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Buen Vivir, subjective poverty, and school conditions in 2017 Ecuador

Silverio Gonzalez-Tellez[1] | **Stefos Efstathios**[1] | **Mahly Martinez**[1] | **Darío Cevallos-Chamba**[2]

[1]Department of Education, National University of Education of Ecuador, Azogues, Ecuador

[2]Department of Teacher Professionalization Program, National University of Education of Ecuador, Zamora-Chinchipe, Ecuador

Correspondence
Silverio Gonzalez-Tellez, Department of Education, National University of Education of Ecuador, Azogues, Ecuador.
Email: silverio.gonzalez@unae.edu.ec

Abstract

In May 2017 in Ecuador, the government of Rafael Correa handed over the presidency after 10 years and several mandates. His administration established the redefinition of the constitutional bases: the *buen vivir* cultural development and policy approach with a new transformative educational policy that sought to contribute to inclusion, overcoming inequalities, and poverty. His government benefited from high oil and commodity prices and broad popular support. This research has set out to review the results of the official national survey ENEMDU completed in December 2017. With a descriptive, bivariate, and multidimensional quantitative data analysis, we sought to shed light on the correlations between subjective poverty associated with *buen vivir*, school conditions, and ICT access and use of the school population in 2017. Results indicate a critical flaw in the *buen vivir* policies that failed to achieve their most valued and declared objective with indigenous and rural populations.

KEYWORDS

buen vivir, Ecuador, education, subjective poverty

INTRODUCTION

This research explores the relationships between the cognitive evaluation of poverty (or subjective poverty of a household), the ethnic identity of a household, the education that children and young people receive, and internet access and use. The possibility of relating such indicators from an alternative discussion of subjective poverty and school conditions in 2017

Ecuador can allow interpretation and research questions from the perspective of *buen vivir (loosely translated as "good living")* and the transformative path of education that considers the cultural subjectivity of people, school conditions and ethnicities, "forcing policymakers to address—in an integral way—the well-being of people" (Rojas, 2015, p. 345).

In 2017, Ecuador found itself at the end of 10 years of the government of the "Citizen Revolution" of Rafael Correa and the beginning of the presidency of Lenin Moreno. Nevertheless, the changes made in the framework of the new Constitution of 2008, with the expansion of rights, the national plans for *buen vivir*, and extensive public and social investment, were important achievements of the government, which benefited from the oil boom until 2015, and which continued to be supplemented by indebtedness until 2017. In that year, GDP per capita reached USD 5848, which meant an increase of 34% compared to 2010 (World Bank, 2021), and social investment per inhabitant increased from USD 580 dollars, in 2016, to USD 626, in 2017 (Briones, 2018, October 17). Ecuador has improved on the most widely used indicator of economic inequality, the national Gini index, which went from 0.552 in 2007 to 0.435 in 2017 (National Institute of Statistics of Ecuador, 2017). Furthermore, regarding the schooling gaps maintained by the indigenous school population, "this went from 4.2 years of schooling compared to the national average in 2007 and is reduced to 3.6 in 2015" (Amores-Leime & Perez-Rodriguez, 2017, p. 632).

2017 therefore represented a more socially balanced Ecuador, especially for the historically most excluded social sectors. The impacts of social policy aspects related to education are of particular interest for this review, since education is defined in the new Constitution of 2008, as an "indispensable condition for *buen vivir*" (Asamblea Nacional Constituyente of Ecuador, 2008, Art. 26). This is consistent with the development approach of *buen vivir* that governed the changes throughout the decade. The goals and motivations behind *buen vivir* originated in the indigenous ancestral way of life called *sumak kawsay* and represents life in harmony with oneself, others, and nature, in communality and fullness (Coral-Guerrero et al., 2021; Hidalgo et al., 2014).

Recent studies on education and poverty policies in Ecuador have emphasized material or objective aspects of *buen vivir* and overcoming economic poverty (Correa-Quezada et al., 2018; Fuentes & Stefos, 2019; Restrepo & Stefos, 2017; Vásquez von Schoettler, 2020). In contrast, others have examined the subjective and cultural aspects of *buen vivir* (Coral-Guerrero et al., 2021; García-Quero & Guardiola, 2018; Guardiola & García Quero, 2014). In fact, the conception of *buen vivir* involves subjective and cultural assessments of life. That is why subjective poverty is an indicator of it. Within this perspective, access to education is an important contributing factor to the positive assessment of life (Asamblea Nacional Constituyente of the Republic of Ecuador, 2008, Art. 26).

René Ramírez, who directed the National Plan for *buen vivir*, was, on his part, a pioneer author in this last line of the subjective approach to a desirable life (2011). The Plan quoted him to define *buen vivir as*:

> The satisfaction of needs, the achievement of a dignified quality of life and death, loving and being loved, the healthy flourishing of all, in peace and harmony with nature, and the indefinite prolongation of human cultures. *Buen vivir* supposes having free time for contemplation and emancipation, and that the freedom, opportunities, capacities, and real potential of individuals are expanded and flourish in such a way that they allow simultaneously achieving what society, territories, and various collective identities and each one—seen as a universal and

> particular human being at the same time—values a desirable life goal (both materially and subjectively and without producing any type of domination over another). (Ramírez, 2011, as cited in the National Plan for *Buen Vivir* 2009—2013, p. 6)

A desirable life goal, subjectively and materially, implies low subjective poverty and good school conditions, especially in historically excluded social groups related to indigenous ethnic self-identification. Improved equality on these points is therefore an important element of the *buen vivir* policy. The actual impact of the policy in these areas, however, has not been systematically explored in the existing academic literature. This leads to questions about how households with school-aged children consider their poverty status (Rojas, 2015; Ureña, 1999) and its relationship with the members' ethnic self-identification and the educational experience of the household's children. Early *buen vivir* planners relied on self-reported indicators of subjective poverty when designing the plan (Ramírez, 2011, 2019). Exploring these variables can offer a perspective of marginalized families' sense of *buen vivir* (i.e., do they feel poor or not?). From both material and subjective perspectives, leading a desirable life or moving in that direction is assumed to mean *buen vivir*, especially for historically excluded social and cultural groups.

This study examines the social, cultural, and educational balance of a decade of political, institutional changes and significant social investments and offers possible empirical answers to questions and doubts raised about the approach and policies of the *buen vivir* (Alonso González & Vázquez, 2015; Breton Solo de Zaldivar, 2013; Merino, 2016). Therefore, this research aims to contribute to the understanding of the relationships between young (ages 5–14 years old) students' homes, schools, and computer/internet use. This includes the influence of government programs in each area.

This study uses data from the December 2017 employment survey of the National Institute of Statistics of Ecuador (ENEMDU), which includes questions of subjective poverty, ethnic self-identification, and school conditions of each schoolchild in the respondent's home as answered by the head of the household or their spouse, as well as questions related to school conditions as answered by the schoolchild or their parents.

SUBJECTIVE POVERTY AND *BUEN VIVIR*

Subjective poverty is "based on the opinion and feeling of the person concerned" (Hagenaars, 1986, p. 13). It is the perception that a person or head of household has about their financial or material situation, related to their sense of subjective well-being (Rojas & Jiménez, 2008). This concept of poverty is born as an alternative indicator for the measurement of poverty, due in part to the limitations of objective measures of poverty, in which only expert, quantitative, material, or monetary aspects are considered to classify people's poverty status. These measures typically refer only to poverty by income, material needs, or consumption (Ravallion, 2012). It is known that this restriction means the absence of cognitive and cultural evaluations that each person or head of household has about their life, their socioeconomic level, and their well-being (Organization for Economic Cooperation and Development [OECD], 2013; Stiglitz et al., 2009).

Hence, using self-reported measures of subjective poverty and ethnic self-identification responds to a generalized criticism of economic development theories that associate good living

only with consumption criteria or objective satisfaction of needs (Aguado, & Osorio, 2006). Indeed, in a culturally diverse (Moya, 1998) and socially unequal (Ayala, 2012) country such as Ecuador, indicators of subjective poverty and *buen vivir* can be better related to ethnic self-definition since it includes a broader, richer understanding of the role that cultural self-identification, values, and education play in achieving *buen vivir*. Under this view, educational policies must make a more significant effort to contextualize government actions, as Hernández argues, through "differentiated approaches that address the heterogeneous situations of the various countries" (2017, p. 445).

EDUCATION FOR OVERCOMING POVERTY

It is necessary to emphasize that *buen vivir* is a relatively new approach in Ecuador, which has recently been defined as a cultural and political appreciation of living well, different from more typical measures of economic development. To be sure, it should be considered that the first measures of living well are presented as indicators based on quantifiable economic parameters (Sen, 2000), yet, its measurement has been modified, incorporating other factors that amplify a broader idea of what welfare represents (Boltvinik, 2013). These include dimensions related to health, gender equality, happiness, political power, education, satisfaction with life, and the perception of life. In this way, not only is the conception of living well extended in the multicausality of factors that influence its appreciation, but the same concept of what is a good life can be analyzed from several perspectives with complex results (Dolan et al., 2008).

As Edgar Morin has emphasized, new conceptions of development are associated with the subjective, cultural, and ecological assessment of well-being by people (2011). Therefore, the relationships between self-perception of poverty, ethnic self-definition, and the school conditions of children and youth (including information, communication technology) can offer a different and valuable balance in social and educational policy perspectives. Particularly noteworthy are its conditions for autonomous learning in 21st-century school conditions, which in turn is linked to the availability of internet access and online devices (Apolo et al., 2020), owned either by the household or an educational institution (Rodriguez & Sanchez-Riofrio, 2017).

If subjective poverty refers to the attributes that a person uses to define themselves as poor or not, education should be a crucial part of this consideration because poor people are aware that education can be a door to overcome poverty, as worldwide primary studies on poverty from the perspective of the poor show (Narayan, 2000).

MATERIALS AND METHODS

This quantitative research study uses data from the primary national source of Ecuador, the Employment, Unemployment, and Under-Employment Survey (ENEMDU) prepared by the National Institute of Statistics and Census of 2017 (National Institute of Statistics of Ecuador, 2017). The results reported are tabulated from the complete annual survey.

The sample design for this study corresponds to a national probabilistic sampling with two selection stages. The first stage is a selection of primary sampling units (conglomerates) by stratum. The second stage corresponds to a selection of occupied dwellings within each conglomerate selected in the first stage. The survey includes a national sample of 22,766

children from 5 to 14 years old, weighted to represent 3,422,579 children. The number 3,422,579 is the total number of children of this age in Ecuador at the time, as sourced from the National Institute of Statistics and Census of Ecuador. From this group, children were sampled to represent students matriculated at compulsory school (3,291,265 children). The sample was drawn to provide useful insights in a variety of contexts, including national, regional, provincial, urban, and rural settings. The final sample included 31,092 homes in 1024 urban and rural population centers.

The ENEMDU typically focuses on identifying the working-age population, the economically active population, and the economically inactive population across Ecuador. However, although the objective of this survey is not to measure school conditions and subjective poverty, such variables are included in it to evaluate public policies and characterize the sociocultural profile of social groups.

In Section 1 of the survey, respondents indicate they identify themselves according to their culture and customs. Questions about the languages spoken by the respondents, their education, and the electronic equipment they own and use at home and school are also included. Interviewers are instructed to ask each question to each person in the household to whom the topic pertains (see Table 1), but the household's qualified informant can assist younger children. The second set of questions relevant for our purposes, from Section 13 of the

TABLE 1 Survey questions: wording, population, and type.

Questions	Who is answering	Type of question
1 Area	Head of household	Binary
2 Gender	Head of household	Binary
3 Ethnic identification	Head of household	Multiple categories
4 How often did you use the internet in the last 12 months?	Schoolchildren	Multiple categories
5 In the last 12 months, have you used the internet?	Schoolchildren	Binary
6 What do you use the internet for?	Schoolchildren	Multiple categories
7 In the last 12 months, where did you use the internet most frequently?	Schoolchildren	Multiple categories
8 Languages spoken at home	Head of household	Multiple categories
9 Subjective poverty	Head of household	Binary
10 The institution where you enrolled has functioning computers	Schoolchildren	Binary
11 The institution where you enrolled has Internet operation	Schoolchildren	Binary
12 School shift attended	Schoolchildren	Multiple categories
13 The establishment where you are enrolled is public or private	Schoolchildren	Multiple categories
14 Individuals received free school texts	Schoolchildren	Binary
15 Individuals received free school uniforms	Schoolchildren	Binary
16 The individual received free school breakfast	Schoolchildren	Binary

Source: National Institute of Statistics of Ecuador (2018). Metodología de Diseño Muestral de la Encuesta Nacional de Empleo, Desempleo y Subempleo (ENEMDU).

survey, asks the head of the household or spouse to answer the following question affirmatively or negatively: Do you consider that your household is poor? Variables were analyzed using the SPAD software platform, considering the sample expansion factor for the population between 5 and 14 years of age to achieve the expected representativeness in all results.

Data in this study come from students of compulsory education age and their households. In addition, 16 indicators related to the sociocultural profile of the household, characteristics of the school attended by the students which received a public support program, and frequency of computer and internet use by children and youth. The study also includes specific education variables such as schools without adequate equipment, the availability of computers and internet in school or home, the availability of internet access, sociocultural measures of the home (including rural or urban location), language spoken at home, migrant status, public or private school status, income-based school policies (e.g., school breakfast, free texts, or school uniforms), and resources linked to education such as the means of transfer schools and measures of subjective poverty.

Results are presented to identify multiple associations in terms of their responses. In this way, a univariate and bivariate characterization was obtained for important research variables. The Chi-square test (χ^2) and the Valor Test were applied for bivariate contingency tables.

The Valor Test is an indicator provided by the SPAD statistical analysis software that investigates the correlation between two variables that are compared in contingency tables. According to Morineau (1984), the Valor Test is a tool that participates in the exploratory and descriptive understanding of large tables. According to Alarcón Becerra (2020), the Valor Test is the difference in the mean of a group of individuals and the global mean in terms of standard deviations. The higher the Valor Test value, the more significant the correlation between the two variables (Grande & Abascal, 2005). The correlations in which the Valor Test is greater than or equal to two are statistically significant.

We also performed an analysis of multivariate associations to observe the groupings of the values of the variables, their hierarchy, and classification. Next, differentiation was made by identifying factors and data grouping with Multiple Correspondence Analysis (Benzecri, 1992). This analysis method is suitable for exploring the relationships between the variables studied for the selected population since it identifies multiple associations and places them in a hierarchy to obtain grouping factors and classifications of responses. A hierarchical classification was then carried out, which is expressed in a dendrogram, allowing the visualization of the axes, the distance between the extremes, and their location (Papapostolou et al., 2013).

Then, the automatic classification was carried out; doing so offers a grouping of values of associated variables in five classes of individuals, each with similar characteristics ordered by degree of association. Finally, each of the five classes identified could be located within a graphical representation of four quadrants, according to their associations or lack thereof.

RESULTS: UNIVARIATE DESCRIPTION

Table 2 presents the maximum and minimum frequency results obtained in the 16 most important variables of the study. Notable results include the prevalence of individuals identifying as mestizo (*Loosely translated as racially mixed*), a Spanish speaker, urban dwellers, someone who does not consider themselves poor, and who reports benefitting from educational support programs.

TABLE 2 Descriptive univariate results.

Question/variable	% Min	% Max
Area of residence of Ecuadorian students from 5 to 14 years of age	Rural: 34.95%	Urban: 65.05%
Gender of Ecuadorian students from 5 to 14 years old	Male: 52.00%	Female: 48.00%
Ethnic identification	Mestizo: 78.51%	White: 1.14%
How often did you use the internet in the last 12 months?	At least once a day: 63.51%	At least once a year: 0.19%
In the last 12 months, have you used the internet?	Yes: 58.33%	No: 41.67%
What do you use the internet for?	Education and learning: 52.81%	Work reasons: 0.02%
In the last 12 months, where did you use the internet most frequently?	Home: 48.00%	Someone else's house: 5.00%
Languages spoken	Spanish only: 92.22%	Foreign language: 0.10%
Subjective poverty	Poor: 29.73%	Nonpoor: 70.27%
The institution where you are enrolled has functioning computers	Yes: 75.28%	No: 24.72%
The institution where you are enrolled has internet operation	Yes: 67.30%	No: 32.70%
School shift attended	Matutine: 81.87%	Full day: 0.00%
The establishment where you are enrolled is:	Public: 80.50%	Municipal: 4.60%
Individuals received free school texts	Yes: 80.58%	No: 19.42%
Individuals received free school uniforms	No: 64.07%	Yes: 35.93%
Individuals received free school breakfast	Yes: 58.33%	No: 41.67%

Source: Own elaboration based on ENEMDU, 2017.

BIVARIATE CORRELATION RESULTS

Five variables are selected for cross-tabulation and the Valor Test. The Valor Test represents the difference in the mean of a group of individuals and the global mean in terms of standard deviations. The higher the Valor Test value, the more significant the correlation between the two variables. Variables are selected to examine the study's main areas of interest, relating the subjectivity of the poverty situation of the home, with ethnicity (Table 3), the language spoken at home (Table 4), the residence area (Table 5), access to a school breakfast food program (Table 6), and finally, internet use in the last 12 months by schoolchildren in the home (Table 7). The correlation between subjective poverty and these other five variables was investigated using the χ^2. The results show a very high correlation between the Valor Test of 99.99 in each contingency table.

The results of Tables 3–7 indicate that feeling poor in Ecuador in 2017 is associated with households where individuals identify as an indigenous ethnicity, speak an indigenous language, reside in rural areas, participate in a school breakfast program, and have not had internet access in the last 12 months.

TABLE 3 Poverty and ethnic self-identification.

		How do you identify yourself?						
		Indigenous	Afro-Ecuadorian, black, mulatto	Montubio	Mestizo	White	Other	Total
Poverty	Poor	232,094	62,600	57,455	601,730	18,153	2,052	974,084
		23.83%	6.43%	5.90%	61.77%	1.86%	0.21%	100.00%
	Not poor	128,508	108,182	71,278	1,970,719	19,373	3,971	2,302,031
		5.58%	4.70%	3.10%	85.61%	0.84%	0.17%	100.00%
	NA	2,081	996	675	11,398	0	0	15,150
		13.74%	6.57%	4.46%	75.23%	0.00%	0.00%	100.00%
Total		362,683	171,778	129,408	2,583,847	37,526	6,023	3,291,265
		11.02%	5.22%	3.93%	78.51%	1.14%	0.18%	100.00%

Note: Valor Test: $\chi^2 = 2212.51/10$ *df*/Valor Test = 99.99.

Source: Own elaboration based on ENEMDU, 2017.

TABLE 4 Subjective poverty and language spoken.

		Language spoken			
		Indigenous language only or with other languages	Spanish	Others	Total
Poverty	Poor	166,101	804,375	3608	974,084
		17.05%	82.58%	0.37%	100.00%
	Not poor	67,100	2,217,400	17,532	2,302,032
		2.91%	96.32%	0.76%	100.00%
	NA	1,868	13,282	0	15,150
		12.33%	87.67%	0.00%	100.00%
Total		235,069	3,035,057	21,139	3,291,265
		7.14%	92.22%	0.64%	100.00%

Note: Valor Test: $\chi^2 = 1825.48/4$ *df*/Valor Test = 99.99.

Source: Own elaboration based on ENEMDU, 2017.

THE RESULTS OF MULTIPLE CORRESPONDENCE ANALYSIS

Next, we conducted a multiple correspondence analysis. This analysis differentiates the data along several axes. Three primary axes result from these data, with their respective percentage of inertia and the clouds of categories of the most associated variables at each factor's end. It is important to note that the variables with the highest inertia are related to computer and internet access and their frequency of use.

TABLE 5 Subjective poverty and residence area.

		Area		
		Urban	**Rural**	**Total**
Poverty	Poor	412,146	561,938	974,084
		42.31%	57.69%	100.00%
	Not poor	1,718,123	583,908	2,302,031
		74.64%	25.36%	100.00%
	NA	10,766	4,384	15,150
		71.06%	28.94%	100.00%
Total		2,141,035	1,150,230	3,291,265
		65.05%	34.95%	100.00%

Note: Valor Test: $\chi^2 = 2{,}114.48/2$ *df*/Valor Test = 99.99.

Source: Own elaboration based on ENEMDU, 2017.

TABLE 6 Poverty and receive school breakfast at school.

		Individuals receive school breakfast in the education establishment		
		Yes	**No**	**Total**
Poverty	Poor	692,126	281,958	974,084
		71.05%	28.95%	100.00%
	Not poor	1,221,369	1,080,662	2,302,031
		53.06%	46.94%	100.00%
	NA	6,250	8,900	15.150
		41,25%	58,75%	100,00%
Total			1.371.520	3.291.265
		58,33%	41,67%	100,00%

Note: Valor Test: $\chi^2 = 552{,}32/2$ *df*/Valor Test = 99,99.

Source: Own elaboration based on ENEMDU, 2017.

THE FIRST CRITERION OF DIFFERENTIATION IS COMPUTER AND INTERNET ACCESS AND POVERTY (WITH 17.50% INERTIA)

On the first axis, there is a higher association between the variables, grouping the responses of children and young people who do not have computers at home or have had access to the internet in the last 12 months. In this population, the survey informant considers the residents of their home to be poor. Respondents reside in a rural environment and speak an indigenous language. Those who go to fiscal schools are also associated with this axis, and respondents

TABLE 7 Subjective poverty and internet use in the past 12 months.

	In the past 12 months, have you used the internet?	Total			
	Yes	No	NA		
Poverty	Poor	431,527	541,661	895	974,083
		44.30%	55.61%	0.09%	100.00%
	Not poor	1,475,570	820,331	6130	2,302,031
		64.10%	35.64%	0.27%	100.00%
	NA	8693	6457	0	15,150
		57.38%	42.62%	0.00%	100.00%
Total	1,915,790	1,368,449	7,026	3,291,265	
	58.21%	41.58%	0.21%	100.00%	

Note: Valor Test: $\chi^2 = 905.94/4$ *df*/Valor Test = 99.99.

Source: Own elaboration based on ENEMDU, 2017.

have access to and participate in public support programs such as school breakfast, school texts, and school uniforms.

On the other end of this axis are the schoolchildren who have computers, frequent internet access, and home access to online resources rather than only at school. Likewise, household informants do not consider their condition poor or participate in public programs. They use the internet for purposes other than education and learning.

THE SECOND AXIS OF DIFFERENTIATION: PUBLIC PROGRAMS SUPPORT (WITH 9.01% INERTIA)

On the second axis, responses are associated with private schools in urban areas where families do not consider themselves poor; do not participate in public breakfast programs, school texts, or uniforms; and make use of a private vehicle to attend school but have relatively more limited use of computers and the internet in the last 12 months. These individuals are also more likely to connect to the internet from their home.

By comparison, this axis also includes a group that participates in all available public education programs (breakfast, texts, and uniforms) and may do so frequently, is connected to the internet and accesses it frequently, but typically only goes online from public centers or schools. These individuals live in rural areas, consider themselves poor and indigenous, and speak an indigenous language.

THE THIRD AXIS OF DIFFERENTIATION: IDENTITIES AND TERRITORIES (WITH 5.56% OF INERTIA)

Here we have an axis pole characterized by self-reported ethnicity. Generally, individuals in this group live in the same population or city in which they were born, speak an indigenous language, and consider themselves poor. Their school does not receive a breakfast or text

program and is not a public school. They attend the morning school shift and are from rural areas.

Contrarily, some boys and girls in this group only speak Spanish, are considered mestizos, have access to education programs (breakfast and school texts) in municipal schools, live in families that do not consider themselves poor, and may be migrants from an urban area and attend class in the afternoon.

HIERARCHICAL CLASSIFICATION ANALYSIS

Next, we conducted a hierarchical classification analysis. This analysis is expressed by a dendrogram of successive classifications illustrated in Figure 1, where the factors differentiate the sample into several classes or clusters according to their degree of association (Benzecri, 1992).

The first class (1/5), with 10% of the population, is characterized by its indigenous identity, limited internet use, speaking an indigenous language, rural residence, subjective poverty perception, limited school resources, and receipt of school uniforms. Households in this group define themselves as indigenous, speak an indigenous language, and attend deprived schools. A negative circle reinforces its historical exclusion.

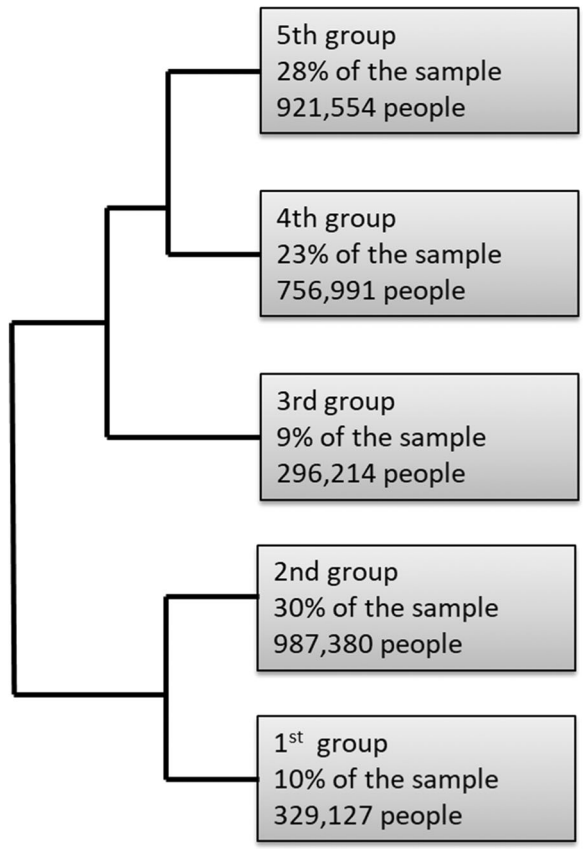

FIGURE 1 Hierarchical classification analysis. *Source*: Own elaboration based on ENEMDU, 2017.

The second class (2/5) of 30% of the population is close to the first in its location within the dendrogram. People in this group are characterized by having little or no internet connection, limited public school resources (e.g., schools often devoid of computers, internet, courts, library, and laboratories), and participation in only a school breakfast program. However, these individuals do not consider themselves indigenous or poor and only speak Spanish. This larger class also has unfavorable educational conditions of lesser opportunity.

The third class (3/5), includes 9% of the population and has few connections to public education. These individuals identify as mestizos and speak Spanish. Also, the schools they attend are private, in urban areas, rely on private transportation, and do not participate in any public support program. However, while the schools are well-equipped, children in this group use the internet predominantly at home. On the other hand, they are families that are not considered poor. These are individuals with a profile of an urban middle-class family with access to well-equipped private schools without any relation to public programs, which are accessed by private vehicles.

The fourth class (4/5), is much more numerous than the third, with 23% of the population. These individuals use the internet at least once a day (most frequently for education and learning) and access computers and the internet from public centers or schools. They live in rural areas, attend public education institutions, and participate in public support programs such as daily school breakfast or school uniforms. These families consider themselves to be poor. As a large group, they access education resources and the internet from municipal schools, rural areas, and school support programs. Despite the opportunities they receive from public policy, they consider themselves poor.

The fifth and last class (5/5) represents 28% of the population. It resembles the previous class because individuals have daily access to a computer and the internet, but it differs in that online activities mostly focus on obtaining information and occur in the home. These are families from urban areas who, unlike the previous class, do not consider themselves poor. Many of their schools are well equipped and are municipal or public, and they attend the afternoon shift. In general, this second-largest class is mostly urban, has access to good schools and equipment (though they are mainly municipal or public institutions), and has frequent internet access at home. The diversification of the public education offered and the urban conditions provided by the internet seem to suggest the opportunities of this class.

The Multiple Correspondence Analysis locates each of the five classes within a two-dimensional graphical representation of four quadrants along two axes, as shown in Figure 2.

Individuals who do not perceive themselves as poor are predominately placed on the right side of the map (e.g., Classes 5 and 3). In contrast, individuals who do identify as poor are placed on the left end of the map (e.g., Classes 1 and 2). Class 4 is more balanced since although it is towards the center of the upper right quadrant (because these individuals consider themselves to be poor), they attend fiscal schools and participate in public support programs. In many respects, their situation is therefore closer to Classes 3 and 5 due to their access to school and technology resources. Classes 4, 5, and 3 represent almost 60% of the population and have well-equipped school conditions, frequent internet access, and reside in urban areas.

These results suggest a relative closeness between Classes 1 and 2. This is due to the conditions of the schools they attend and their use of computers and the internet. Still, while individuals in Class 1 define themselves as indigenous, poor, rural, and relatively more socioculturally homogenous, members of Class 2 identify as mestizo and not poor. However, members of these classes share very poor school conditions, low access to support programs for school children, few computers, and limited access to the internet. One group, Class 4, behaves

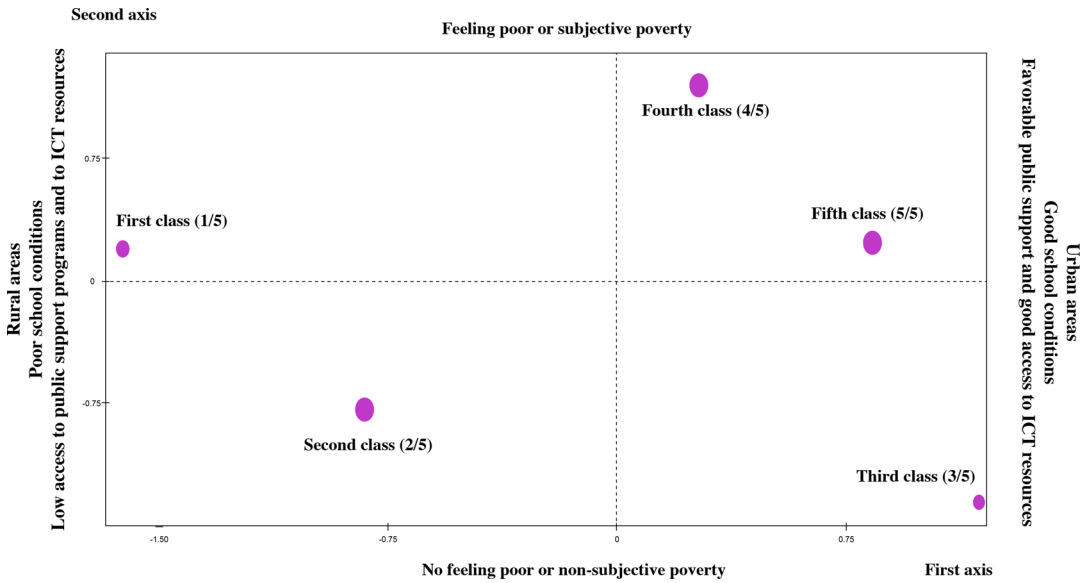

FIGURE 2 Multiple correspondence analysis graphic representation. *Source*: Own elaboration based on ENEMDU, 2017.

differently, having good school conditions, favorable public support, high frequency of internet access, but still identifies as being in poverty. These individuals live in urban areas. Urban areas with a mestizo population and good school conditions do not usually consider themselves poor. However, despite the benefits of the public education policy that children receive, it does not appear to be reflected in these individuals' self-perception. On the other side, Classes 3 and 5 do not consider themselves poor, live in urban areas, and have more diversified access to the internet, computers, and municipal and private schools.

DISCUSSION

One result of this study is that households that self-identified as indigenous also considered themselves poor, which is consistent with studies carried out by Ramírez (2011, 2019), and during the first years of the decade evaluated here (2007–2017) indicated "that the probability of being happy decreases by 0.20 if the citizen defines himself as indigenous, keeping the other variables at a constant level" (2011, p. 40). More recent studies also report similar results. Coral-Guerrero et al. noted that "an important exception is an indigenous identity, which is negatively related to life satisfaction" (2020, p. 392). The results of this study indicate that the feeling of poverty is common among Ecuador's indigenous population from which the definition of *buen vivir* emerges. Although a minority in relative frequency, this sociocultural sector is significant in its historical exclusion and linked to poverty, indigenous identity, and inhabitants of the rural environment. This is consistent with Correa-Quezada et al.'s discussion of "poverty traps" (2018). Alternatively, Apolo et al. identified "resistance and political fight" activities among the indigenous population in Ecuador fighting against a government that had closed hundreds of indigenous communitarian schools (2022, p. 9). These are essential topics to address. In any case, it is an apparent failure in *buen vivir* national policy and planning goals.

Most homes and school populations that do not feel poor are associated with urban life, greater use of computers and the internet, and more diverse school resources. These households and their children represent positive outcomes and a majority living well, with access to high-quality school conditions and resources.

Finally, individuals in Class 4, those who live in urban areas and define themselves as mestizos, identify as poor despite having their children supported by public school support programs, which raises specific questions about what has been called "the paradox of objective well-being and subjective discomfort" (Ramirez, 2019, pp. 243–244). Following Diener et al. (2010), there is still a field of research between the evaluation of life in terms of poverty and its associations with school conditions, ethnicity, place of residence, and the difference that this implies with people's positive and negative feelings. According to the literature on the subject, reviewed by Dolan et al. (2008), it has not been easy to identify what is a desirable life, leaving many questions unanswered.

CONCLUSIONS

In the sample of households and school population studied, we found that 29.6% live in households that declared themselves poor in Ecuador in 2017. However, a significant majority of respondents did not consider themselves poor, with almost 70% of responses.

The study establishes a relationship between right school conditions, strong public policy, mestizo self-definition, and the appreciation of nonpoor life. However, the factor that most clearly organizes these data is access to and use of the internet and computers. Therefore, one clear finding is the differentiating importance of Information and Communication Technology and its use in the definition of social groups. This result provides support for strong democratic Information and Communication Technology policies that guarantee access for learning and educational purposes (Apolo et al., 2020), especially in rural areas among indigenous populations.

Of the schoolchildren between 5 and 14 years old enrolled in primary education represented in this study, 80% of the total attended fiscal schools, 75% had access to computers, 63% had daily access to the internet (used mostly for educational or learning purposes), 81% received free school texts, 53.8% received free meals at school, and 48% had access to libraries. These data suggest that a significant proportion of Ecuadorian school children had access to right school conditions during 2017.

The multidimensional analysis indicated that households with non-mestizo ethnic self-perception and rural status were more likely to perceive themselves as poor in a subjective measure. On the other hand, mestizos and urban households predominantly did not self-classify as poor. This result reflects discontent among individuals in rural and nonmestizo social conditions. Indeed, 29.6% of the population of compulsory school age lived in households that are considered poor and self-identify as indigenous. These schoolchildren attend schools in poor conditions and have limited access to resources, conditions stemming from structural inequalities and unresolved historical gaps. Such a result indicates a critical flaw in the *buen vivir* policies that fail to achieve their most valued and central objective, drawing attention to the current public policy of the country. Moreover, the indigenous and intercultural basis of the development approach can even be questioned, as Merino (2016) points out, and which Alonso González & Macia Vasquez concur when they propose anchoring the search for a definition of development from the *sumak kawsay* in "the common" (2015, p. 16).

The school conditions of the majority of the population studied were good, but the subjective aspects of *buen vivir* "depend to a great extent on how people feel and evaluate their lives" (Ramírez, 2011, p. 53). In other words, giving more relevance to "what is important for their lives" (García-Quero & Guardiola, 2018), in the case of indigenous populations that consider themselves poor, is the call to reconsider public policies in the country.

For this reason, the philosophy of *buen vivir* has raised new questions, not so much as a political ideology but as a social practice, from the ethos that effectively accompanies indigenous peoples and their cultures (Coral-Guerrero et al., 2021) since we agree with the statement that "there is nothing more structural than the construction of subjective meanings" (Ramirez, 2019, p. 272).

ORCID

Silverio Gonzalez-Tellez http://orcid.org/0000-0002-2004-4372
Stefos Efstathios http://orcid.org/0000-0002-5679-8002
Mahly Martinez http://orcid.org/0000-0002-4745-358X
Darío Cevallos-Chamba http://orcid.org/0000-0001-8592-1199

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