***	-0.146***	-0.325***	-0.241***
	(0.0649)	(0.0555)	(0.0853)	(0.0886)
Another reason	-0.381	-0.377	-0.502	-0.601*
	(0.285)	(0.248)	(0.345)	(0.354)
External Humiliation				
Felt discriminated at work	-0.313**	-0.194	-0.374*	-0.253
	(0.155)	(0.134)	(0.197)	(0.205)
Non Observed component				
Z		0.311***		0.505***
		(0.0174)		(0.0347)
Socio Economics and Demographics				
Female	0.128	0.163**	0.169	0.281**
	(0.0909)	(0.0737)	(0.117)	(0.117)
Age	-0.0211	-0.0116	-0.0263	-0.0153
	(0.0168)	(0.0141)	(0.0220)	(0.0223)
Squared Age	0.000241	0.000139	0.000296	0.000188
	(0.000181)	(0.000149)	(0.000237)	(0.000235)
Years of Schooling	0.00228	0.00503	0.00361	0.0104
	(0.00904)	(0.00768)	(0.0119)	(0.0122)
ln(Wage per hour)	0.143***	0.135***	0.183***	0.212***
	(0.0440)	(0.0350)	(0.0580)	(0.0574)
Family Characteristics				
Married	0.113	0.109	0.149	0.163
	(0.130)	(0.100)	(0.171)	(0.167)
Widower	0.404	0.305*	0.627	0.666*
	(0.302)	(0.177)	(0.452)	(0.383)
Single	0.0877	-0.0415	0.122	-0.0783
	(0.161)	(0.128)	(0.214)	(0.210)
Head of the household	0.0969	0.117	0.130	0.208
	(0.103)	(0.0856)	(0.132)	(0.134)
Has children	-0.162**	-0.175**	-0.227**	-0.311***
	(0.0799)	(0.0684)	(0.107)	(0.113)
Worker characteristics				
Self-employed	-0.0396	-0.0935	-0.0603	-0.158
	(0.0893)	(0.0722)	(0.117)	(0.117)
Contributes to a retirement pension	0.173**	0.134*	0.200*	0.187*
	(0.0852)	(0.0711)	(0.110)	(0.113)
Part-Time	-0.235**	-0.157*	-0.315**	-0.252*
	(0.111)	(0.0942)	(0.143)	(0.150)
Tenure	0.00367	0.00196	0.00482	0.00278
	(0.00325)	(0.00273)	(0.00426)	(0.00440)
Other Controls				
Indigenous	-0.216**	-0.204**	-0.284**	-0.342***
	(0.105)	(0.0802)	(0.133)	(0.127)
Religious	0.162***	0.147***	0.216***	0.230***
	(0.0620)	(0.0522)	(0.0800)	(0.0822)
Have savings to go by 3 months	0.356***	0.412***	0.484***	0.684***
	(0.0698)	(0.0564)	(0.0953)	(0.0947)
Industry Dummies	YES	YES	YES	YES
Size of the firm Dummies	YES	YES	YES	YES
R-squared	0.181	0.415		
Observations	819	819	819	819

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 8: Average marginal effects after ordered probit estimation of Job Satisfaction

	Pr(Job Satisfaction= Very Satisfied)
Agency	
Do this job only because he need the money	-0.0949***
	(0.0305)
Do this job for both reason	-0.0555***
	(0.0208)
Wage	
ln(Wage per hour)	0.0482***
	(0.0129)
Work Characteristics	
Part-Time	-0.0541*
	(0.0301)
Other Controls	
Religious	0.0516***
	(0.0183)

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

5 Conclusions

This paper tried to measure the importance of agency and human dignity in subjective well being using a unique data set designed to measure these variables.

Controlling for personality traits, our results show that agency and shame are important predictors of life satisfaction. In particular, the effect of agency is comparable with the difference in wellbeing between individual's in the first income quintile relative to the fifth. The effect of shame is 0.7 times the effect of the difference in wellbeing between individual's in the first income quintile relative to the fifth.

On the other hand, agency is an important predictor of job satisfaction. Individuals who do their job only because of the money in comparison with individuals that do their job because they consider it personally important have 9.5 percentage points less in the probability of being very satisfied with their job. This is equivalent to an decrease of 1.97% in the wage per hour, or 1.8 times the effect of working part-time.

However, perceived discrimination is not correlated with life satisfaction and job satisfaction after controlling by personality traits. This relationship deserves further study. Investigating whether the association between subjective well being and perceived discrimination is subject to adaptation over time, seems important before a final conclusion on this

matter (Brickman et al., 1978; Fujita and Diener, 2005; Oswald and Powdthavee, 2008).

Importantly, our results highlight the importance of controlling by personality traits in order to avoid the omitted variable bias. Our estimates of the bias in the variables related with agency and shame are between 40-58%. Moreover, perceived discrimination is not statistically significant when personality traits are incorporated as a control.

Our results suggest that subjective well being is aligned with capabilities emphasized by Sen. Moreover, quantitatively, variation in the sample across the missing dimensions of well being seem to be as central as as income and religiosity in explaining subjective well being.

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Apendix

A Personality traits measure

This appendix presents the empirical implementation of the methodology of Van Praag and Ferrer-i Carbonell (2008) to obtain a variable that accounts for personality traits.

The first step is to estimate the determinants of each domain satisfaction. The domains considered are feeding, income, health, family and freedom satisfaction. Following Van Praag and Ferrer-i Carbonell (2008) we start by applying an implicit cardinalization of each of the domain satisfaction variables using the conditional expectation as follows:

$$\hat{S}_i = E(S_i|\mu_{i,j-1} < S_i < \mu_{i,j}) = \frac{n(\mu_{i,j-1}) - n(\mu_{i,j})}{N(\mu_{i,j}) - N(\mu_{i,j-1})}$$

where $\{(\mu_{i,j-1}, \mu_{i,j})\}_{j=1}^{I}$ are the intervals of the ith domain, and $n(\cdot)$ and $N(\cdot)$ represent the pdf and cdf of a standard normal distribution. Then we estimate the determinants of each domain ($\hat{S}_i$) by OLS. This procedure is call Probit adapted Ordinary Least Square (POLS).

Table 9 show these estimates.

Table 9: POLS estimation of the determinants of domains satisfaction

	Dependent variable: Satisfaction with				
	Feeding	**Income**	**Health**	**Family**	**Freedom**
Socio Economics and Demographics					
Women	-0.0993*	0.0465	-0.0137	-0.151**	-0.0291
	(0.0565)	(0.0361)	(0.0522)	(0.0646)	(0.0598)
Age	-0.00616	-0.00365	-0.0188**	-0.00838	-0.0134
	(0.00903)	(0.00585)	(0.00843)	(0.0103)	(0.00933)
Squared Age	8.32e-05	5.55e-05	0.000155*	0.000117	0.000155
	(9.19e-05)	(6.00e-05)	(8.78e-05)	(0.000104)	(9.46e-05)
Income Quintile I	-0.447***	-0.398***	-0.147**	0.0220	-0.163**
	(0.0693)	(0.0468)	(0.0688)	(0.0816)	(0.0749)
Income Quintile II	-0.251***	-0.237***	-0.0990	-0.00726	-0.125*
	(0.0650)	(0.0442)	(0.0668)	(0.0791)	(0.0728)
Income Quintile III	-0.161***	-0.216***	-0.0439	0.0483	0.0313
	(0.0612)	(0.0423)	(0.0628)	(0.0766)	(0.0683)
Income Quintile IV	-0.01000	-0.0762*	0.0638	0.141*	0.0524
	(0.0570)	(0.0408)	(0.0596)	(0.0722)	(0.0659)
Years of Schooling	0.0107*	0.0126***	0.0158***	0.0228***	0.0194***
	(0.00546)	(0.00365)	(0.00541)	(0.00614)	(0.00600)
Employed	0.339***	0.321***	0.250**	0.193	0.256**
	(0.110)	(0.0777)	(0.105)	(0.133)	(0.125)
Inactive	0.312***	0.316***	0.157	0.0466	0.0924
	(0.115)	(0.0801)	(0.110)	(0.140)	(0.130)
Family Characteristics					
Married	0.141	0.0250	0.0459	0.211**	0.210**
	(0.0903)	(0.0533)	(0.0826)	(0.0994)	(0.0935)
Widower	0.0887	0.0217	0.0364	0.00835	0.0610
	(0.135)	(0.0847)	(0.142)	(0.170)	(0.154)
Single	0.0917	-0.0498	-0.0316	-0.0115	0.178
	(0.112)	(0.0716)	(0.0978)	(0.132)	(0.118)
Head of the household	-0.0381	0.0352	0.0854	-0.0426	0.00457
	(0.0573)	(0.0368)	(0.0542)	(0.0661)	(0.0617)
Has Children	-0.0615	-0.0729**	-0.0887*	0.115**	-0.0445
	(0.0461)	(0.0323)	(0.0471)	(0.0554)	(0.0502)
Health Problems					
Has physical and/or mobility impairment	-0.187**	-0.0905*	-0.531***	0.0701	-0.0542
	(0.0851)	(0.0547)	(0.0797)	(0.0946)	(0.0954)
Has a psychiatric problem	-0.208	-0.0872	-0.453***	-0.243	-0.496**
	(0.185)	(0.120)	(0.151)	(0.223)	(0.217)
Has a chronic disease	-0.151***	-0.0545*	-0.401***	-0.0839	-0.0465
	(0.0483)	(0.0313)	(0.0502)	(0.0549)	(0.0515)
Has Cancer	-0.0406	-0.0618	-0.278	0.0469	0.134
	(0.113)	(0.0996)	(0.170)	(0.181)	(0.154)
Other Controls					
Indigenous	-0.102	-0.0681	-0.0934	-0.161*	0.000227
	(0.0708)	(0.0436)	(0.0659)	(0.0840)	(0.0742)
Religious	0.134***	0.0566**	0.0880**	0.135***	0.144***
	(0.0380)	(0.0255)	(0.0378)	(0.0449)	(0.0420)
Have savings to go by 3 months	0.198***	0.270***	0.243***	0.125**	0.180***
	(0.0423)	(0.0300)	(0.0440)	(0.0523)	(0.0473)
Regional Dummies	YES	YES	YES	YES	YES
Observations	1,924	1,924	1,924	1,924	1,924
R-squared	0.132	0.209	0.175	0.066	0.088

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

In order to explore the possibility that the errors contain important information about personality traits we compute the correlation matrix of the residuals of each estimation (see Table 10).

Table 10: Residuals correlation

	Feeding	Income	Health	Family	Freedom
Feeding	1.000				
Income	0.433	1,000			
Health	0.316	0.350	1,000		
Family	0.303	0.184	0.227	1,000	
Freedom	0.390	0.277	0.261	0.375	1,000

The correlations between the residuals range from 18.4% to 43.3%. This might suggest common non-observed characteristics that determine subjective well being.

Then, we proceed to perform a principal components analysis. Table 11 presents the results of this analysis. We see that the first component has a eigenvalue greater than one and it explains 45% of the variance. The second component has an eigenvalue smaller than one and explains 18% of the variance. The other three components explain less than one third of the variance and have eigenvalues smaller than one.

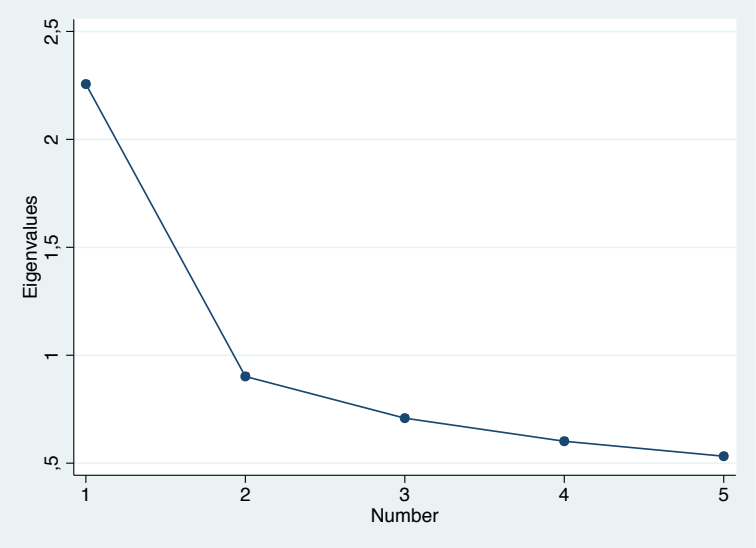
Table 11: Eigenvalues of principal component analysis

	Eigenvalue	Proportion	Cumulative
Component 1	2.256	0.451	0.451
Component 2	0.902	0.180	0.632
Component 3	0.708	0.142	0.773
Component 4	0.602	0.120	0.894
Component 5	0.532	0.106	1.000

In order to choose the components we use as proxy for personality traits we rely on the rules summarized Jackson (1993). We use two of these rules. Kaiser's rule establishes that all the components with an eigenvalue greater than one are useful. In this case, the criterion implies using only the first component.

We also apply the scree method. To do so, we plot the value of each successive eigenvalue against the rank order (see Figure 1). This criterion calls to choose all of the components that precede the breakpoint in the trend of the graph. It is easy to see that the second component is a breakpoint of the trend. Thus, this second criterion also points us to use the first component only.

Figure 1: Scree plot of eigenvalue after principal component analysis



Since both criteria lead to the same prescription, we choose the first component. Table 12 presents the correlation of the different residuals of each domain with the first component. The correlation between each residual and the component is positive. The magnitudes range from 40% to 50%. This component can be interpreted as genetic characteristics of the individual related with his disposition to be satisfied, i.e., optimism (Van Praag and Ferrer-i-Carbonell, 2003, 2008)

Table 12: Correlation between residuals of each domain and the 1st component

	Component 1
Feeding	0.500
Income	0.449
Health	0.419
Family	0.400
Freedom	0.461

With this in mind, be can try to predict the direction of the bias in our estimates. We know that the expected effect of our personality trait measure over subjective well being is positive. Therefore, the bias depends of the covariance between the variables of interest and the measure of personality traits.