

Please cite this article as: García-Quero, Fernando, and Guardiola Jorge (2018) Economic poverty and happiness in rural Ecuador: The importance of *Buen Vivir* (Living Well). *Applied Research in Quality of Life*. 13, 909–926. <https://doi.org/10.1007/s11482-017-9566-z>

Economic Poverty and Happiness in Rural Ecuador: the Importance of *Buen Vivir* (Living Well)

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Abstract This research paper addresses the endemic dimensions of having or not having a good life using a concept of poverty based on self-reported subjective well-being. We build a subjective well-being poverty (SWBP) line and compare it with two income poverty (IP) lines. The endemic dimension comes from rural Ecuador and the indigenous happiness idea of *Buen Vivir* (Living Well), which has been the focus of growing attention in the scientific and the political arena. Discrepancies between SWBP and IP are deeply explored building models that explain SWBP with IP, as well as control variables and *Buen Vivir* related variables. We show that income poor households are more likely to be poor in terms of their reported subjective well-being. However, households that grow their own food and are in an indigenous community are less likely to report to be subjective well-being poor. The results suggest that low SWBP values in contrast with high IP may be explained by idiosyncratic components of the *Buen Vivir* philosophy. The components of the *Buen Vivir* ethos related to SWBP give rise to the idea of building multidimensional concepts of poverty based on what ethnic people consider to be good or bad for their specific way of life. In a general context, our study raises the importance of considering poverty and its dimensions taking into account the endemic factors of specific groups of people and cultures. That is, to take into account what is important for their lives.

Keywords Happiness · Poverty · *Buen Vivir* · Latin America · Food sovereignty

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Introduction

Poverty has traditionally been measured by means of objective indicators that enable us to assess people's situation. There are numerous objective poverty measures and the most commonly used one is income-based poverty lines (income poverty or IP hereafter), used for instance by the World Bank, and serving as a way of monitoring the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs). IP is traditionally associated with ill-being, whereby the lower their income, the fewer opportunities people have to transform income in ways to satisfy their human needs in the market. A caveat regarding IP is that in some societies, there are other ways to satisfy human and material needs rather than the market (for instance, through the exchange of goods or subsistence agriculture). Therefore, having more dimensions rather than income seems a more accurate way to proxy people's chances of having a good life or a bad one.

In recent years, subjective approaches have been incorporated into the measuring of poverty, on the understanding that the interpretation of poverty goes beyond material deprivation and that the people themselves are responsible for assessing themselves as poor (Rojas 2014). Those measures rely on how people feel and see themselves, rather than other people evaluating how they should feel regarding the material conditions they enjoy. There are the poverty lines based on subjective well-being (SWB)¹ reports (e.g. Rojas 2008, 2014) that consider poverty as a failure of people to achieve a good life (Chambers 2006). Subjective well-being poverty (SWBP) lines are built by asking people how satisfied they are with life. If they report that they are not satisfied with the lives they are living, then they are considered to be poor in SWB terms.²

The subjective approach has coexisted with the objective one, and it has been interpreted in some research as an encompassing concept of other objective approaches based on income and on people's opportunities (Kingdon and Knight 2006; Rojas 2014). SWB approaches can be a complement of IP as well as a way to define objective dimensions of what is good or bad for a particular society. However, research on this issue is scarce and deserves more attention. The scarce empirical evidence has found some mismatches on the SWBP and the IP in classifying people as poor, and some studies on particular culturally deprived regions with high poverty levels have found higher than expected SWB (e.g. Graham 2010; Guardiola et al. 2012; Guillen-Royo and Velazco 2012). In this vein, Economist, Carol Graham, has even labelled the Paradox of Happy Peasants and Miserable Millionaires[^] in order to refer to these difficulties in explaining the results (Graham et al. 2010). Empirical evidence on those issues is difficult to assimilate: The traditional economic perspective, supported by

¹ Normally happiness and SWB have been used synonymously, and subsequently different kinds of happiness are distinguished, such as evaluation of life, emotional and hedonic experience. In this research paper, we use a satisfaction indicator, which is more attuned to the cognitive evaluation of people's lives (Kahneman et al. 1999). Despite these differences, for reasons of clarity, happiness, SWB and satisfaction with life are considered to be synonymous.

² There is also the subjective poverty approach, different to the SWBP. The subjective poverty approach is based in asking people if they see themselves as poor (e.g. Ravallion 2012; Ravallion et al. 2013) using a series of questions that enable people to position themselves on a ladder. Those questions are similar to this one: "Imagine a 6-step ladder where on the bottom, the first step, stand the poorest people, and the highest step, the sixth, stand the rich. On which step are you today?" The lower down they place themselves, the stronger their self-perception is of being poor, the higher up, the greater their self-perception is of being rich

empirical research on income and SWB, has shown that life satisfaction is positively related to income, but not fully defined by it, following the law of decreasing marginal utility. It might be that particular interpretations of economic and social relations, as well as perspectives of life and ideas of happiness can make people feel happy despite having a low income. This gives rise to a cultural interpretation of the mismatches of both IP and SWBP that could clarify the first part of the paradox.

Accordingly, this paper aims to analyse the discrepancies between IP and SWBP, and explore the possible cultural causes. We pay close attention to people's cultural and ideological traits by constructing in an original dataset from rural Ecuador comprising 977 households. The main hypothesis of the research is that both concepts empirically mismatch. We empirically assess as possible explanation of the mismatch the cultural traits of *Buen Vivir* (good living in Spanish), a way of life that belong to the indigenous tradition and is based in harmony with nature, with the others and with the self. Following the *Buen Vivir* ethos, we incorporate in our analysis variables related to the environment, self-production –which serves as a proxy of attachment to the land and food sovereignty- and relations with others, expecting that those variables would play an important role in the IP-SWBP mismatch. Self-production is related to the ability of people to grow their own food by themselves, not depending on others to produce it. In the empirical analysis we calculate the correlation between SWBP and IP and use probability models to explain the possible mismatch. From the empirical analysis, we find strong mismatches in IP and SWBP, with a high proportion in the former, and a lower proportion in the latter. We also find a greater important role played by *Buen Vivir* related variables than not being income poor in raising SWB beyond the defined SWBP threshold.

In this research we aim to provide a two-fold contribution: Firstly, to identify the endemic factors that correlate to SWBP beyond IP, then the probability of SWBP can be decomposed into the multiple dimensions that generally relate to this consideration. By doing so, we aim to inspire multidimensional poverty indicators for a particular culture built on the idea of people evaluating the extent to which they are living well.³ This exercise is based on the assumption that the dimensions of a multidimensional poverty line and the policy options should be inspired by what each society considers to be good or bad for the people comprising it. Secondly, to the authors' knowledge, there is no empirical evidence on the study of poverty in *Buen Vivir*.

The rest of this paper is structured as follows: Firstly ([Literature Review](#) section), we review the empirical evidence from SWB literature, focusing on the relation between SWBP and IP relation, as well as the different dimensions of SWB, paying special attention to what the literature says about the major dimensions of the *Buen Vivir* concept: the peaceful relation with others and the environment. Secondly ([The Empirical Approach](#) section), we present the region under study, the database, the hypothesis, the methodology and the results. Thirdly ([Conclusions and Discussion](#)

³ Recently, multidimensional poverty lines have received increasing attention in scientific circles and in the political arena. Examples are the At Risk of Poverty and/or Exclusion (AROPE) indicator used by the European Union, as well as the Human Poverty Index (HPI) and the Multidimensional Poverty Index (MPI), both elaborated by the United Nations Development Program (UNDP). These kinds of indicators typically comprise a value judgment of several dimensions of what people need to have a good life, comprising their achievement on different dimensions of their life.

section), we conclude and discuss the results within the cultural context of the Ecuadorian political debate and the *Buen Vivir* ethos.

Literature Review

Buen Vivir and Poverty

Buen Vivir is translated as *sumaq amaña* in *Aymara*, *sumak kawsay* in *Quichua*, *ñandareko* in *Guaraní*, *kümemongen* in *Mapuche*, and *living well* in English, and is founded on community relations, and enjoyment of the environment as a source of happiness or living well. The concept became a worldwide phenomenon, particularly in Latin American in the early 2000s, and was subsequently incorporated into the constitutions of Ecuador (2008) and Bolivia (2009). This particular concept of life differs from the economic vision of wellbeing and the interpretation of poverty as a lack of material goods and income, focusing more on the relational and environmental aspects (Acosta 2012; Ascarrunz 2011). Indigenous groups whose culture is built in *Buen Vivir* have their own systems of self-organization, reciprocity, solidarity and co-responsibility between individuals, community and nature that go beyond the markets.⁴ In Ecuador, *Buen Vivir* is at the centre of the political and social arena as a specific concept of what a good life is considered to be in the indigenous tradition, and is founded on community relations, being at peace with others, and enjoyment of the environment as a source of happiness or living well. There are several interpretations of *Buen Vivir* and it is difficult to establish a precise definition capable of reflecting the complexity of the concept that is understood in one way or another by different actors, such as the government, social practitioners and indigenous groups (see reviews of the concept by Dávalos 2008; Tortosa 2012; Gudynas 2011; Hidalgo-Capitán and Cubillo-Guevara 2013; Houtart 2011; Vanhulst and Beling 2014; and Waldmüller 2014). We address the indigenous perspective in this research paper, referring to the original *Buen Vivir* ethos that has developed from indigenous traditions.⁵

This particular idea of life differs from the economic vision of wellbeing and the interpretation of poverty as a lack of material goods and income, focusing more on the relational and environmental aspects (Acosta 2012; Ascarrunz 2011). The idea of *Buen Vivir* poverty is related to the inability to be integrated within a community, share with the others, and a lack of harmonious coexistence with nature (Torrez 2001; Albó 2010). Therefore someone can be considered poor if she/he lives excluded from the community, regardless of the amount of money she/he owns. The strong assumption in this

⁴ These systems are based on ethical, cultural, historical and environmental values that form institutional norms that enable people to lead a satisfactory life, as people from these communities understand it. Some examples are *Bminka*[^], *Branti-ranti*[^], *Bmakimañachina*[^], *Bmakipurarina*[^], *Buyanza*[^], *Bchukchina*[^], *Buniguilla*[^], among others. In the *Bminka*[^], everyone works collectively for the benefit of their whole community or for one of its members; the *Bpampamesa*[^] are places where all people share food sitting on the ground. For further information see De la Torre and Sandoval Peralta (2004) and Acosta (2012:187–192).

⁵ The concept became a worldwide phenomenon, particularly in Latin American in the early 2000s, and was subsequently incorporated into the constitutions of Ecuador (2008) and Bolivia (2009). It is well documented, most of it in Spanish, and has emerged as a post-development concept with a strong influence in the Iberoamerican region.

research is to consider the SWBP measure, which indicates if a person is satisfied with life or not, to be a proxy of the *Buen Vivir* poverty idea.

The Measurement of Happiness and its Relation with IP

The scientific study of happiness has received increasing attention since the start of twenty-first century. It has generally centred on the individuals' evaluation of the positive and negative affects experienced; as well as their satisfaction with life, which is a cognitive evaluation of an individual, taking into account the circumstances of their life (Kahneman et al. 1999; Diener et al. 1999). There are also qualitative approaches to assess individual happiness (Camfield et al. 2009), though in this paper we build on the quantitative and cognitive –satisfaction with life- approach. Normally evaluations of happiness are proxied by individuals by answering questions such as: BAll things considered, how satisfied are you with your life as a whole?^ or BOverall, would you say that you are: very happy, quite happy, not very happy, not happy at all^. The Likert-type response is interpreted quantitatively and is commonly used for two purposes: to determine the average happiness of a region, as an indicator of quality of life, and to assess how happiness relates to other observable variables using a statistical approach.

Generally, estimators of the influence of people's income on happiness at a given moment in time have shown that it is positive, but non-linear. When income increases, so does happiness, with lower variations the higher the income level (Diener et al. 2010; Graham et al. 2010). This evidence supports the economic theory that low income means low levels of happiness, and vice versa. Empirical evidence also shows that when people do not meet several material standards that allow them to achieve a good life, then their SWB is lower compared to people who can achieve those standards (Borghesi and Vercelli 2012). In the SWB-income relationship, relative income also plays an important role, meaning that generally it is not the absolute amount of money that influences life satisfaction, but rather the relative position of a person's income in comparison to a reference group (Layard 2005).

Although there is a great deal of research on the SWB-income relationship, there is scarce evidence on the relationship of IP with low levels of SWB. This is surprising as conceptually it makes sense to consider poverty as a well-being deprivation. In our view, the most complete conceptual and empirical assessment of SWB measures as a tool for approaching poverty can be found in Rojas (2015). He argues that those measures are appropriate as conceptually, they are based on the understanding that poverty is a situation where people experience a low well-being. Accordingly, the SWBP concept refers to a situation where people are not doing well or are not experiencing being well. Poverty therefore refers to something that happens to people and therefore cannot be detached from the person who is experiencing it.⁶ The idea of poverty on *Buen Vivir* is being detached from the community and the solidarity and reciprocity dynamics, and a person who is in this situation could be considered to have a low quality of life. Therefore, SWB measures could be a better indicator to proxy

⁶ The International Poverty Centre edited a brochure that aiming to define poverty, and some of the invited researchers referred to poverty as a lack of wellbeing (IPC 2006). Specifically, in this brochure Robert Chambers assesses development as going from a situation of ill-being to one of well-being.

poverty for people in our study than to have a low income, and could explain the possible mismatches.

In fact, the empirical evidence (Kingdon and Knight 2006; Rojas 2008, 2014) suggests that both methods –the income and the SWB- mismatch when approaching poverty. Although they do not directly build a SWBP, Kingdon and Knight (2006) compare SWB to different income categories on a sample comprising 8800 people in South Africa, finding certain mismatches. For instance, around 17% of people belonging to the poorest income category (the threshold value is not reported in the research) respond that they are very satisfied or satisfied. The research by Rojas (2008) observed that around 11% of people in a dataset of 1540 Mexicans were considered as income poor (with an IP line of \$2) while they reported no experience of SWBP (a satisfactory self-evaluation or better). In another sample for Mexico comprising 19,500 people, Rojas (2015) builds a SWBP measure based on life satisfaction (being poor if the respondent is 'Extremely unsatisfied', 'Very unsatisfied', 'Somewhat unsatisfied' or 'Neither satisfied nor unsatisfied') and compares these with two IP lines (\$1.25, as used by the World Bank, and \$2.93, as used by a Mexican government agency). The results of the cross tabulation indicate that around 77% of those classified as poor are nevertheless satisfied (not considered SWBP) for the first IP line and around 80% for the second IP line.

Not many research papers have constructed a SWB poverty line to explore this discrepancy, but there are several ones that have examined SWB in deprived areas, finding several groups in some societies reporting high values of SWB even though they are considered to be in a deprived situation. The explanations are mostly suggestive, which calls for more empirical research and hypothesis testing. This is the particular case of Tibetans (Webb 2009), deprived groups of people in Calcutta, India (Biswas-Diener and Diener 2001), several people in Peru (Graham and Pettinato 2002; Guillen-Royo and Velazco 2012), several people in Russia (Graham and Pettinato 2002), and Mexican Mayas (Guardiola et al. 2012).

An important interpretation of this discrepancy is that poor people have lowered expectations based on low reference norms, which makes people score their SWB higher than expected. Then, as a survival strategy, deprived people may evaluate their life positively despite their burdens (Sen 1987).⁷ Although this research focuses on the cultural and endemic factors as a possible explanation of this paradox, the downward expectations of life is one important caveat to take into account in SWBP research that, in our view, should be taken seriously.

Buen Vivir Determinants of Life Satisfaction

Life satisfaction is related to a number of different aspects of life, not only income and income relative to others as mentioned earlier, but also unemployment, gender, marital

⁷ There is research that has tested this using vignettes, namely, by asking an individual to evaluate the satisfaction of people involved in certain situations and see if the individual reports higher than expected values. Then it can be checked if they are overevaluating because of their deprived situation. For instance, Bertoni (2015) uses vignettes to show that elderly people that experienced hunger as children show higher than expected life satisfaction. He interprets that extreme deprivation leads people to develop lower aspirations as to their level of achievements in life so that they can consider their life to be satisfying. Vignettes are also used to calibrate subjective poverty lines (e.g. Ravallion et al. 2013).

status and age (reviews can be found in Frey and Stutzer 2002; Layard 2005; Dolan et al. 2008; and Ferrer-i-Carbonell 2013). Exceptions aside, generally speaking, results indicate that having better relations with others, not being unemployed, age, being a woman, being married, each have a *ceteris paribus* positive effect on SWB.

The influence of the natural environment and people's participation are dimensions of life that received little attention relative to other issues such as the influence of income on SWB. Because of its importance to the *Buen Vivir* ethos, they are key to this study. Regarding the natural environment, evidence suggests that people's contact with nature is related to a sense of *biophilia* (Wilson 1984), and *solastagia* (Albrecht et al. 2007) -the latter refers to the impact of environmental degradation on negative affect-. Those concepts go in line with the *Buen Vivir* indigenous concept. Empirical approaches regarding the relation of SWB and the environment referred to issues such as action and volunteering in organizations that conserve the environment (Suárez-Varela et al. 2014; Meier and Stutzer 2008), environmental concern (Ferrer-i-Carbonell and Gowdy 2007), and environmental degradation (Di Tella and MacCulloch 2008; Welsch 2002). Generally, those studies have supported the *biophilia* and *solastagia* interpretation of nature, although they are based on scenarios that are different from the one in our research paper (normally urban environments in the developing world): environmental degradation lowers SWB, volunteering in environmental activities and the experience with nature increases it, and concerns about nature either increases or decreases it, depending on the dimension taken into account.⁸ With respect to volunteering, the influence is greater when action is taken through intrinsic values and goals, rather than for extrinsic motivation, which is related to external goals and rewards (Meier and Stutzer 2008; Brown and Kasser 2005), and this has also been particularly identified in volunteering to conserve the natural environment (Brown and Kasser 2005).

Other *Buen Vivir* essential features are people's participation in the community and the community ties, which have been also empirically explored in SWB research, although once again in cultural contexts that are different to that of the *Buen Vivir* ethos. Generally speaking, Helliwell (2003) found that with a sample of households in different years in 49 countries, people involved in a community organization were more satisfied than those that were not. Said results are confirmed by Bruni and Stanca (2008) with a household dataset comprising around 80 countries for different times. Social capital features, such as trust, are found to be positively related to SWB (Helliwell 2006) in different countries and datasets, and healthy ties with other people are found to reduce mortality rates (see Helliwell 2001 for review). Time spent with

⁸ In a cross-section sample from Granada (Spain), Suárez-Varela et al. (2014) show that concern about the environment and voluntary work actions to preserve it are relevant for SWB (when both coincide, the greater the influence). Accordingly, Meier and Stutzer (2008) use panel data from Germany to prove that volunteering increases happiness, but they do not make a distinction between environmental and other kinds of volunteering, focusing their conclusions on the value of helping others. Using OECD country household data from different years, Di Tella and MacCulloch (2008) find that SWB is negatively affected by environmental degradation. Urban air pollution is also found to affect SWB with cross-national data from 54 countries and Welsch (2002) identifies a negative impact of urban air on SWB. Concern may also negatively influence SWB when it refers to negative environmental features such as concern about urban air pollution (Welsch 2002; Ferrer-i-Carbonell and Gowdy 2007), and noise levels (van Praag and Baarsma 2005; Rehdanz and Maddison 2008). Green lifestyles are related to SWB according to an analysis using a British panel data (Binder and Blankenberg 2017).

family, friends, colleagues and others are also found to be significantly and positively related to SWB (Bruni and Stanca 2008). Spending money on others rather than spending in oneself is also found to positively influence SWB (Aknin et al. 2013; Dunn et al. 2008).

Even though these results are from datasets mostly from occidental cultures different from *Buen Vivir*, they reflect the importance that people place on the environment and its preservation. Although it can be a framework of reference, it should be kept in mind that those realities are different in terms of culture and values than the reality taken into consideration in this paper. To the knowledge of the authors, there are only two SWB studies that empirically build on the *Buen Vivir* ethos. The study by Ramirez 2011 showed results for Ecuador that are in line with *Buen Vivir*: the most important life domains in relation to SWB are the social and family aspects. He finds a negative relationship between SWB and being indigenous using regression analysis, but a distinction between rural –in the community- and urban –detached from the community- dwellers is not considered in the analysis. The research paper by Guardiola and García-Quero (2014), also based on Ecuador, puts the SWB and *Buen Vivir* framework into the political discussion of extraction vs conservation of natural resources, finding that *Buen Vivir* features, such as participation and self-production, increase people's life satisfaction while concern for the environment decreases it.

The Empirical Approach

The Region of Study, the Data, the Method Strategy, the Variables and the Hypothesis

The field study in this research was carried out in the Nabón and Pucará districts, located in the Jubones River Basin in the Azuay Province, in the South of Ecuador. They are two of the poorest districts in Ecuador; the population living in poverty because of unsatisfied basic needs (UBN) is approximately 65% in both districts.⁹ Nabón has 15,892 inhabitants, 7.7% of whom live in urban areas with 92.3% living in rural areas (INEC 2010). Pucará has 10,052 inhabitants, 9.1% of whom live in urban areas with 90.9% living in rural areas (INEC 2010). The activities of both districts are mainly dedicated to agriculture, with employment in farming at 22.7% in Nabón and 20.1% in Pucará.

In this study, our empirical analysis is based on a representative sample for both districts conducted in the rural areas of both districts in November and December 2012. The data was collected by the Public Committee of the Jubones River Basin (*Consortio Público de la Cuenca del Río Jubones* or CCRJ) and by the Program for Population and Sustainable Local Development (*Programa de Población y Desarrollo Local Sustentable* or PYDLOS). The survey consisted of 977 household interviews in the

⁹ UBN is a multidimensional poverty measure developed by the Ecuadorian government (see ENEMDU 2013). These figures are similar to those from other rural areas in Ecuador. According to the latest figures (ENEMDU 2013), 38.7% of the population in the country were living in poverty by UBN. The differences between rural and urban areas are especially high. In rural areas, poverty reached 65.7%, while in urban areas it stood at 25.7%. Since 2008, these percentages have fallen. In rural areas, the figure fell by 11.7 percentage points, and in urban areas, by 5.8 percentage points.

rural areas in the two districts (445 in Pucará and 729 in Nabón). Before information was collected, a background overview was implemented in order to explore the key issues to be included in the questionnaire. Assemblies were held with the rural communities to help design the questionnaire. A pilot study of 100 households was also implemented.

We construct two different objective IP measures, based on the per capita household income.¹⁰ According to the World Bank criteria, a person is said to be in a situation of *extreme poverty* when his/her income is below \$1.25. In addition, we build an alternative income poverty line, whereby a *poor* person is one whose per capita household income is lower than \$2.5 (Edward 2006; Rojas 2011). The consideration of an income-based poverty line is strategic: By relating this measure and other variables with poverty in terms of SWB, we could have an idea of the drivers of dissatisfaction that go beyond income. In addition, this measure is in keeping with the aims of the Ecuadorian government, namely to create income-generating strategies in rural areas (SENPLADES 2009, 2013) that aim to stop income poverty.¹¹ The SWBP indicator is built using the following question: *How satisfied are you with your life?* The possible answers given were scored from 1 to 5: 1 being very dissatisfied, 5 very satisfied and 3 a mid-point. SWBP is defined as reporting a level of 3 or lower.¹²

In order to compare the SWBP and the IP variables, we do as follows: Firstly, we check on the descriptive statistics of both variables and calculate cross tabulation tables of SWBP with both measures of IP. Secondly, we estimate the following model:

$$P(SWBP = 1) = f(IP). \quad (1)$$

We assume that the probability of being SWB poor is related to being considered income poor or not. Therefore model (1) is estimated using the probit technique, considering errors robust to heteroscedasticity. The pseudo R squared and significance of the marginal probability would allow for accounting on the importance of the relation of both variables. We estimate different versions of model 1, by combining the different poverty lines.

We aim to compare model 1 results with those from model 2:

$$P(SWBP = 1) = f(IP, CV, BV), \quad (2)$$

where *CV* refers to the control variables and *BV* refers to the *Buen Vivir* variables. Comparing the results would enable us to verify the importance of the *Buen Vivir*

¹⁰ This is calculated by dividing the income of the household by the number of household members.

¹¹ In fact, there is an important political discussion in Ecuador about the exploitation of natural resources or not. Indigenous associations are opposed to it because of their interest in preserving the natural habitat, while the Ecuadorian government is against, arguing that it will generate jobs and increasing income (Acosta 2011; Guardiola and García-Quero 2014; Gudynas and Alayza 2012).

¹² Due to data representativeness we could only design a particular specification for the threshold value of SWBP, taking as a threshold instead of, for instance 2. This is because a high proportion of the sample is very satisfied or satisfied, and not many reported to be dissatisfied with life. If we consider 3 not to be SWBP, then people being SWBP would decrease from 103 to 19, which is a too low representation for estimation purposes. Given that most people are satisfied or very satisfied with life in the reality under study, we could also consider that being neither satisfied nor satisfied could be considered as not doing very well in terms of life achievement.

variables and quantitatively check if the empirical evidence is in line with the poverty idea of *Buen Vivir* reflected in the vast amount of literature in this field. In addition, they would enable to inspire ad hoc multidimensional poverty components. The greater the pseudo R squared of the estimations in model 2, the more suitable the components of a possible multidimensional poverty measure. Again, we estimate different versions of model 2 using probit. For sensitivity analysis purposes we estimate different versions of model 1 and 2 that are denoted by letters *a, b, c, d, e* and *f*.

The vector of control variables is composed of standard variables in happiness studies that serve as control variables, and their possible relationship with SWBP can determine general dimensions or traits related to what people consider to be good or bad for life. Those are *age, female, being married, being unemployed, and being unable to read and write*. With the exception of *age*, which is a quantitative variable, all variables equal 1 when the respondent has the characteristic the variable describes, and 0 if not. We expect a negative influence on SWBP probability of all variables with the exception of *unemployed* and *unable to read and write*.

The set of variables referring to *Buen Vivir* ethos firstly include a *community participation index* constructed using the question: *To what degree do you participate in different local institutions?* The interviewer read a list of seven possible options¹³ where people could interact and the different possible answers for each were: *very much, a little* and *no participation*. We allocated a score of 1 to *very much*, 0.5 to *a little* and 0 to *no participation* for each of the seven variables. We then summed the total of the seven answers for each individual and divided by seven. Secondly, we use two proxies for environmental involvement. People were asked about three different fields that concerned them in an open question.¹⁴ The *environmental concern* variable was equal to 1 if the individual mentioned environment or nature in one of the three replies, and 0 if not. The importance of household food production is proxied by *food sovereignty* in the household, obtained by dividing the market value of the food produced in the household by total household expenses. With this variable, we expected to obtain not only food sovereignty, but also attachment to and dependence on land as a livelihood. Thirdly, the variable *indigenous* equals 1 if the household is in an indigenous community, where everyone belongs to the Quechua and Cañari indigenous groups.¹⁵ The indigenous variable aims to capture the *Buen Vivir* ethnic effect and their own way to improve the local economy. The indigenous groups incorporate redistribution elements of wealth based on a philosophy underpinned by values of solidarity, reciprocity, equilibrium, collectivity, and sustainability. According to *Buen Vivir* literature, we expect a negative influence of all *Buen Vivir* variables on SWBP, with the exception of *environmental concern* that could be positive (that is, detrimental to satisfaction) according to empirical evidence (Ferrer-i-Carbonell and Gowdy 2007).

Normally, models estimated similar to (1) and (2) take the variable SWB with all their values, and do not transform it into a dichotomous variable as we did, even for studying poverty (see for instance Kingdon and Knight 2006). We believe it is better, in

¹³ The different spaces were defined by previous work in assemblies that was part of the design of the questionnaire. These are defined as parish and irrigation boards, district councils, farming organizations, drinking water boards, sports associations and the church.

¹⁴ Specifically, the individuals were asked: 'Can you name three areas that concern you?'

¹⁵ The four sectors under consideration (Shiña, Morasloma, Chunazana and Puca) are in the Nabón district and have a total of 5.444 inhabitants divided among 15 indigenous communities (35% of the Nabón population).

order to achieve our objectives, to transform it dichotomously, as this variable reflects the concept of a *good* or *bad* life. The original variable would reflect the concept of a *better* or *worse* life.

Results

Descriptive statistics appear in Table 1. One important fact is the low percentage of people dissatisfied with life, less than 9%. The second fact to highlight is that IP is quite high in our sample: almost half of the sample is below the IP\$2.50 line, and almost 10% is below the IP\$1.25. Other statistics that are worth highlighting are that unemployment is low (less than 3%), around 21% of the households live in indigenous communities and that 17% of the value of food people consume they produce themselves.

Table 2 includes a cross tabulation of the measures of SWBP with IP. Correlations are quite low, around 0.1. The percentage of people classified as IP\$1.25 poor but not classified as SWBP is around 81%, and this figure rises to almost 90% for IP\$2.50. In other words, around 80–90% of people are classified as being poor but nevertheless report that they are satisfied with life. These results are the highest found in the empirical literature, even greater than the 80% found by Rojas (2015) in Mexico for an IP line of \$2.93.

Table 3 presents the results of the estimations for the different specifications of model 1 and 2, and Table 4 the marginal effects related to *Buen Vivir* and IP variables that are found to be significant at least with a 10% level of significance. With respect to pseudo R squared, as indicators of goodness-of-fit, the most complete models (2b and 2e) are much greater than the estimations of model 1.

The results show that there is indeed a positive relation between the IP measures and SWBP. This relation is maintained when control variables and *Buen Vivir* related variables are added, with the exception of the IP\$2.50 models, in which case when *Buen Vivir* variables are added, the variable IP\$2.50 becomes non-significant. Model 2a and 2d drops *Buen Vivir* variables. Particularly, 2d permits to check that IP\$2.50 is rendered non-significant by the effect of controls. Overall, the highest marginal probability for explaining dissatisfaction with life in those models comes from the variable related to food sovereignty, which is an alternative livelihood closely related to *Buen*

Table 1 Descriptive statistics

Variable	Mean/%	Std. Dev.	Min	Max
<i>SWBP</i>	8.86%		0	1
<i>IP1.25</i>	8.93%		0	1
<i>IP2.50</i>	44.99%		0	1
Age	48.6636	18.8077	18	87
Female	66.95%		0	1
Married	59.59%		0	1
Unemployed	2.37%		0	1
Illiterate	14.37%		0	1
Indigenous	21.30%		0	1
Participation	0.3105	0.2290	0	1
Sovereignty	0.1685	0.1504	0	1
Concern	25.51%		0	1

The first column of values included the percentage for quantitative variables and the mean for qualitative

Table 2 Cross tabulation and Chi squared test

SWBP	IP2.50			IP1.25		
	0	1	Total	0	1	Total
0	593	465	1058	974	84	1058
with respect to total SWBP	56.05%	43.95%		92.06%	7.94%	
with respect to total IP	92.95%	88.91%		92.06%	81.55%	
1	45	58	103	84	19	103
with respect to total SWBP	43.69%	56.31%		81.55%	18.45%	
with respect to total IP	7.05%	11.09%		7.94%	18.45%	
Total	638	523	1161	1058	103	1161

Bwith respect to total SWBP[^] means that the percentage is calculated by the number above divided by the total of each category on SWBP. Bwith respect to total IP[^] means that the percentage is calculated by the number above divided by the total of each category on IP. For instance for the first column, 593/1058*100 equals the first percentage, 56.05%. The value above, 92.95% is calculated by this formula: 593/638*100

Vivir. When estimating an univariate model using *food sovereignty* as an independent variable (not included in the tables), the R squared value is around twice that of the ones from model 1a and 1b. Only 21% of the sample did not grow their own food. Accordingly, if we look at the marginal probabilities, a raise of 50% of food sovereignty in model 2b equates to around a 10% less chance of being SWBP, which compensates the marginal probability of earning \$1.25 or less.¹⁶ It is a strong assumption to assess both variables as substitutes, but nevertheless results indicate that the own land variable plays an important role in people reporting that they have a satisfactory or unsatisfactory life.

The rest of the *Buen Vivir* variables also play a role in being SWB poor, as they are all found to be significant with the expected sign, with the exception of participation, which remains non-significant. It is surprising the lack of significance of this variable. However, even though this variable is not related to the probability of being poor, it is related to life satisfaction, as estimated by Guardiola and García-Quero (2014). Living in a community does not affect the significance or magnitude of the marginal probabilities of other *Buen Vivir* variables, therefore it seems that it has a value in itself on the potential for avoiding SWBP that goes beyond the other covariates. That is, the value of living in a community has an independent influence than other *Buen Vivir* variables.

Conclusions and Discussion

In this paper we have related income poverty (IP) measures with a SWB poverty measure, showing that being income poor is different to being dissatisfied with life. Therefore an identification between income poverty and unhappiness cannot be made. Our analysis demonstrates that other variables are involved in explaining dissatisfaction, variables that we suggest are endemic to the context of analysis. The context of analysis is rural Ecuador, where the idea of *Buen Vivir*, based on a peaceful relation with nature and other people have

¹⁶ From Table 4 the marginal probability of *sovereignty* in model 2b is -0.23, and multiplied by 0.5 equals to -0.11 which is greater than the marginal probability of IP\$1.25, that equals 0.0742.

Table 3 Estimations of models 1 and 2

Variable	1a	2a	2b	2c	1b	2d	2e	2f
<i>IP1.25</i>	0.5064 *** (0.0016)	0.4809 *** (0.0030)	0.4514 *** (0.0081)	0.4490 *** (0.0073)				
Age		-0.0004 (0.8985)	0.0010 (0.7935)	0.0025 (0.4652)		0.0001 (0.9659)	0.0014 (0.7087)	0.0030 (0.3826)
Female		-0.0399 (0.7483)	-0.0136 (0.9157)	-0.0293 (0.8180)		-0.0138 (0.9117)	0.0158 (0.9028)	-0.0047 (0.9710)
Married		-0.2170 * (0.0601)	-0.1401 (0.2492)	-0.1752 (0.1408)		-0.2313 ** (0.0451)	-0.1499 (0.2176)	-0.1870 (0.1164)
Unemployed		0.5915 * (0.0771)	0.4585 (0.1917)	0.5007 (0.1490)		0.5751 * (0.0849)	0.4440 (0.2041)	0.4875 (0.1569)
No_readwrite		0.1259 (0.4652)	0.2763 (0.1541)	0.1802 (0.3181)		0.1259 (0.4553)	0.2800 (0.1447)	0.1804 (0.3111)
Indigenous			-0.9528 *** (0.0009)				-0.9475 *** (0.0008)	
Participation			-0.2572 (0.3873)	-0.3927 (0.1893)			-0.3025 (0.3033)	-0.4309 (0.1456)
Sovereignty			-1.8372 *** (0.0019)	-2.0874 *** (0.0004)			-1.8249 *** (0.0030)	-2.0877 *** (0.0007)
Concern			0.2633 * (0.0547)	0.2501 * (0.0609)			0.2714 ** (0.0467)	0.2589 ** (0.0514)
<i>IP2.50</i>					0.1941 ** (0.0843)	0.1764 (0.1239)	0.1675 (0.1575)	0.1745 (0.1334)
cons	-1.3936 (0.0000)	-1.2623 (0.0000)	-1.0616 (0.0000)	-1.1017 (0.0000)	-1.4251 (0.0000)	-1.3242 (0.0000)	-1.1102 (0.0000)	-1.1539 (0.0000)
R ²	0.0016	0.004	0.1064	0.08	0.0843	0.0614	0.0986	0.0722
chi ²	9.99	19.09	48.84	44.10	2.98	12.02	43.54	35.44

We show the coefficients of the variables and the p -values in brackets: *** stands for variables significant at 1%, ** significant at 5% and * at 10%. The chi² test for global significance is significant at 1% in every model estimated

come to prominence in the political and scientific arena. In fact, components of this concept are proven to influence the poverty measure based on SWB in a greater extent than the IP measures.

The ability of people to grow their own food, and the degree of importance of this on the household budget is found to play a more important role in explaining dissatisfaction than being income poor. This reflects the *Buen Vivir* ethos, although it might appear counterintuitive for those who are of the opinion that low income is related to low satisfaction. Relation does not mean full identification, as there are other drivers that bring with them satisfaction, permitting to cover the material (and nonmaterial)

Table 4 Marginal probabilities

	1a	2a	2b	2c	1b	2d	2e	2f
<i>IP1.25</i>	0.1058	0.0975	0.0742	0.0819				
Indigenous			-0.0796				-0.0807	
Sovereignty			-0.2315	-0.2975			-0.2336	-0.3012
Concern			0.0369	0.0392			0.0388	
<i>IP2.50</i>					0.0321			

Only marginal probabilities that are significant at 10% are displayed in the table

needs that are important for rural households in the sample. Living within an indigenous community is also related to not being poor in SWB terms. In fact, in the rural area under study, other lifestyles exist that could permit people to satisfy their human needs¹⁷ and lead a satisfactory life with mechanisms that go beyond the income earned from selling the household workforce. Therefore, they rely on their own system of self-organization based on reciprocity and solidarity with others and with nature in general, which may influence people to lead a satisfactory life despite IP.

The analysis carried out in this research paper allows us to understand the poverty of a certain collective beyond constructs. Taking into account people's self-reported satisfaction or dissatisfaction enables us to identify what drives them. Results enable us to better understand poverty in the geographical area under study, inspiring richer poverty constructions to drive social programs that put - or maintain - people in a satisfactory situation. Considering the area under study, the Ecuadorian Constitution of Montecristi states that the Ecuadorian State is plurinational and cross-cultural (2008 Art. 1), acknowledging as such a multitude of rights of the indigenous peoples. Recognizing the plurinational nature of the State implies supporting collectives and communities that possess an alternative space-time perspective and have other ways of satisfying their needs (Acosta 2012; De Souza Santos 2009). It is a question of encouraging other ways of looking at things, other life models and to put them on the same footing regarding equality and legitimacy (Bartra 2010). Politically, in the case of Ecuador, there is a conflict, as the government considers people to be poor when there is a lack of employment and income. In the words of Correa regarding the need to create development plans to create jobs, "we cannot live as beggars sitting on sacks of gold" (Correa 2012) referring to the natural resources that people enjoy without obtaining a profit. On the other hand, the idea of indigenous poverty is more related to the correlates identified here, which is related to the inability to live within a community and share with the others (Torrez 2001; Albó 2010).

A quick, preliminary assessment of the results could lead to a misinterpretation that might identify people as IP despite the fact that they nevertheless see themselves as satisfied idealizing poverty by claiming that (income) poor people are happy. But the issue is that IP constructs are not enough to understand people's lives, not that economic poverty should be tolerated. Any poverty definition involves an ethical judgement as to what constitutes a good or a bad life (Kingdon and Knight 2006). Therefore poverty lines could be improved if they are based on participatory approaches that assess what is important for people to have a good life (e.g. Max-Neef 1991; Hargreaves et al. 2007 Guillén-Royo et al. 2017). Therefore, in order to link poverty lines with good life it is necessary to take the perspective of each culture, with the cost of difficulties for comparison with other realities.

In summary, the approach that makes income a proxy for welfare, and lack of income a proxy for lack of welfare may ignore the many ways that exist to satisfy human needs, some of them culture-specific, as well as the many ways to bring about

¹⁷ The human needs theory, in fact, suggests that there are many ways to have a good life that go beyond the use of income. They consider that those ways, called satisfiers, are cultural specific. See for example Max-Neef (1991) and Guillen-Royo (2016).

satisfactory lives and communities. An interpretation of poverty that goes beyond income is required to be able to understand people's needs, desires, expectations, and preferences (see Edward 2006 for an ethical discussion). Therefore, it is too reductionist an approach to assume that good things in life – which for Ecuadorian people who follow *Buen Vivir* are based on ancient tradition and are part of the Constitution - are perfect substitutes for income. Instead, two clear policy messages come from the contextual interpretation of the results: Firstly, that the conservation of indigenous communities and rural livelihoods are important for people's SWB in Ecuador, beyond other development constructs, just as *Buen Vivir* claims, and therefore the conservation of natural capital and social ties and institutions is essential. Secondly, from a substantivist perspective, it is evident that scientifically we have more to learn than to write about indigenous *Buen Vivir*. Only with a correct understanding of the multiple dimensions of people's perspectives on what a good life means to them, can efficient policies be implemented.

Acknowledgements

The authors would like to thank the Institute of Population and Local Sustainable Development (PYDLOS by the Spanish acronym) at Universidad de Cuenca, Ecuador, for assistance and access to the database. Financial support from the Spanish Ministry of Economics and Competitiveness (Project ECO2012-32189) and the Government of Andalucía (Project P11-SEJ-7039 and Project P12-SEJ- 1436) is also acknowledged. The authors would also like to thank useful comments from Mariano Rojas, Mónica Guillén Royo, Martin Binder. The comments made by four anonymous referees and the editor of the Journal are also appreciated. Usual disclaimer applies. In addition, the first author would like to thank the Latin American Centre (LAC) at the University of Oxford for its support during the review process that took place during his research stay in the centre. A particular thanks to Dr. Diego Sánchez-Ancochea, director of LAC for his hospitality.

References

- Acosta, A. (2011). Extractivismo y neoextractivismo. Dos caras de la misma maldición. In M. Lang & D. Monkrani (Eds.), *Más allá del desarrollo* (pp. 83–118). Quito: AbyaYala.
- Acosta, A. (2012). *Buen Vivir/SumakKawsay. Una oportunidad para imaginar otros mundos*. Quito: AbyaYala.
- Aknin, L. B., Barrington-Leigh, C. P., Dunn, E. W., Helliwell, J. F., Burns, J., Biswas-Diener, R., et al. (2013). Prosocial spending and well-being: Cross-cultural evidence for a psychological universal. *Journal of Personality and Social Psychology*, 104(4), 635.
- Albó, X. (2010). Suma Qamaña, Convivir Bien, ¿Cómo medirlo?. *Diálogos*, 1, 54–64, file:///C:/Users/Asus%20PC/Downloads/Art%C3%ADculo%20Xavier%20Alb%C3%B3.pdf).
- Albrecht, G., Sartore, G. M., Connor, L., Higginbotham, N., Freeman, S., Kelly, B., Stain, H., Tonna, A., & Pollard, G. (2007). Solastalgia: The distress caused by environmental change. *Australasian Psychiatry*, 15(1), S95–S98.
- Ascarrunz, B. (2011). El Vivir Bien como sentido y orientación de políticas públicas. In: Farah y Vasapollo Farah H. I. and Vasapollo, L. (coord.) *Vivir bien: ¿Paradigma no capitalista?* Università di Roma Sapienza CIDES-UMSA: La Paz. Pp. 424–437.
- Bartra, A. (2010). *Campeñinos. Aproximaciones a los campesinos de un continente colonizado*. Bolivia: ipdrs / cides-umsa.

-
- Bertoni, M. (2015). Hungry today, unhappy tomorrow? Childhood hunger and subjective wellbeing later in life. *Journal of Health Economics*, 40, 40–53.
- Binder, M., & Blankenberg, A. K. (2017). Green lifestyles and subjective well-being: More about self-image than actual behavior? *Journal of Economic Behavior & Organization*, 137, 304–323.
- Biswas-Diener, R., & Diener, E. (2001). Making the best of a bad situation: Satisfaction in the slums of Calcuta. *Social Indicators Research*, 55, 329–352.
- Bolivian Constitution. (2009). <http://bit.ly/1nuhqhW>.
- Borghesi, S., & Vercelli, A. (2012). Happiness and Health: Two Paradoxes. *Journal of Economic Surveys*, 26(2), 203–233.
- Brown, K. W., & Kasser, T. (2005). Are psychological and ecological well-being compatible? The role of values, mindfulness, and lifestyle. *Social Indicators Research*, 74(2), 349–368.
- Bruni, L., & Stanca, L. (2008). Watching alone: Relational goods, television and happiness. *Journal of Economic Behavior & Organization*, 65(3), 506–528.
- Camfield, L., Crivello, G., & Woodhead, M. (2009). Wellbeing research in developing countries: Reviewing the role of qualitative methods. *Social Indicators Research*, 90(1), 5–31.
- Chambers, R. (2006). *What is Poverty? Concepts and Measures*. International Poverty Centre (IPC): UNDP.
- Correa, R. (2012). Ecuador's Path. *New Left Review*, 77, 89–104.
- Dávalos, P. (2008). Reflexiones sobre el SumakKawsay (el Buen Vivir) y las teorías del desarrollo. Bol. ICCI 113 (English version; <http://bit.ly/OB6LXh>).
- De la Torre, L. M., & Sandoval Peralta, C. (2004). *La reciprocidad en el mundo Andino*. Abya-Yala: Quito.
- De Souza Santos, B. (2009). *Una epistemología del Sur*. México: CLACSO Coediciones. Siglo XXI Editores.
- Di Tella, R., & MacCulloch, J. R. (2008). Gross National Happiness as an answer to the Easterlin Paradox? *Journal of Development Economics*, 86(1), 22–42.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125, 276–302.
- Diener, E., Ng, W., Harter, J., & Arora, R. (2010). Wealth and happiness across the world: Material prosperity predicts life evaluations, while psychosocial prosperity predicts positive feeling. *Journal of Personality and Social Psychology*, 99(1), 52–61.
- Dolan, P., Peasgood, T., & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of Economic Psychology*, 29(1), 94–122.
- Dunn, E. W., Aknin, L. B., & Norton, M. I. (2008). Spending money on others promotes happiness. *Science*, 319(5870), 1687–1688.
- Ecuadorian Constitution (2008). <http://bit.ly/1mgUnKw>.
- Edward, P. (2006). The Ethical Poverty Line: a moral quantification of absolute poverty. *Third World Quarterly*, 27(2), 377–393.
- ENEMDU (2013). Ecuadorian Employment, Underemployment and Unemployment Survey. <http://www.siise.gob.ec/siiseweb/>
- Ferrer-i-Carbonell, A. (2013). Happiness economics. *SERIEs*, 4(1), 35–60.
- Ferrer-i-Carbonell, A., & Gowdy, J. M. (2007). Environmental Degradation and Happiness. *Ecological Economics*, 60, 509–516.
- Frey, B. S., & Stutzer, A. (2002). What Can Economists Learn from Happiness Research? *Journal of Economic Literature*, 40, 402–435.
- Graham, C. (2010). *Happiness around the world*. Oxford: Oxford University Press.
- Graham, C., & Pettinato, S. (2002). Frustrated Achievers: Winners, Losers, and Subjective Well Being in New Market Economies. *Journal of Development Studies*, 38, 100–140.
- Graham, C., Chattopadhyay, S., & Picon, M. (2010). The Easterlin and other paradoxes: why both sides of the debate might be correct. In E. Dieder, J. Helliwell, & D. Kahneman (Eds.), *International differences in well-being*. Oxford: Oxford University Press.
- Guardiola, J., & García-Quero, F. (2014). Buen Vivir (living well) in Ecuador: Community and environmental satisfaction without household material prosperity? *Ecological Economics*, 107, 177–184.
- Guardiola, J., González-Gómez, F., García-Rubio, M. A., & Lendechey-Grajales, A. (2012). Higher income equal higher happiness in every society? The case of the Mayan People. *International Journal of Social Welfare*, 22(1), 35–44.
- Gudynas, E. (2011). Buen Vivir: today's tomorrow. *Development*, 54(4), 441–447.
- Gudynas, E., & Alayza, A. (2012). Postextractivismo: transiciones hacia las alternativas al desarrollo. In N. Velardi & M. Z. Polatsik (Eds.), *Anales Seminario Internacional Desarrollo territorial y extractivismo: Luchas y alternativas en la Región Andina*. Cuzco: Centro Bartolomé de Las Casas.

- Guillen-Royo, M. (2016). *Sustainability and Wellbeing: Human-scale development in practice*. London: Routledge.
- Guillen-Royo, M., & Velazco, J. (2012). Happy villages and Unhappy slums? Understanding Happiness determinants in Peru. In H. Selin & S. G. Davey (Eds.), *Happiness across cultures* (pp. 253–270). New York: Springer.
- Guillén-Royo, M., Guardiola J. & García-Quero, F. (2017) Sustainable development in times of economic crisis: A needs-based illustration from Granada (Spain). *Journal of Cleaner Production*, 150, 267–276. <http://dx.doi.org/10.1016/j.jclepro.2017.03.008>.
- Hargreaves, J. R., Morison, L. A., Gear, J. S., Makhubele, M. B., Porter, J. D., Busza, J., & Pronyk, P. M. (2007). BHeard the voices of the poor?: assigning poverty lines on the basis of local perceptions of poverty. A quantitative analysis of qualitative data from participatory wealth ranking in rural South Africa. *World Development*, 35(2), 212–229.
- Helliwell, J. (2001). Social capital, the economy and well-being. In K. Banting, A. Sharpe, F. St-Hilaire, E. D. A. Sharpe, & D. K. Banting (Eds.), *The review of economic performance and social progress 2001: The Longest Decade: Canada in the 1990s* (pp. 43–60). Montreal: The Institute for Research and Public Policy. <http://www.csls.ca/rep/1/03-helliwell.pdf>.
- Helliwell, J. F. (2003). How's life? Combining individual and national variables to explain subjective well-being. *Economic Modelling*, 20, 331–360.
- Helliwell, J. F. (2006). Well-Being, Social Capital and Public Policy: What's New? *The Economic Journal*, 116(510), 34–45.
- Hidalgo-Capitán, A. L., & Cubillo-Guevara, A. P. (2013). Seis debates abiertos sobre el sumak kawsay. *ÍCONOS*, 48, 25–40.
- Houtart, F. (2011). El concepto de Sumak kawsay (buen vivir) y su correspondencia con el bien común de la humanidad. *Rev. Filos.*, 69, 7–33.
- INEC (2010). Spanish acronym for Ecuadorian National Statistics Institute. VII Censo de Población y VI de Vivienda 2010, (<http://bit.ly/U3Fhfm>).
- International Poverty Centre. (2006). *What is Poverty?: Concepts and Measures*. Brazilia: International Poverty Centre.
- Kahneman, D., Diener, E., & Schwarz, N. (Eds.). (1999). *Well-Being: The Foundations of Hedonic Psychology*. New York: Russell Sage Foundation.
- Kingdon, G. G., & Knight, J. (2006). Subjective well-being poverty vs. income poverty and capabilities poverty? *The Journal of Development Studies*, 42(7), 1199–1224.
- Layard, R. (2005). *Happiness: Lessons from a New Science*. New York and London: Penguin.
- Max-Neef, M. (1991). *Human-scale development - conception, application and further reflection*. New York: The Apex Press.
- Meier, S., & Stutzer, A. (2008). Is Volunteering Rewarding in Itself? *Economica*, 75, 39–59.
- Ramirez Gallego R. (2011). La felicidad como medida del buen vivir en Ecuador. SENPLADES.
- Ravallion, M. (2012). Poor, or just feeling poor? On Using Subjective Data on Measuring Poverty. *World Bank Policy Research Working Paper*, 5963.
- Ravallion, M., Himelein, K., & Beegle, K. (2013). Can subjective questions on economic welfare be trusted? evidence for three developing countries. *World Bank Policy Research Working Paper*, 6726.
- Rehdanz, K., & Maddison, D. J. (2008). Local Environmental Quality and Life Satisfaction in Germany. *Ecological Economics*, 64(4), 787–797.
- Rojas, M. (2008). Experienced poverty and income poverty in Mexico: A subjective well-being approach. *World Development*, 36(6), 1078–1093.
- Rojas, M. (2011). Poverty and Psychological Distress in Latin America. *Journal of Economic Psychology*, 32, 206–217.
- Rojas, M. (2014). El Estudio Científico de la Felicidad. México City: Fondo de Cultura Económica.
- Rojas, M. (2015). Poverty and Well-being Deprivation. In W. Glatzer, V. Moller, L. Camfield, & M. Rojas (Eds.), *Global Handbook of Well-being and Quality of Life*. New York: Springer.
- Sen, A. (1987). *On Ethics and Economics*. Oxford: Blackwell.
- SENPLADES (2009). Plan Nacional para el Buen Vivir del Ecuador 2009–2013. SENPLADES, Quito, (<http://bit.ly/1jsXOWF>).
- SENPLADES (2013). PLAN Nacional para el Buen Vivir del Ecuador 2013–2017. SENPLADES, Quito, (<http://bit.ly/1pauwkz>).
- Suárez-Varela, M., Guardiola, J., & González-Gómez, F. (2014). Do pro-environmental behaviors and awareness contribute to improve subjective wellbeing? *Applied Research in Quality of Life*, 11(2), 429–444.
- Torrez, M. (2001). Estructura y proceso de desarrollo del Qamaña. *Espacio de bienestar. Pacha*, 6, 45–67.

-
- Tortosa, J.M. (2012). SumakKawsay, Buen Vivir, ¿alternativa al desarrollo? <http://bit.ly/PzsUGK>.
- Van Praag, B., & Baarsma, B. E. (2005). Using happiness surveys to value intangibles: The case of airport noise. *The Economic Journal*, 115(500), 224–246.
- Vanhulst, J., & Beling, A. E. (2014). Buen vivir: Emergent discourse within or beyond sustainable development? *Ecological Economics*, 101, 54–63.
- Waldmüller, J. M. (2014). BuenVivir, SumakKawsay, 'Good Living': An Introduction and Overview. *Alternautas*, 1, 17–28.
- Webb, D. (2009). Subjective Wellbeing on the Tibetan Plateau: An Exploratory Investigation. *Journal of Happiness Studies*, 10(6), 753–768.
- Welsch, H. (2002). Preferences Over Prosperity and Pollution: Environment Valuation Based on Happiness Surveys. *Kyklos*, 55(4), 473–494.
- Wilson, E. O. (1984). *Biophilia*. Cambridge: Harvard University Press.