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An empirical assessment of the indigenous *Sumak Kawsay* (living well): the importance of nature and relationships

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Abstract

The Andean indigenous way of life *Sumak Kawsay* (living well in Kichwa) is related to reciprocity, solidarity, collective participation, social justice, and harmony with nature and with the community. This paper uses a representative national sample in Ecuador to assess how certain features of *Sumak Kawsay* relate to subjective well-being. In this vein, we propose several variables associated with this particular way of life: collective participation activities (*mingas*), enjoying a portion of land (*chakra*), living in a rural area and indigenous identity. The results indicate that most *Sumak Kawsay* features are positively related to life and environmental satisfaction. An important exception is indigenous identity, which is negatively related to life satisfaction and not significant for environmental satisfaction. We suggest that *Sumak Kawsay* is important for subjective well-being in Ecuador, but indigenous people's subjective well-being would benefit if their needs are better taken into account in the political arena.

Keywords: Life satisfaction, environmental satisfaction, *Sumak Kawsay*, indigenous, rural area, collective participation.

1. Introduction

The indigenous philosophy and way of life *Sumak Kawsay* (living well in Kichwa) is related to several principles of life such as reciprocity, solidarity, respect, complementarity, dignity, collective participation and social justice, set within an overall sense of harmony with mother nature and with the community (CELADE, 2014). Although there are similar philosophies in the Andes, *Sumak Kawsay* is mainly found in Ecuador. Due to the importance of this philosophy for indigenous people, it played an important role not only in the Constitution of Ecuador, but also in the country's development plans from 2008 onwards.

The environment and relationships are key in *Sumak Kawsay*, a philosophy that offers a holistic vision of life in which everything is interconnected (Maldonado, 2010b; Medina, 2001a). Therefore, it offers a particular idea of what happiness is. In this paper we explore this idea by addressing the importance of *Sumak Kawsay* in people's subjective well-being (SWB) using a representative sample of Ecuador for 2017 comprising 7,478 households. To do so, we estimate a standard happiness model, including satisfaction with life and satisfaction with the environment as measures of SWB.

In order to proxy the complexity of *Sumak Kawsay*, we propose several variables that are related to this way of life. Even if it is impossible to capture this complexity via a set of variables, the empirical exercise we present offers some clues on how certain important features of *Sumak Kawsay* relate to people's SWB. In order to proxy *Sumak Kawsay*, we include the following variables: living in a rural area, participation in *mingas* (collective work in which the entire community participate, contributing to tasks such as cleaning neighborhood roads, building a house or planting potatoes),

participation in community activities other than *mingas*, having a *chakra* (an orchard that constitutes an ecological, symbolic and social space in which the economy is developed as well as the spirit, and which provides food such as yucca, corn, and vegetables), and the self-perception of oneself as being indigenous¹.

This study has a political dimension. Even though *Sumak Kawsay* enjoyed great importance in political terms at the beginning of the century, recent development plans have turned against the very essence of it (Acosta, 2011; Gudynas, 2016). Resource extraction plans in Ecuador have left indigenous people disappointed in the State, and an internal debate has opened up in the country. On February 4th 2018, a Referendum and a Popular Consultation was held in Ecuador to gauge opinion in favor of and against fundamental aspects of *Sumak Kawsay*, such as the rights of nature defined in terms of restrictions on metal mining and the reduction of the area of oil exploitation in the Yasuní National Park.²

Considering its importance, relatively few efforts have been made to study indigenous people's SWB in Ecuador. Exceptions are García-Quero & Guardiola (2017), Guardiola & García-Quero (2014) and Ramírez (2011). The novelty of our research with respect to these studies is the use of a recent national representative sample (June 2017), along with the incorporation of additional variables related to SWB and the environment domain as an additional dependent variable.³

The results are in line with previous research, as they indicate that most of the *Sumak Kawsay* variables are positively related to the two measures of SWB. However, considering oneself indigenous is related to lower levels of life satisfaction. We argue that this might be because the Ecuadorian development process over the last decade has rejected the concept of *Sumak Kawsay*, and does not benefit indigenous people's lives.

The remainder of this chapter is structured as follows: in Section 2, we present the theoretical framework, explaining in further detail the significance of *Sumak Kawsay* as well as the relationship between *Sumak Kawsay* and SWB. In Section 3, we outline the data, the variables, the method and the hypotheses. In Section 4, we report the results, and finally in Section 5 we conclude, discussing the results and proposing a new political direction following the results.

2. Literature review

2.1. Definition of Sumak Kawsay

Sumak Kawsay is an indigenous term, linked to the worldview of the Andes-Amazonian region, and is related to the following principles of life: reciprocity, solidarity, respect, complementarity, dignity, collective participation and social justice, all within a sense of harmony with mother nature and with the community (CELADE, 2014). This Kichwa term is translated into English as living well and into Spanish as buen vivir. Similar concepts in the region are known as Suma Qamaña (good living in Aymara), Nandereco (harmonious life, in Guaraní), Qhapaj Nan (road or noble life, in Quechua) (Huanacuni-Mamani, 2010a). For some indigenous people, the correct term to define living well is Alli Kawsay, which means full life (Macas, 2010b; Maldonado, 2010b; Pacari, 2014).

In this paper, we work with the indigenous concept of *Sumak Kawsay*, which is a two-word phrase: *Kawsay*, means life, and *Sumak*, means good, full, precious, beautiful, or abundant (Ministerio de Educación Ecuador, 2009). *Sumak Kawsay* thus indicates a state of fullness of the whole vital community involved in the interaction between human and natural existence (Macas, 2010a). Similar to this concept, for the Aymara, *Suma Qamaña* is defined as to live in fullness, while *Suma Qamasiña* is [co]living well, not better than others and not at the expense of others (Albó, 2011; Macas, 2010b; Medina, 2001b).

The processes of reform and constituent assembly led to the promulgation of the new Constitutions of Ecuador in 2008 and Bolivia in 2009, both of which clearly reflect the concept of *Sumak Kawsay*. The preamble of the Political Constitution of Ecuador (PCE) points out that the decision has been taken to build "a new form of citizen coexistence, in diversity and harmony with nature, to achieve *Sumak Kawsay*" (Asamblea Nacional Ecuador, 2008). The PCE emphasizes that economic development focuses on *Sumak Kawsay*. Article 275 of the PCE states that "the development structure is the organized, sustainable and dynamic set of economic, political, socio-cultural and environmental systems that guarantee the achievement of good living, of *Sumak Kawsay*" (Asamblea Nacional Ecuador, 2008).

2.2. Important aspects of Sumak Kawsay concerning nature, relationships and the economic system

In *Sumak Kawsay*, nature and good relations with people and nature play an important role. For the indigenous peoples of the Abya Yala (as they call Latin America), the conception of the environment includes all the beings that inhabit it: "our mother earth is a living being, we not only know that there is life on earth, we know with certainty that the earth is a living being bodily and spiritually" (Torres, 2011). According to Kowii (2009), nature is a living being that has a spirit and is sacred; within this dimension, development actions were restricted under the mandate to take from nature only what is needed and not to abuse it. For the people in the Amazon jungle, "nature not only provides a home for all of its inhabitants, it also emotionally, psychologically, physically, and spiritually revitalizes them. In this way it regenerates the indigenous peoples who live in community with these sylvan selves. That is, the living forest nourishes and augments life" (Sarayaku, 2015).

The connection that indigenous people have with their land is fundamental to understanding what nature means to them. In agrarian communities, *kamari* (offerings) are made, that is, indigenous people request mother earth's intervention, using the lunar cycle to assure a good harvest (Kowii, 2009). Offerings to the earth are standard in indigenous cultures, in order to show gratitude in their relationship with the *allpa-mama* or mother earth. This is a reciprocal relationship that involves sharing the commitment to continue generating life (Huanacuni-Mamani, 2010b). In the indigenous worldview, a relationship of mutual respect is established: the land is part of the human being and vice versa. Therefore, "when a *wawa* (baby) is born, the umbilical cord and the placenta are planted under the ground next to a tree, which will then flower, bear fruit and provide shelter or shade. Likewise, when death occurs, which is another way of living, we return to the earth again, to our *allpa-mama* and we are once again part of it" (Pacari, 2013).

The space where relations with nature take place is called the *chakra*: it is a space where the communities of the Andes constitute a micro-territory, an ecological, symbolic and social space in which life is developed materially and spiritually. It provides food such as yucca, corn, potatoes, vegetables and fruits, as well as aromatic, medicinal, ornamental and artisanal plants. Each family unit usually has one of these little orchards (at least in rural or wild environments), and so *chakras* thus play an important role as a pillar of the indigenous economy and community participation (Lehmann & Rodríguez, 2013; Medina, 2001b). The *chakra* forms the central dimension of the family and community relations and the economy, constituting the basis of food security and family welfare. They therefore help create self-sufficiency, enjoyment and autonomy, which are historically fundamental values in indigenous societies (Viteri, 2003).

For indigenous peoples, relations with the community are fundamental to their worldview. In Aymara, the $ayll\acute{u}$ —a term which means "community"—is a system of life organization. It differs from the western idea of community, which is understood as "unity and social structure"; specifically, the components of community are exclusively human in the western idea. For the worldview of indigenous peoples, community is understood as the unity and structure of life, and the "human being is only a part of this unit; animals, insects, plants, mountains, air, water, sun, even what is not seen, our ancestors and other beings, are part of the community. Everything lives and everything is important for the balance and harmony of life; the disappearance or deterioration of species is the deterioration of life" (Huanacuni-Mamani, 2010a).

The community understood as people's relationships with their peers, their environment and everything that surrounds it, is fundamental to the understanding of *Sumak Kawsay*. The way communities organize in order to work together is known as the *minga:* this term comes from the Kichwa word *minka* and means community work. The *mingas* are agreed by the members of a community, who identify the existing needs, and then plan and prioritize the activities to be carried out; for example: cleaning neighborhood roads, constructing the communal house or dwellings, carrying out maintenance of the territorial limits, planting yucca, and so on. Members actively and consciously participate in the *minga* to improve life in the community (Universidad de Cuenca & UNICEF, 2012). The *minga* endures in many communities as a form of ritual and ceremonial assembly that encourages cohesion between people. Their collective participation allows them to maintain the interests of the community while engaging in a full expression of solidarity and internal redistribution, with goods and services produced and consumed within the community (De la Torre & Sandoval, 2004).

The economy of the *Sumak Kawsay* promotes a diverse, healthy, sufficient production, with no surpluses or shortages, intended for sharing, trading and self-consumption. With respect to trading, it involves a fair price that does not harm or affect the producer or those who acquire the product (Chuji, 2010). Carlos Viteri has called this economy self-sufficient, communitarian, supportive, equitable and sustainable, based on the principles of self-sufficiency and solidarity, that is, to obtain from nature what is needed for subsistence and to share surplus production with the community. The basis of self-sufficiency, or food sovereignty, in the most current expression, is the family unit (Viteri, 2003).

2.3. Different visions of Sumak Kawsay

Sumak Kawsay is an indigenous concept. However, it should be borne in mind that other agents have perceived this idea in different ways. Sumak Kawsay debates are complex and undergo constant review. Some papers have managed to classify or categorize this concept from different perspectives, as well as analyzing the term. Two lines of work can be identified that support the present study: the indigenous approach and the 21st century socialist approach.

From the indigenous perspective, *Sumak Kawsay* involves an element of resistance against development projects that entail the destruction of nature, and has influenced the processes of drafting the constitution and the development plans of both Ecuador and of Bolivia. The following elements are fundamental to an understanding of this line of thought: defense of the rights of nature and feeling part of nature (Chancoso, 2010; Chuji, 2010; Pacari, 2013; Quirola, 2009), the *runa* or self-sufficient economy in tune with nature (Taxo, 1999; Viteri, 2003), holistic thinking (Maldonado, 2010b; Medina, 2001a; Oviedo, 2014a), and alternatives to the development of and resistance to neoliberalism (Macas, 2010a; Simbaña, 2011; Viteri, 2002).

Twenty-first century socialism is mainly identified with the governments of Rafael Correa in Ecuador (from 2007 to 2017) and Evo Morales in Bolivia (from 2006 to present). This line of thought is also defined as the socialism of the citizen revolution or the 'bio-socialism' of the 21st century (Dieterich, 2008; Garcia-Linera, 2010; Ramírez, 2012). *Sumak Kawsay* from a political perspective, in search of social equity, is included in programs such as the Citizen Revolution (SENPLADES, 2009, 2013). A model for a popular, solidarity economy has been defined, and agencies have been created for its implementation and execution (Asamblea Nacional Ecuador, 2008; Coraggio, 2007; Patiño, 2010).

These categories allow us to analyze the current processes of the *Sumak Kawsay* from two opposing positions, as the recent Ecuadorian Referendum and Popular Consultation has shown. On the one hand, there is the indigenous standpoint, which seeks to defend nature, understood as a living being with constitutional rights, in a relationship of reciprocity between human beings and nature with a long-term vision that allows food sovereignty and self-sufficiency within the community. On the other hand, there is the vision of 21st century socialism, which has characterized the public policies executed by the governments of Ecuador and Bolivia, using the *Sumak Kawsay* to justify resource extraction in all its forms with the aim of eliminating poverty and social exclusion (Correa, 2012, 2013).

2.4. Happiness and Sumak Kawsay

Happiness studies have traditionally focused on different aspects of life. Results indicate that having better relations with others (family and friends), not being unemployed, being a woman and being married all have a positive effect on SWB (Frey & Stutzer, 2002; Layard, 2011). Meanwhile, poor health, separation and lack of social contact are all strongly negatively associated with SWB (Dolan, Peasgood, & White, 2008).

To the authors' knowledge, there are three SWB studies that empirically build on the *Sumak Kawsay* ethos. The first comes from Ramírez (2011), who concludes, using data from 2006 and 2007, that social and family aspects are the most important life domains

in relation to SWB. A negative relationship between SWB and being indigenous was found in his study, using regression analysis; however, the study did not distinguish between rural but in the community and urban but separated from the community. Secondly, the research paper by Guardiola & García-Quero (2014), based on rural areas in Ecuador, uses SWB and *Sumak Kawsay* to frame the political discussion on the conflict between resource extraction and conservation of natural resources. Their research finds that variables associated with *Sumak Kawsay* philosophy, such as participation in the community and self-production, increase people's life satisfaction, while concern for environmental issues decreases it. Thirdly, and in a similar vein, García-Quero & Guardiola (2017) conclude that the approach based on using income as a proxy for well-being, and lack of income as a proxy for lack of well-being, may fail to account for the many ways that exist to satisfy human needs in rural Ecuador.

Even though little SWB research has focused on Sumak Kawsay, some studies have nonetheless centered on other cultures that involve key aspects of Sumak Kawsay. Regarding the natural environment, evidence suggests that people's contact with nature is related to a sense of biophilia: as Wilson (1984) concluded, "to the degree that we come to understand other organisms, we will place a greater value on them, and on ourselves". In this vein, Albrecht et al. (2007) use the term solastagia for understanding the psychological impact of the increasing incidence of environmental change worldwide and the detrimental impact of environmental degradation. Empirical studies considering the relationship between SWB and nature have referred to issues such as: action and volunteering in organizations that foster environmental awareness and sustain behaviors (Suárez-Varela, Guardiola, & González-Gómez, 2016), environmental concern and attitudes (Ferrer-i-Carbonell & Gowdy, 2007), and environmental degradation (Tella, MacCulloch, & Oswald, 2003). Generally, however, these studies are related to cities and urban scenarios in developed countries, and therefore differ from our research, which is based on indigenous communities in rural populations in a developing country.

Research on the environment and conservation attitudes have found that direct and continuous contact with nature generates a very positive effect on the well-being of the individual, and that green behavior and sustainable consumption are positively related to life satisfaction (Binder & Blankenberg, 2017; MacKerron & Mourato, 2013), in line with the concept of *biophilia*. Respectful and responsible attitudes and actions towards nature, such as water saving, recycling, participating in voluntary organizations, or buying organic products, also have a positive relationship with happiness (Binder & Blankenberg, 2016; Suárez-Varela et al., 2016).

Relations with the community is another important dimension of *Sumak Kawsay*. This is something which has also been analyzed empirically with respect to SWB, albeit generally in very different contexts to the indigenous worldview of *Sumak Kawsay*. Several studies have focused on the participation of people in the community. Helliwell (2002) conducted a study in 49 countries, finding that people who belong to or have some involvement with a community organization are more satisfied than those who do not (Helliwell, 2002). Bruni & Stanca (2008) obtain similar results with a longer dataset of 80 countries at different times, including correlations between relational goods and individual well-being: time spent with parents and friends, volunteering, charity, church and art-related activities impact positively on life satisfaction. The studies of Helliwell (2001, 2006) found that healthy relations with other people are found to reduce

mortality and that social capital characteristics, such as trust, are found to be positively related to SWB. In addition, spending money on others rather than spending on oneself is also found to positively influence SWB (Aknin et al., 2013; Dunn, Aknin, & Norton, 2008). In Latin America, the study of Mariano Rojas, with a sample of 1,560 questionnaires in Central Mexico, found that that achievement in several life domains such as leisure time and family ties may explain some people's high life satisfaction in spite of living in poverty (Rojas, 2008).

3. Data, variables, method and hypotheses

In this study we utilize a nationally representative sample in Ecuador: the National Survey on Employment, Unemployment and Underemployment (ENEMDU by its initials in Spanish), produced by the *Instituto Nacional de Estadísticas y Censos* (INEC). This is a representative survey at the national level that has been used by the government and researchers to monitor public policies. We use the dataset⁵ from June 2017. Excluding observations with missing variables, we have a sample size of 7,478 households.

There is an ample set of variables in the dataset, and we have chosen those that are most useful for our study. For our dependent variable, we take life satisfaction as indicated by the response to the question: "How do you feel about your overall satisfaction with your life, that is, taking into account all aspects of your life?" As an alternative dependent variable, the life domain is taken from the response "How do you feel about the environment?". The possible responses to both of these questions range from 0 (very unhappy) to 10 (very happy). We refer to these variables as *satvida* and *satenvironment* respectively.

For the *Sumak Kawsay* variables, we include a dummy that indicates if the household lives in a *rural* or urban area. This variable is interpreted as a *Sumak Kawsay* variable, as *Sumak Kawsay* communities are found in rural areas, as explained in the previous section. The variable *indigenous* indicates whether the respondent considers himself/herself to be indigenous rather than other options such as white, black, mestizo, mulatto or montubio. Participation in *Sumak Kawsay* is captured by two different variables. The first one is called *mingas*, which is a variable that indicates the number of hours per week the respondent participates in *mingas*. The other variable, community *participation*, indicates the number of hours per week committed to meetings in the community. Finally, the binary variable *chakra* equals 1 if the respondent's household has a *chakra*.

As for the socioeconomic variables, the EDEMDU includes a large section detailing income from every person in the household and from all sources. We consider the household *income* per capita, that is, we divide the household income by the number of members in the household, and then take logs. We consider marital status, and include *married* and *free union* as dummies in our model to indicate people living with a partner as compared to those living without. The *gender* and *age* of the respondent is also taken into account. As a proxy for the educational capabilities of the respondent, we choose a dummy variable that indicates whether or not the respondent can *read and write*.

Given the fact that our two dependent variables, life and environmental satisfaction, range from 0 to 10, we estimate using ordinary least squares with robust standard

errors.⁶ We build alternative models to account for the influence of *Sumak Kawsay* on SWB.

4. Results and preliminary discussion

The descriptive statistics of the sample are included in Table 1. Satisfaction with life is higher than satisfaction with the environment. Almost 50% of the sample live in rural areas and 15% are indigenous.

Table 1: Descriptive statistics (N=7478)

Variable	Mean	Std. Dev.	Min	Max
satlife	7.333	1.745	0	10
satenvironment	6.923	1.889	0	10
income (per cap				
in logs)	4.825	0.868	0	8.933
married	42.9%		0	1
free union	21.5%		0	1
female	29.0%		0	1
age (years)	55.0	16.5	12	96
rural	49.9%		0	1
no read and write	14.4%		0	1
indigenous	15.2%		0	1
mingas (hours				
per week)	0.311	1.362	0	16
participation				
(hours per week)	0.133	0.763	0	12
chakra	35.9%		0	1

In Tables 2 and 3, we present several models with life satisfaction and environmental satisfaction, respectively, as the dependent variable. The goodness of fit of every model indicates that they are adequate for inference, as the F test is significant at 1% in every case. That is, in all cases the null hypothesis of zero slope can be rejected at the 1% level of significance using an F-test. In every table, we estimate a model with the socioeconomic factors, and then add the *Sumak Kawsay* variables.

The socioeconomic variables are similar to what would be expected from previous models of life satisfaction (Dolan et al., 2008), with the only exception being gender. For the environmental satisfaction model (Table 3), it is interesting to observe that income is significant and positive but being unable to read and write is not significant. It seems that earning more allows individuals to appreciate the environment more, instead of devoting their attention to worrying about how to meet their subsistence needs (i.e. getting food and clean water). This reflects the need-satisfaction theories that imply that there is an order or hierarchy of needs to be satisfied (Maslow, 1943), and that subsistence needs take priority over affective needs such as enjoying others and the environment. That is, people that have a low income may not be satisfying their subsistence needs and as a result they may not be able to appreciate the environment.

Table 2: Life satisfaction estimations

	(1)	(2)	(3)
income	0.247***	0.270***	0.270***
	(0.024)	(0.026)	(0.026)
married	0.194***	0.189***	0.189***
	(0.061)	(0.061)	(0.061)
free union	0.170**	0.163**	0.163**
	(0.069)	(0.070)	(0.070)
female	-0.0499	-0.0235	-0.0236
	(0.060)	(0.061)	(0.060)
age	-0.006***	-0.007***	-0.007***
	(0.001)	(0.001)	(0.001)
no read and write	-0.193***	-0.180***	-0.180***
	(0.063)	(0.064)	(0.064)
indigenous		-0.256***	-0.278**
		(0.062)	(0.137)
rural		0.044	0.0419
		(0.050)	(0.051)
mingas		0.0328**	0.0326**
		(0.016)	(0.016)
Participation		0.0558**	0.0555**
		(0.024)	(0.024)
Chakra		0.171***	0.171***
		(0.052)	(0.052)
indigrural			0.0267
			(0.150)
constant	6.664***	6.491***	6.493***
	(0.192)	(0.205)	(0.205)
Observations	7,478	7,478	7,478
R-squared	0.023	0.028	0.028

Robust standard errors in parentheses

According to the results, indigenous people are more dissatisfied with life, but no significant differences are found concerning environmental satisfaction. People living in rural areas are more satisfied with the environment, but this variable was not significantly related to satisfaction with life. In the last model estimated for every dependent variable (models 3 and 6), we add an interaction of indigenous and rural to check if indigenous people living in rural areas are in fact more satisfied than other indigenous people, but this interaction is not significant in every case.

Table 3: Environmental satisfaction estimations

	(4)	(5)	(6)
income	0.140***	0.238***	0.238***
	(0.026)	(0.028)	(0.028)

^{***} p<0.01, ** p<0.05, * p<0.1

married	0.110*	0.0857	0.0869
	(0.065)	(0.065)	(0.065)
free union	-0.0565	-0.0193	-0.0184
	(0.076)	(0.076)	(0.076)
female	-0.147**	-0.0673	-0.0664
	(0.064)	(0.064)	(0.064)
age	-0.005***	-0.005***	-0.005***
	(0.001)	(0.001)	(0.002)
no read and write	0.0181	-0.0624	-0.0627
	(0.066)	(0.067)	(0.067)
indigenous		0.0208	0.154
		(0.069)	(0.140)
Rural		0.326***	0.338***
		(0.054)	(0.056)
Mingas		0.00379	0.00507
		(0.018)	(0.018)
participation		0.0584**	0.0599**
		(0.030)	(0.030)
chakra		0.202***	0.203***
		(0.057)	(0.057)
indigrural			-0.167
			(0.156)
constant	6.711***	5.970***	5.962***
	(0.201)	(0.215)	(0.215)
Observations	7,478	7,478	7,478
R-squared	0.008	0.022	0.022

Robust standard errors in

parentheses

Concerning the rest of the *Sumak Kawsay* variables, participation in the community shows a positive and significant relationship with both satisfaction variables (models 2, 3, 5 and 6). The *mingas* are significant and positive for life satisfaction, but not for environmental satisfaction. Having a chakra is positively associated with both SWB measures.

5. Conclusions, discussion, and policy implications

In this chapter, we examine the indigenous *Sumak Kawsay* philosophy and way of life, which places an important emphasis on harmony with mother nature, the interconnectedness of all life forms, and a holistic vision of reality. We estimate how *Sumak Kawsay*-related variables influence two SWB measures: life satisfaction and environmental satisfaction. The results indicate that most *Sumak Kawsay* features are positively related to the two measures of SWB. The variables positively related to life satisfaction are involvement in *mingas*, community participation and having a *chakra*. For environmental satisfaction, the relevant variables are living in a rural area, participation and having a *chakra*. The relationship between being indigenous and SWB

^{***} p<0.01, ** p<0.05, * p<0.1

is negatively related to life satisfaction and not significant for environmental satisfaction.

The results closely reflect the *Sumak Kawsay* worldview concerning mother earth, and the sense of belonging to the community. Therefore, spaces that permit participation make it easier for people to develop spiritually. The fact that being indigenous is not significant for environmental satisfaction and was negatively related to life satisfaction is in line with previous empirical results in the Ecuadorian context (Ramírez, 2011). ⁹ Nevertheless, this evidence requires further explanation.

With the empirical evidence we provide, it is difficult to fully explain why indigenous people are less satisfied with life. The most we can do is offer our interpretation, taking into account the Ecuadorian context. There may be many reasons for indigenous people's perceived unhappiness. The first explanation we propose concerns the long tradition of resistance in the indigenous movement, from the process of colonization until present day. In the words of Atawallpa Oviedo, "this sadness is not something contemporary or natural of the peoples of the Andean highlands but it is post-Columbian" (Oviedo, 2014b). Indigenous people have historically been very aggrieved by governments and liberal concepts of individual rights and the creation of private property (Ranta, 2016). The passing of the Ecuadorian Constitution in 2008, supported by a broad majority of indigenous movements and parties, allowed the possibility that this situation could change. However, the growing conflict between the ideas of the government – 21st century socialism – and indigenous positions have deepened the disputes on topics that are considered vital according to the indigenous worldview.

This confrontation leads us to a second explanation of why indigenous people may be more dissatisfied: the clash between the government's development ideas and *Sumak Kawsay*. From the indigenous viewpoint, poverty is not only associated with loneliness, isolation, and disengagement from the community, *wakcha* (orphan) (Maldonado, 2010a), but also refers to a "circumstantial poverty", *mutsui*, generated by external agents such as development, which destroys the ecosystem, deteriorates the sources that provide food security and contributes to the absence of a long-term vision (Viteri, 2002). In this regard, despite the political importance that has been granted to *Sumak Kawsay* in Ecuador, government development plans go against the very essence of it (Acosta, 2011; Gudynas, 2016). This could be the reason for the negative association with life satisfaction (models 2 and 3) and the non-significant association for environmental satisfaction (models 5 and 6) observed in indigenous people.

If those explanations hold true, then indigenous people's subjective well-being would benefit if their culture were given more consideration in the political arena. In fact, as we presented in Section 2, there is an open conflict among indigenous people and the government for the culture preservation of the former. The results in this chapter focus attention on features related to the *Sumak Kawsay* way of life, which seems to be important for satisfaction. In light of these results, it is reasonable to argue that public policies should seek to preserve and respect those features.

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References

- Acosta, Alberto (2011), 'Extractivismo y neoextractivismo: Dos caras de la misma maldición', in Miriam Lang & Dunia Mokrani (eds), *Mas allá del desarrollo*, Ciudad de México, Abya Yala Rosa Luxemburgo, pp. 83–121.
- Aknin, L. B., Dunn, E. W., Helliwell, J., Biswas-Diener, R., Nyende, P., Barrington-Leigh, C. P., ... M. I. Norton (2013), 'Prosocial spending and well-being: Cross-cultural evidence for a psychological universal', *Journal of Personality and Social Psychology*, **104** (4), 635–652.
- Albó, X. (2009), 'Suma qamaña = convivir bien. ¿Cómo medirlo?', *OBETS. Revista de Ciencias Sociales*, **4**, 25–40.
- Albrecht, G., Sartore, G. M., Connor, L., Higginbotham, N., Freeman, S., Kelly, B., ... G. Pollard (2007), 'Solastalgia: The distress caused by environmental change'. *Australasian Psychiatry*, **15** (1), 95–98.
- Asamblea Nacional Ecuador. Constitución de la República del Ecuador (2008), Ecuador.
- Binder, M. and A. K. Blankenberg (2017), 'Green lifestyles and subjective well-being: More about self-image than actual behavior?', *Journal of Economic Behavior & Organization*, **137**, 304–323.
- Binder, M. and A. K. Blankenberg (2016), 'Environmental concerns, volunteering and subjective well-being: Antecedents and outcomes of environmental activism in Germany', *Ecological Economics*, **124**, 1–16.
- Bruni, L. and L. Stanca (2008), 'Watching alone: Relational goods, television and happiness', *Journal of Economic Behavior and Organization*, **65**, 506–528.
- CELADE (2014), Los pueblos indígenas en América Latina: Avances en el último decenio y retos pendientes para la garantía de sus derechos, Santiago de Chile, Centro Latinoamericano y Caribeño de Demografía CEPAL. Naciones Unidas.
- Chancosa, Blanca (2010), 'El Sumak Kawsay desde la visión de la mujer', in Antonio Luis Hidalgo-Capitán -Alejandro Guillén García -Nancy Deleg Guazha (eds), Sumak Kawsay Yuyay Antología del Pensamiento Indigenista Ecuatoriano sobre Sumak Kawsay. Huelva y Cuenca, Universidad de Huelva, pp. 161–170.
- Chuji, Mónica (2010), 'Altermundos. El sumak kawsay: una opción de vida', accessed 31 August 2016 at http://miradoriu.org/spip.php?article168
- Consejo Nacional Electoral Ecuador-CNE (2018), 'Resultados Referéndum y Consulta Popular 2018', accessed 10 February 2018 at https://resultados2018.cne.gob.ec/
- Coraggio, J. (2007), 'La economía social y la busqueda de un programa socialista para el siglo XXI', paper presented at El Encuentro de los Socialismos del Siglo XXI, Quito, 21-22 August.
- Correa, R. (2012), 'Rafael Correa: "No podemos ser mendigos sentados en un saco de

- oro"', *Andes Agencia Pública de Noticias de Ecuador y Suramérica*. Quito (Ecuador). Accessed 25 May 2017 at https://www.andes.info.ec/es/noticias/actualidad/1/9675
- Correa, R. (2013), 'Correa pone fin a iniciativa Yasuní-ITT porque "el mundo nos ha fallado", *El Confindencial*. Quito (Ecuador). Accessed 25 May 2017 at https://www.elconfidencial.com/ultima-hora-en-vivo/2013-08-16/correa-pone-fin-a-iniciativa-yasuni-itt-porque-el-mundo-nos-ha-fallado_18605/
- De la Torre, Luz María and Carlos Sandoval (2004), *La reciprocidad en el mundo Andino: el caso del pueblo de Otavalo*, Quito (Ecuador), Abya-Yala.
- Di Tella, R., MacCulloch, R. and A. J. Oswald (2003), 'The Macroeconomics Of Happiness', *The Review of Economics and Statistics*, **85** (4), 809–827.
- Dolan, P., Peasgood, T. and M. White (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. and M. I. Norton (2008), 'Spending money on others promotes happiness'. *Science*, **319**, 1687–1688.
- Ferrer-i-Carbonell, A. and J. M. Gowdy (2007), 'Environmental degradation and happiness', *Ecological Economics'*, **60** (3), 509–516.
- Frey, B. S. and A. Stutzer (2002), 'What Can Economists Learn from Happiness Research?', *Journal of Economic Literature*, **40** (2), 402–435.
- Garcia-Linera, A. (2010), 'El socialismo comunitario. Un aporte de Bolivia al mundo', *Revista de Análisis. Reflexiones Sobre La Coyuntura*, **3** (5), 7–18.
- García-Quero, F. and J. Guardiola (2017), 'Economic Poverty and Happiness in Rural Ecuador: the Importance of Buen Vivir (Living Well)', *Applied Research Quality Life*, 1-18.
- Guardiola, J. and F. García-Quero (2014), 'Buen Vivir (living well) in Ecuador: Community and environmental satisfaction without household material prosperity?', *Ecological Economics*, **107**, 177–184.
- Gudynas, E. (2016), 'Beyond varieties of development: Disputes and alternatives', *Third World Quarterly*, **37** (4), 721–732.
- Helliwell, J. (2001), 'Social Capital, the Economy and Well-Being', *The Review of Economic Performance and Social Progress*, **1**, 43–60.
- Helliwell, J. (2002), 'How's Life? Combining Individual and National Variables to Explain Subjective Well-Being', *Economic Modelling*, **20**, 331–360.
- Helliwell, J. (2006), 'Well-Being, Social Capital and Public Policy: What's New?', *The Economic Journal*, **116** (March), 34–45.
- Hidalgo-Capitán, A. and A. P. Cubillo-Guevara (2014), 'Six Open Debates on Sumak Kawsay', *Íconos. Revista de Ciencias Sociales*, **48** (Enero), 25–40.
- Huanacuni-Mamani, Fernando (2010a), *Buen Vivir / Vivir Bien: Filosofía, políticas, estrategias regionales andinas.* (M. P. Quishpe, Ed.). Lima, Perú: Coordinadora Andina de Organizaciones Indígenas-CAOI.
- Huanacuni-Mamani, F. (2010b), 'Paradigma Occidental y Paradigma Indígena Originario', *América Latina En Movimiento*, **452**, 17–22.
- Kowii, Ariruma (2009), 'El Sumak Kawsay', in Antonio Luis Hidalgo-Capitán Alejandro Guillén García -Nancy Deleg Guazha (eds), *Sumak Kawsay Yuyay Antología del Pensamiento Indigenista Ecuatoriano sobre Sumak Kawsay*, Huelva y Cuenca, Universidad de Huelva, pp. 161–170.
- Layard, Richard (2011), *Happiness: lessons from a new science*, London, Penguin Books.
- Lehmann, S. and J. Rodríguez (2013), La Chakra Kichwa: Criterios para la

- conservación y fomento de un sistema de producción sostenible en la Asociación Kallari y sus organizaciones socias, Quito (Ecuador), GIZ.
- Macas, L. (2010a), 'El Sumak Kawsay', Yachaykuna, 13, 13–39.
- Macas, L. (2010b), 'Sumak Kawsay: La vida en Plenitud', *América Látina En Movimiento*, **452**, 14–16.
- MacKerron, G. and S. Mourato (2013), 'Happiness is greater in natural environments', *Global Environmental Change*, **23** (5), 992–1000.
- Maldonado, Luis (2010a), El Sumak kawsay/ Buen Vivir/ Vivir Bien, in Antonio Luis Hidalgo-Capitán Alejandro Guillén García Nancy Deleg Guazha (eds), *Sumak Kawsay Yuyay Antología del Pensamiento Indigenista Ecuatoriano sobre Sumak Kawsay*, Huelva y Cuenca, Universidad de Huelva, pp. 195–211.
- Maldonado, Luis (2010b), 'Interculturalidad y políticas públicas en el marco del buen vivir', in Gerardo Fernandez-Juárez (ed), *Salud, Interculturalidad y Derechos Claves para la Reconstrucción del Sumak Kawsay-Buen Vivir*, Quito (Ecuador), Ministerio de Salud Pública, pp. 81–90.
- Maslow, A. (1943), 'A theory of human motivation', *Psychological Review*, **50** (4), 370–396.
- Medina, Javier (2001), 'La Buena Vida occidental y la Vida Dulce amerindia', in Javier Medina (ed.), *Suma Qamaña: La Comprensión Indígena de la Vida Buena*, La Paz, PADEP/GTZ, pp. 31–36.
- Ministerio de Educación Ecuador. (2009), *KICHWA: Yachakukkunapa Shimiyuk Kamu*. Accessed 28 May 2017 at http://www.illa-a.org/cd/diccionarios/diccionarioKichwaEcuador.pdf
- Oviedo, Atawallpa (2014a), *Bifurcaciones del Buen Vivir y el Sumak Kawsay*. Quito (Ecuador), Sumaj.
- Oviedo, Atawallpa (2014b), 'La Felicidad de la Revolución Ciudadana', accessed 14 September 2016 at https://lalineadefuego.info/2014/11/25/la-felicidad-de-la-revolucion-ciudadana-por-atawallpa-oviedo-wakakue/
- Pacari, Nina (2013a), 'Naturaleza y territorio desde la mirada de los pueblos indígenas', in Antonio Luis Hidalgo-Capitán -Alejandro Guillén García -Nancy Deleg Guazha. (eds), Sumak Kawsay Yuyay Antología del Pensamiento Indigenista Ecuatoriano sobre Sumak Kawsay, Huelva y Cuenca, Universidad de Huelva, pp. 129–132.
- Pacari, Nina (2013b), 'Sumak Kawsay para que tengamos vida', in Antonio Luis Hidalgo-Capitán -Alejandro Guillén García -Nancy Deleg Guazha (eds), *Sumak Kawsay Yuyay Antología del Pensamiento Indigenista Ecuatoriano sobre Sumak Kawsay*, Huelva y Cuenca, Universidad de Huelva, pp. 345–355.
- Patiño, Ricardo (2010), 'Diferencias entre el socialismo del Siglo XX y el socialismo del siglo XXI. La democracia participativa y el nuevo sujeto revolucionario', in Secretaría Nacional de Planificación y Desarrollo, SENPLADES (ed.), *Los nuevos retos de América Latina: Socialismo y Sumak Kawsay*. Quito, Ecuador: Secretaría Nacional de Planificación y Desarrollo (SENPLADES), pp. 133–140.
- Quirola, Diana (2009), 'Sumak Kawsay. Hacia un nuevo pacto social en armonía con la naturaleza', in Alberto Acosta and Esperanza Martínez (eds), *El Buen Vivir: Una vía para el desarrollo*, Quito (Ecuador), Abya Yala, pp. 103–114.
- Ramírez, René (2011), *La felicidad como medida del buen vivir en Ecuador*. Quito (Ecuador), Secretaría Nacional de Planificación y Desarrollo (SENPLADES).
- Ramírez, René (2012), *La Vida (Buena) como riqueza de los Pueblos Hacía Una Socioecología Política del Tiempo* (1st ed.). Quito (Ecuador), Instituto de Altos Estudios Nacionales IAEN.
- Ranta, E. M. (2016), Toward a Decolonial Alternative to Development? The

- Emergence and Shortcomings of Vivir Bien as State Policy in Bolivia in the Era of Globalization', *Globalizations*, **13** (4), 425–439.
- Rojas, M. (2008), 'Experienced Poverty and Income Poverty in Mexico: A Subjective Well-Being Approach', *World Development*, **36** (6), 1078–1093.
- Sarayaku (2015), 'Kawsak Sacha the living forest: An indigenous proposal for confronting climate change', paper presented at *COP 21*. *An Indigenous proposal for confronting climate change* (pp. 1–3). Paris.
- SENPLADES (2009), Plan Nacional para el Buen Vivir 2009-2013: Construyendo un estado Plurinacional e Intercultural, Quito (Ecuador).
- SENPLADES (2013), *Plan Nacional para el Buen vivir 2013-2017*, Quito (Ecuador). Simbaña, Floresmilo (2011), 'El Sumak Kawsay como proyecto político', in Miriam Lang & Dunia Mokrani (eds), *Más Allá del Desarrollo. Grupo permanente de trabajo sobre alternativas al desarrollo*, Ciudad de México, Abya Yala, Rosa Luxemburgo, pp. 219–226.
- Steffan, Heinz Dietrich (2008), *El socialismo del siglo XXI*, México, Fondo de Cultura Económica.
- Suárez-Varela, M., Guardiola, J. and F. González-Gómez (2016), 'Do Proenvironmental Behaviors and Awareness Contribute to Improve Subjective Wellbeing?', *Applied Research Quality Life*, **11**, 429–444.
- Taxo, Alberto (1999), 'La concepción runa de la economía', in Vladimir Serrano (ed), *Economía de solidaridad y cosmovisión indígena*, Quito (Ecuador), Abya Yala, pp. 155–166.
- Torres, W. (2011), 'Medicina De La Tierra: El Sendero de la Madre Ancestral', *Cultura y Droga -Universidad de Caldas*, **16** (18), 137–148.
- Tortosa, J. M. (2009), 'Maldesarrollo y Mal Vivir', *América Latina En Movimiento*, **445**, 18–21.
- United Nations (2008), *Declaration on the Rights of Indigenous Peoples*. United Nations. Accessed 10 July 2017 at http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf
- Universidad de Cuenca and UNICEF (2012), 'Sabiduría de la cultura Kichwa de la Amazonía Ecuatoriana', in Universidad de Cuenca (ed.), *Sabiduría de la cultura Kiwcha de la amazonía Ecuatoriana*,. Cuenca (Ecuador), Universidad de Cuencia, pp. 341–400.
- Viteri, C. (2002), 'Visión Indígena del desarrollo en la Amazonía', *Polis*, **3**, 2–6. Viteri, Carlos (2003), 'Súmak Kaúsai. Una respuesta viable al desarrollo', dissertation presented at Universidad Politécnica Salesiana.
- Wilson, Edward (1984), *Biophilia* (2003), Cambridge (USA), Hardvard University Press.

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¹ The Declaration on the Rights of Indigenous Peoples underlines the importance of self-identification; that indigenous peoples themselves define their own identity as indigenous in accordance with their customs and traditions (United Nations, 2008).

² The Ecuador Referendum and Popular Consultation consisted of seven questions for voters to approve or reject. It had a participation rate of 80.7% of the population, and three of the questions were set in the context of *Sumak Kawsay*. These were "Do you agree with amending the Constitution of the Republic of Ecuador so that metal mining in all its stages, in protected areas, untouchable zones and urban centers, is prohibited without exception, in accordance with the provisions of Annex 5?"; "Do you agree with the repeal of the Organic Law to Prevent Speculation on the Value of Land and Speculation of Taxes, known as the Capital Gains Law, according to Annex I?; "Do you agree with increasing the untouchable zone by at least 50,000 hectares and reducing the area of oil exploitation authorized by the National Assembly in

the Yasuní National Park from 1,030 hectares to 300 hectares?". The three questions were approved with 68.62%, 63.10% and 67.31% of the votes, respectively (CNE, 2018).

- ³ In this chapter, we use a representative sample of the whole country, whereas the Guardiola & García-Quero (2014) analysis is based on a representative sample from two cantons in southern Ecuador. Regarding our database, Ramírez (2011) uses the same database as we use in this study but from years 2006 and 2007 and with fewer variables related to *Sumak Kawsay*.
- ⁴ According to Hidalgo-Capitán & Cubillo-Guevara (2014), there are six open debates that could be informed by three theoretical approaches: the indigenous and pachamamista, the socialist, and the ecologist.
- ⁵ The dataset can be freely accessed at: http://www.ecuadorencifras.gob.ec/enemdu-2017/
- ⁶ Similar results are obtained using an ordered logit technique. We prefer to show the results from OLS as they are easier to depict and interpret.
- ⁷ Models including the square of age were also estimated, but this variable was found to be nonsignificant in every model. As such, we decided to eliminate this quadratic term from all estimations.
- ⁸ In order to further test this claim, we regressed environmental satisfaction with a measure of perceived poverty (equals 1 if the person perceives himself/herself to be poor and 0 otherwise). The two are negatively related with a significance level of 1%.
- ⁹ Using the ENEMDU representative national survey—the same that we use but from years 2006 and 2007—Ramírez (2011) finds that indigenous people are more dissatisfied that non indigenous. By way of justification, he argues that Latin American countries such as Peru, Ecuador and Bolivia have the lowest happiness levels in the region, while at the same time having the highest indigenous population.