



## A DATA ANALYSIS OF SOCIAL CHARACTERISTICS OF BASIC AND SECONDARY EDUCATION STUDENTS IN ECUADOR

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### KEY WORDS

*Students of Basic General  
Education  
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Social Profile  
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### ABSTRACT

*The objective of the study is to examine the social profile of Basic and Secondary Education students in Ecuador by means of a statistical analysis of this sector of the Ecuadorian population based on data from the National Survey of Employment, Unemployment and Underemployment from 2015. The variables investigated were: area, sex, age, language spoken, ethnic self-identification, condition of activity and inactivity, school enrollment, use of smartphone, use of computer during the last months, use of internet during the last 12 months, natural region, income poverty, occupational group and the level of happiness at work. The results of the study may be used as a tool for the development of the Basic and Secondary Education studies in Ecuador in accordance with the social profile and the needs of the students in the country.*

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## 1. Introduction

The Ecuadorian educational system is an integrated, decentralized and flexible system, which meets the needs of individual and social learning, contributes to cultural identity, and promotes unity in diversity. As well as it aims to consolidate a society with intercultural awareness, strengthen the multi-cultural and multiethnic country with a universal vision, reflexive, critical, participatory, supportive and democratic. Besides that, the Ecuadorian educational system encourages the use of developing knowledge, skills and values to ensure competitiveness, productivity and technical and scientific development, and thus to make a better living for Ecuadorians, and achieve sustainable development in the country.

Through its educational institutions, the Ecuadorian educational system offers a higher learning education which allows the fulfillment of this vision, and based on the principles such as: quality, equity, inclusion, relevance, participation, accountability, diversity, flexibility and efficiency, the different components of the national educational system pursues the commitment and participation in the construction of knowledge of society. (Castellano et al., 2017).

Therefore, the purpose of the Ecuadorian educational institutions is to shape citizens, men and women, who will be creative, critical, solidarity and deeply committed to social change. Individuals who feels proud of their national identity, who contributes to the construction of the multicultural, and multi-ethnic state always preserving their territorial sovereignty and their natural resources. Likewise, each school has the commitment to guarantee the development of ancestral languages, develop students' civic and moral values, and have capacity for self-management and generate productive work. Educators shall participate actively in the development of the country which is required for its integration into the international community; and shall contribute to the consolidation of a non-dependent democracy, in which peace, gender, equality, and social justice are the main principles to be respected and valued in all human beings.

This is why, this study's aim is to investigate the social profile of Basic General Education students in Ecuador. Basic General Education in Ecuador encompasses ten levels of study, first grade through tenth grade. Students who complete these levels are able to continue their studies towards a Unified General Baccalaureate.

Basic General Education levels enable students to develop communication skills, interpret and solve problems, and develop understanding of natural and social life. Those students who complete the Basic General Education studies develop competency in demonstrating logical, critical and creative thinking skills, as well as improve their problem solving skills in everyday situations. At the same time, students of Basic Education apply technologies to communicate, and find out solution to practical problems by doing research, and training on academic activities.

We have also chosen to focus on the teenage population of 15 to 17 year olds (the three years of secondary education – Baccalaureate), as it is the age group that is likely to be under more pressure to support the family economically and consequently, changes in the drop out and attendance rate in this age group promise to be more marked. This study proposes to offer explanations as to why non-attendance occurs in addition to providing a socio-cultural analysis (or social profile) of the selected population of teenagers and of the factors which may or may not contribute to truancy among adolescents within this age group. It is hoped that this analysis will help us to better assess the improvements made to the Ecuadorian educational system over the past decade (Castellano et al., 2017).

## 2. Method

The study uses as reference statistical information from the 2015 National Survey of Employment, Unemployment and Underemployment (INEC, 2015). Given the objective of the present study, a descriptive statistical analysis was done, with the former showing the frequency and percentages of the variables under investigation (Athanasidis, 1995). We use contingency tables in analysis of data of secondary education students (age 15-17) in order to examine the relation between to variables under investigation and the school attendance. The statistical software R was used to analyze the data.

## 3. Data analysis of basic education students

Approximately 64% of students are from urban areas and 36.60% are from rural areas (Table 1).

Table 1. Area of residence

	N	%
Urban	2,168,529	63.39
Rural	1,252,204	36.60
Total	3,420,734	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Approximately 51% of students are men and 49.04% are women (Table 2).

Table 2. Gender

	N	%
Men	1,743,190	50.96
Women	1,677,544	36.60
Total	3,420,734	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Approximately 10% of students are 5 years old, 9.27% are 6 years old, 9.96% are 7 years old, 9.75% are 8 years old, 9.88% are 9 years old, 9.12% are 10 years old, 9.48% are 11 years old, 8.97% are 12 years old, 9.32% are 13 years old, 8.80% are 14 years old, and 5.78% of students are more than 14 years old (Table 3).

Table 3. Age

	N	%
5	330,756	9.67
6	317,200	9.27
7	340,601	9.96
8	333,404	9.75
9	338,031	9.88
10	311,889	9.12
11	324,319	9.48
12	306,958	8.97
13	318,857	9.32
14	300,943	8.80
More than 14 years	197,777	5.78
Total	3,420,734	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Approximately 100% of students attend classes and 0.18% do not attend classes (Table 4).

Table 4. Attend class

	N	%
Yes	3,414,554	99.82
No	6,180	0.18
Total	3,420,734	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Approximately 82% of students attend classes in the morning, 15.91% in the afternoon, 0.53% in the evening, 0.01% attend all-day classes, 0.37% attend classes in two periods, 0.57% at distance, and 0.18% do not attend classes (Table 5).

Table 5. Time of attendance

	N	%
Morning	2,819,911	82.44
Afternoon	544,04	15.91
Evening	18,047	0.53
All day	376	0.01
Two periods	12,686	0.37
At distance	19,429	0.57
NA	6,180	0.18
Total	3,420,734	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Approximately less than 1% (0.02%) of students do not attend classes due to lack of economic resources, 0.01% due to school failure, 0.01% due to illness or disability, 0.001% due to lack of family support, 0.001% due to shortage of educational institutions, 0.01% are not interested, 0.08% due to lack of positions, 0.04% other, and 99.82% do not attend classes (Table 6).

Table 6. Reason for not attending

	N	%
Lack of economic resources	629	0.02
School failure	482	0.01
Illness or disability	432	0.01
Lack of family support	28	0.001
Shortage of educational institutions	43	0.001
Not interested	328	0.01
Lack of positions	2,819	0.08
Other	1,419	0.04
NA	3,414,554	99.82
Total	3,420,734	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Approximately less than 1% (0.17%) of the students' parents speak only indigenous language, 9.11% indigenous and Spanish language, 89.74% only Spanish, 0.97% Spanish and

foreign language, 0.002% indigenous language and foreign language, 0.001% foreign language and 0.01% do not speak (Table 7).

Table 7. Parents' language

	N	%
Only Indigenous language	5,798	0.17
Indigenous and Spanish language	311,710	9.11
Only Spanish	3,069,684	89.74
Spanish and foreign language	33,047	0.97
Indigenous language and foreign language	76	0.002
Foreign language	21	0.001
Do not speak	398	0.01
Total	3,420,734	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Approximately less than 1% (0.15%) of students speak only indigenous language, 6.16% speak indigenous and Spanish language, 93.00 % only Spanish, 0.53% Spanish and foreign language, 0.01% indigenous and foreign language, 0.3% foreign language, and 0.03% do not speak (Table 8).

Table 8. Students' language

	N	%
Only indigenous language	5,294	0.15
Indigenous and Spanish language	210,591	6.16
Only Spanish	3,181,123	93.00
Spanish and foreign language	18,005	0.53
Indigenous language and foreign language	229	0.01
Foreign language	4,302	0.13
Do not speak	1,190	0.03
Total	3,420,734	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Approximately 11% of students consider themselves indigenous, 1.34% Afro-Ecuadorian, 2.09% black, 1.40% Mulatto, 4.72% Montubio, 78.41% Mestizo, and 1.42% White (Table 9).

Table 9. Ethnic self-identification

	N	%
Indigenous	362,467	10.60
Afro-Ecuadorian	45,882	1.34
Black	71,648	2.09
Mulatto	47,827	1.40
Montubio	161,316	4.72
Mestizo	2,682,214	78.41
White	48,730	1.42
Other	650	0.02

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Approximately 81% of students were born in the same city they are living now, 18.14% were born elsewhere in the country, and 1.36% were born in another country (Table 10).

Table 10. Place of birth

	N	%
In this city	2,753,721	80.50
Elsewhere in the country	620,611	18.14
In other country	46,402	1.36
Total	3,420,734	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Approximately 8% of students use cellphones, and 90.96% do not use cellphones (Table 11).

Table 11. Use of cellphones

	N	%
Yes	283,052	8.27
No	3,111,521	90.96
NA	26,161	0.76
Total	3,420,734	100.00

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Approximately only 4% of students use smartphones (Table 12).

Table 12. Use of smartphone

	N	%
Yes	126,996	3.71%
No	156,055	4.56%
NA	3,137,682	91.73%
Total	3,420,734	100.00%

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Approximately 59% of students have used computer during the last 12 months, and 40.72% have not used computer (Table 13).

Table 13. Use of computer during the last 12 months

	N	%
Yes	2,001,564	58.51
No	1,393,009	40.72
NA	26,161	0.76
Total	3,420,734	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Approximately fifty four percent of students used internet during the last 12 months, and 44.29% did not use internet (Table 14).

Table 14. Use of internet during the last 12 months

	N	%
Yes	1,879,639	54.95
No	1,514,934	44.29
NA	26,161	0.76
Total	3,420,734	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Approximately forty two percent of students are from the mountain region, 50.50% are from the coastal region, 6.63% are from the Amazon region, and 0.16% are from the insular region (Table 15).

Table 15. Natural region

	N	%
Mountain region	1,460,789	42.70%
Coastal region	1,727,419	50.50%
Amazon region	226,888	6.63%
Insular region	5,638	0.16%
Total	3,420,734	100.00%

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Approximately thirty two percent of students suffer income poverty, and 66.31% do not suffer income poverty (Table 16).

Table 16. Income poverty

	N	%
Not poor	2,268,391	66.31
Poor	1,120,067	32.74
NA	32,275	0.94
Total	3,420,734	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Approximately twelve percent of students are indigent, and 86.50% are not indigent (Table 17).

Table 17. Extreme income poverty

	N	%
Not indigent	2,958,853	86.50
Indigent	429,606	12.56
NA	32,275	0.94
Total	3,420,734	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

#### 4. Data analysis of Secondary Education students

There has been a descent (roughly 12 percent less) in both enrolment and attendance in the 15 to 17 age group, although, similar to the students between the ages of 5 and 14, the percentage of enrolled students (85.44%) basically corresponds to the percentage of students who attend class (85.31%) (Tables 18, 19 & 20).

Table 18. Enrolled in school year 2015-2016

	N	%
Yes	842,336	85.44
No	143,549	14.56
Total	985,885	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Table 19. Attend class

	N	%
Yes	841,021	85.31
No	144,864	14.69
Total	985,885	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Table 20. Enrolled in school year 2015-2016

	Attend class		Do not attend class	
	N	%	N	%
Yes	838,735	99.73%	3,601	2.49%
No	2,286	0.27%	141,263	97.51%
Total	841,021	100.00%	144,864	100.00%

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Comparatively speaking, the majority of the students who attend class are from urban areas (67.74%), which is more than twice the percentage of those who attend class from rural areas (32.26%). Yet, in the variable of non-attendance, the urban and rural areas had similar percentages 49.46% and 50.24% respectively (Table 21).

Table 21. Area

	Attend class		Do not attend class	
	N	%	N	%
Urban	569,732	67.74	72,082	49.76
Rural	271,289	32.26	72,782	50.24
Total	841,021	100	144,864	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Regarding gender, more boys (51.93%) than girls (48.17%) attend class, although this difference between the sexes is minimal (Table 22). However, taking into consideration that 2.47% (Table 23) of the population studied, cited 'pregnancy' as a reason for not attending class, and that as much as 12.95% of the girls who become

pregnant or are in the period of lactation (Table 24), do not attend class, it may be reasonable to assume that a contributing factor to the lower attendance of girls compared to that of boys, could be related to pregnancy and child-rearing, (in addition to other social factors regarding gender). Overall, however, the data shows that the predominant reason for not attending class is the lack of economic resources (32.54%), followed by a lack of interest (15.70%), work (11.31%) housework (10.08%), disease or disability (5.86%) and the lack of permission from the family (4.38%).

Table 22. Sex

	Attend class		Do not attend class	
	N	%	N	%
Male	436,705	51.93	69,777	48.17
Female	404,315	48.07	75,087	51.83
Total	841,021	100	144,864	100.00

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Table 23. Reason for not attending class

	N	%
Age	619	0.43
Finished studies	1,315	0.91
No money	47,134	32.54
School failure	5,557	3.84
Work	16,384	11.31
Disease or disability	8,495	5.86
House work	14,597	10.08
Not permitted by family	6,339	4.38
No educational institutions in the area	754	0.52
Not interested	22,741	15.70
Pregnancy	3,576	2.47
No space in schools	3,229	2.23
Other	14,124	9.75
Total	144,864	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Table 24. Pregnant or in the lactation period

	Attend class		Do not attend class	
	N	%	N	%
Yes	10,184	1.21	18,754	12.95
No	394,132	46.86	56,333	38.89
NA	436,705	51.93	69,777	48.17
Total	841,021	100	144,864	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

In terms of age, 15 year olds have the lowest incidence of non-attendance (19.67%), while the 17 year olds, the highest (48.10%) (Table 25).

Table 25. Age

	Attend class		Do not attend class	
	N	%	N	%
15	326,776	38.85	28,489	19.67
16	287,863	34.23	46,694	32.23
17	226,382	26.92	69,681	48.10
Total	841,021	100	144,864	100.00

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

The fact that there is less attendance as the subjects get older could be related to an increase in responsibilities, such as more housework or work resulting from a possible necessity or expectation on the part of the rest of the family members that the older teen contribute to the family income (Colbert de Arboleda et al., 1994). Additionally, it is possible that the older the subjects become the likelihood that they will form families of their own, given that as high as 21.64% are in common-law union (Table 26).

Table 26. Marital Status

	Attend class		Do not attend class	
	N	%	N	%
Married	6,806	0.81	1,767	1.22
Separated	1,911	0.23	2,562	1.77
Divorced	1,332	0.16	160	0.11
Widowed	47	0.01	0	0
Common-law union	11,975	1.42	31,355	21.64
Single	818,950	97.38	109,019	75.26
Total	841,021	100	144,864	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

The majority of the students surveyed attend class in the morning (70.77%), followed by 25.28% who attend class during the evening. A very small percentage (1.74%) attend class at night with a slightly higher percentage doing distance learning (1.80%) (Table 27).

Table 27. Shift attended

	N	%
Morning	595,158	70.77
Evening	212,611	25.28
Night	14,625	1.74
Full day	169	0.02
Two full days	3300	0.39
Distance learning	15,157	1.80
Total	841,021	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

In terms of language, the vast majority speak only Spanish (91.47%), so it is safe to assume that attendance is not affected by a language barrier (Table 28).



Table 28. Language spoken

	Attend class		Do not attend class	
	N	%	N	%
Only indigenous language	140	0.02	0	0
Indigenous language and Spanish	50,768	6.04	10,302	7.11
Only Spanish	780,599	92.82	132,500	91.47
Spanish and foreign language	7,903	0.94	505	0.35
Indigenous and foreign language	530	0.06	0	0
Foreign language	771	0.09	0	0
Do not speak	309	0.04	1,556	1.07
Total	841,021	100	144,864	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

The majority of the subjects surveyed who attend class identified themselves as ‘mestizo’ (79.65%), followed by 9.56% who considered themselves indigenous and about half that percentage (4.72%) thought of themselves as Montubio (Table 29).

Table 29. Ethnic self-identification

	Attend class		Do not attend class	
	N	%	N	%
Indigenous people Afro-	80,428	9.56	17,704	12.22
Ecuadorian	7,917	0.94	2,023	1.40
Black	18,659	2.22	3,241	2.24
Mulatto	11,437	1.36	1,795	1.24
Montubio	39,702	4.72	12,886	8.90
Mestizo	669,849	79.65	104,368	72.05
White	12,741	1.51	2,847	1.97
Other	288	0.03	0	0
Total	841,021	100	144,864	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Logically since the sample population came from the age group of 15 to 17 year olds, there is an underrepresentation in the category of ‘pensioner’, both in terms of attendance (0.002%) and non-attendance (0.16%) (Table 30). The overwhelming majority of the subjects who attend class are logically students (90.03%), while the majority of those who do not attend class, almost half of the surveyed population (46.41%), are not students but rather teenagers who do not find any of the categories (pensioner, student, housewife, disabled, other) applicable. Interestingly, the second highest percentage of those who do not attend class, comes from the category of housewife (27.76%), followed closely by 20.06% who stated their status of inactivity as ‘other’. Disability (5.62%) was not a principal reason for not attending class.

Table 30. Status of inactivity

	Attend class		Do not attend class	
	N	%	N	%
Pensioner	17	0.002	225	0.16
Student	759,453	90.30	0	0
House-wife	0	0.00	40,208	27.76
Disabled	0	0.00	8,141	5.62
Other	455	0.05	29,059	20.06
NA	81,096	9.64	67,231	46.41
Total	841,021	100	144,864	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

The majority of the subjects who attend class do not find any of the categories of this job-related variable applicable, which would seem coherent given that it is a population sample from the age group of 15 to 17 year olds and who are therefore not likely to be well represented in job related issues (Table 31). Despite this, however, over 50% of the surveyed subjects who attend class do not find the categories in this variable applicable to their situation. On the other hand, it also follows that 27.76% of those who do not attend class are happy with their jobs compared to an 8.32% who are happy with their jobs and attend class. It would make sense that there is a higher percentage of non-attendance among those who are happy with their jobs, since the level of happiness at work could inversely affect the level of interest in school. That said, the percentage of those who attend class and are happy with their jobs (8.32%) is roughly the same as that of those who do not attend class and are unhappy with their jobs (8.64%). This would suggest that happiness at work affects more the level of non-attendance (27.76% of those who do not attend class are happy at work) than it does the level of attendance, and being miserable at work has no great impact on the attendance of classes.

Table 31. The level of happiness at work

	Attend class		Do not attend class	
	N	%	N	%
Happy	69,946	8.32	40,215	27.76
Not very happy	6,109	0.73	12,516	8.64
Unhappy but conformant	3,647	0.43	5,006	3.46
Completely unhappy	253	0.03	1,738	1.20
NA	761,065	90.49	85,389	58.94
Total	841,021	100	144,864	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Interestingly, the highest percentage of attendance is represented by the subjects in public schools (81.17%) whereas as low as a quarter of those who attend school (14.54%) are from private institutions (Table 32). This could mean that public schools have a stricter policy of school attendance although more data is needed to determine whether or not the majority of the sample population come from public schools, that is, if there is an equal representation of public and private schools in the survey.

Table 32. The institute in which they are enrolled

	Attend class		Do not attend class	
	N	%	N	%
Public	682,657	81.17	3,445	2.38
Private	122,267	14.54	156	0.11
Semi-private, municipal	33,811	4.02	0	0
NA	2,286	0.27	141,263	97.51
Total	841,021	100	144,864	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Approximately 54.4% of the 15 to 17 year olds who attend class do not have an activated cellular phone, while a slightly higher percentage of those who do not attend class, do not have an activated cellular phone (58.93 %). That is, not having a cellular phone would seem to have affected attendance in a negative way, although the difference between percentages is too small to make any assumptions (Table 33).

Table 33. Use of cellphone

	Attend class		Do not attend class	
	N	%	N	%
Yes	360,545	42.87%	52,600	36.31%
No	457,523	54.40%	85,361	58.93%
NA	22,953	2.73%	6,902	4.76%
Total	841,021	100.00%	144,864	100.00%

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

In general, however, there are less teenagers who attend class who have access to cellular phones (42.87%) than those who attend class and do not (54.4%). Those who do have phones, attend class more than those who own an active phone but do not attend class, by almost 6%. Likewise, those who have smartphones registered 23.75% of attendance to the 12.55% of non-attendance of those who own smartphones. The percentage of those who do not attend class and do not have smartphones (23.76%) is similar to those who attend class but do not have smartphones (19.12%) (Table 34).

Table 34. Use of smartphone

	Attend class		Do not attend	
	N	%	N	%
Yes	199,770	23.75	18,174	12.55
No	160,775	19.12	34,427	23.76
NA	480,476	57.13	92,264	63.69
Total	841,021	100	144,864	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

On the other hand, where technology is still concerned, as high as 89.86% of those who attend class, have had access to a computer in the past 12 months, compared to 47.11% of those who do not attend class and have not had access to a computer. Nevertheless, the percentages of non-attendance of both those who have used a computer in the past year (48.12%) is quite similar to those who have not used a computer in the past year (47.11%). There seems to be no notable difference between having and not having used a computer where class attendance is concerned (Table 35).

Table 35. Use of computer in the past 12 months

	Attend class		Do not attend class	
	N	%	N	%
Yes	755,747	89.86	69,713	48.12
No	62,321	7.41	68,249	47.11
NA	22,953	2.73	6,902	4.76
Total	841,021	100	144,864	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

There are similar statistics between those who have had access to a computer over the past 12 months and those who have accessed the internet over the same period of time, suggesting that those who have had access to the internet, have done so through the computer. Conversely, up to 90.13% of those who attend class have had access to the internet, quite similar to the 89.86% of those who attend class and have used a computer over the past 12 months. Although it may be tempting to assume that having access to the internet improves class attendance, what is probably more likely is that the school provides access to the internet (Table 36).

Table 36. Use of internet in the past 12 months

	Attend class		Do not attend class	
	N	%	N	%
Yes	757,974	90.13	70,808	48.88
No	60,094	7.15	67,154	46.36
NA	22,953	2.73	6,902	4.76
Total	841,021	100	144,864	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

The largest representation of those who attend class comes from the mountain and coastal regions. In fact, almost half of the population (49.85%) who attend class are from the coastal region, followed by 44.14% who are from the mountain region. A very small percentage (5.91%) of the school attending population from the sample, comes from the Amazon Region. Curiously, the highest percentage of those who do not attend class, also comes from the coastal region (59.19%) (Table 37).

Table 37. Natural Region

	Attend class		Do not attend class	
	N	%	N	%
Mountain Region	371,200	44.14	49,581	34.23
Coastal Region	419,230	49.85	85,742	59.19
Amazon Region	49,677	5.91	9,477	6.54
Insular Region	914	0.11	64	0.04
Total	841,021	100	144,864	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

Around 90.45% of the population sampled who attend class, cannot be categorized in any of the job-related activities stated, which would appear to have its logic given the fact that the sample represents the age group of 15 to 17 year olds. Similarly, a high percentage of those who do not attend class (58.75%), also belong to the 'not applicable' category compared to that of those who do not attend class. Nevertheless, as high as a quarter of the population (24.89%) who do not attend class, are dedicated to agriculture, livestock farming, hunting, forestry and fishing. Nevertheless, given the relatively high attendance rate among Ecuadorian teenagers, it may be reasonable to conclude (at least, in this decade) that for the most part, those who attend class do not have jobs and that it may be an important but not a predominant contributing factor to school absenteeism (Table 38).

Table 38. Type of activity

	Attend class		Do not attend class	
	N	%	N	%
Agriculture, live-stock farming, hunting, forestry and fishing	46,867	5.57	36,051	24.89
Mining and quarrying	5,394	0.64	3,240	2.24
Distribution of water and drainage	0	0	71	0.05
Construction	678	0.08	4,392	3.03
Commerce and vehicle repair	14,996	1.78	8,840	6.10
Transport and storage	1,129	0.13	1,518	1.05
Accommodation and food storage	5,562	0.66	2,875	1.98
Information and communication	1,418	0.17	242	0.17
Professional, scientific and technical activities	185	0.02	41	0.03
Administrative services and support	471	0.06	505	0.35
Teaching	0	0.00	55	0.04
Social services and health	1,180	0.14	0	0
Arts, entertainment and recreation	115	0.01	186	0.13
Other service activities	1,555	0.18	1,304	0.90
Domestic services in private homes	801	0.10	435	0.30
NA	760,669	90.45	85,109	58.75
Total	841,021	100	144,864	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

On the other hand, when we look at job suitability under the 'activity status' variable, we can appreciate that as many as 41.25% of the teenagers who do not attend class, are involved in some form of employment (whether it be 'suitable employment', 'underemployment due to insufficient work time', 'underemployment due to insufficient earnings', 'other unsuitable employment' or 'unpaid employment'), indicating that these adolescents, although not well represented in numbers in the formal job sector, may well be involved in higher numbers in the informal job sector (Table 39). In terms of job activity, the vast majority of the surveyed teenagers (90.36%) who attend class declared that they were economically inactive, followed by 7.70% who attend class but exercise some form of unpaid employment. Similarly, the highest percent of those who do not attend class are also from the economically inactive category (53.59%), which is somewhat to be expected since these statistics represent a very young sector of the population, teenagers between the ages of 15 and 17.

The second highest percentage in the non-attendance column, however, comes from the 'unpaid employment' category (14.39%), followed by the category of 'other unsuitable employment' (13.13%). Additionally, 5.21% of those who do not attend class are in unsuitable employment. If we were to calculate the percentage of teens between the ages of 15 and 17 who do not attend class and are involved in some form of employment, then the percentage would be as high as 32.73%. Conversely, 6.21% of those who do not attend class declared themselves to be in the category of underemployment due to insufficient work, which indicates the intention to find employment, signifying that a little under half of the surveyed population who do not attend class either need to be or would rather be working.

Table 39. Activity status

	Attend class		Do not attend class	
	N	%	N	%
Suitable job	1,193	0.14	7,547	5.2
Underemployment due to insufficient work	3,320	0.39	8,994	6.21
Underemployment due to insufficient income	914	0.11	3,347	2.31
Other unsuitable employment	10,125	1.20	19,021	13.13
Unpaid employment	64,799	7.70	2,847	14.39
Open unemployment	468	0.06	3,558	2.46
Hidden unemployment	277	0.03	3,917	2.70
Economically inactive population	759,925	90.36	77,633	53.59
Total	841,021	100	144,864	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

In fact, Colbert de Arboleda, Himes, and Mendez (1994) hold that many employment surveys, apart from being mainly preoccupied with the urban population, are more concerned with the formal job sector as opposed to the informal one where the vast majority of adolescents work either part or full time. The ENEMDU survey has three options under the 'activity status' that could possibly be used to address this gap regarding informal job related activities ('unpaid work', 'other service activities' or 'domestic services in private homes') but they are inadequate.

This means that there is a failure to recognise ‘excessive home-based work’ (Colbert de Arboleda, Himes & Mendez, 1994) in which many of the young girls are involved, in addition to the fact that much of the information concerning the informal sector is difficult to come by since they are related to illegal and hazardous activities.

The greater part of the students who go to school (72.94%) are not poor but the majority of the students who do not attend school are also not poor (63.51%). Nevertheless, there is a higher percentage of subjects who do not attend class who are poor (35.9%) than those who attend class who are poor (26.03%). That said, however, given the fact that the majority of the students who do not attend class are not poor (63.51%), it would appear that poverty does not have as big of an impact on the level of non-attendance as is normally assumed (Orazem, Sedlacek, & Tzannatos, 2009) or at least that the influence of poverty on attendance levels has been reduced (INEC, 2015) (Table 40).

Table 40. Income poverty

	Attend class		Do not attend class	
	N	%	N	%
Not poor	613,464	72.94	91,997	63.51
Poor	218,918	26.03	52,132	35.99
NA	8,638	1.03	734	0.51
Total	841,021	100	144,864	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

The same pattern is reflected in the statistics of extreme poverty, in the sense that the majority of the 15 to 17 year old students who attend class (89.79%), are not indigent, a large majority which is repeated in those who do not attend class yet are not indigent (85.51%). Nevertheless, the statistics show that the percentage of those who do not attend class and are indigent is slightly higher (13.98%) than the percentage of those who do attend class and are indigent (9.19%) (Table 41). Consequently indigence, like poverty, would still seem to have an impact on non-attendance.

Table 41. Extreme income poverty

	Attend class		Do not attend class	
	N	%	N	%
Not indigent	755,119	89.79	123,878	85.51
Indigent	77,263	9.19	20,251	13.98
NA	8,638	1.03	734	0.51
Total	841,021	100	144,864	100

Source: Instituto Nacional de Estadística y Censos - INEC (2006). *Encuesta Nacional de Empleo, Desempleo y Subempleo - ENEMDU, 2006*. Quito, Ecuador.

## 5. Conclusion

The objective of the study was to examine the social profile of Basic and Secondary Education students in Ecuador by means of a statistical analysis of this sector of the Ecuadorian population based on data from the National Survey of Employment, Unemployment and Underemployment from 2015. The variables investigated were: area, gender, age, language spoken, ethnic self-identification, condition of activity and inactivity, school enrollment, use of smartphone, use of computer during the last months, use of internet during the last 12 months, natural region, income poverty, occupational group and the level of happiness at work (Kampouroupoulou et al, 2015; Stefos, 2015).

The analysis of the data showed that 78.41% of students of Basic General Education in Ecuador consider themselves mestizo and 10.60% indigenous; 93.00% speak only Spanish and 6.16% speak indigenous and Spanish language; 82.44% attend classes in the morning and 15.91% in the afternoon; only 0.18% of the students do not attend classes; 8.27% of students use cellphones, 3.71% smartphones, 58.51% computers and 54.95% internet; 32.74% of students suffer income poverty and 12.56% are indigent (Stefos et al, 2011).

A simple comparative analysis between the percentages of Secondary Education students enrolled in (72.91%) and attending school (71.81%) in 2006 as opposed to those enrolled in (85.44%) and going to school (85.31%) in

2015 (INEC, 2006, 2015), is indicative of the fact that Ecuador is on the path to achieving some of the principal objectives laid out in the Decennial Plan of Education (MEC, n/d). Nevertheless, change not only calls for a change in numbers but a transformation in economic conditions and mentality as well. Historically in Latin America and in Ecuador in particular, poverty has made the school going population of children and young adolescents vulnerable to obligatory labour, particularly among the indigenous population in rural areas (Orazem, Sedlacek, & Tzannatos, 2009).

López & Tedesco & (2002) talk about the place of school being 'usurped' by consumption and hence, the market in youth culture in which more prominence is given to the present than to the future. This implies that the young people of today may be more concerned about the immediate gratification of consumption permitted by money, than the less tangible expectant long term benefits of a good education (Stefos & Efstathiou, 2013). However, despite the fact that the statistical data were insufficient to provide conclusive evidence regarding changing attitudes in the population towards education, we were able to determine certain characteristics among the Secondary Education students surveyed regarding attendance. The ratio of enrolment to attendance within the respective age groups of 5 to 14 year olds and 15 to 17 year olds was basically the same. Nevertheless, there is a 12 percent drop in both enrolment and attendance between 15 to 17 year olds and 5 to 14 year olds. The percentage of students who attend class from the urban areas (67.74%) is roughly twice the amount of those who attend from the rural areas (32.26%).

The gender gap between boys (51.93%) and girls (48.17%) between the ages of 15 and 17 who attend class is very minimal. This slight difference may be attributable to maternity (2.47% of the girls surveyed cited 'pregnancy' as the principal reason for not attending class and as much as 12.95% of the girls who become pregnant or are breastfeeding do not attend class) although there is no conclusive evidence of this in the data collected. Fifteen year olds have the lowest percentage of truancy (19.67%) as opposed to the 17 year olds who have the highest (48.10%). A very small percentage of the surveyed teenagers attend night school (1.74%), with the vast majority attending school in the morning (70.77%). This may itself be indicative

of the low incidence of students in the work force. The majority of the adolescents in this study speak Spanish as their first language (91.47%), ruling out the language barrier as one of the possible explanations for non-attendance in this age group. The majority of the subjects who attend class identified themselves as mestizos (79.65%), although an equally high percentage of this ethnic group make up the majority of those who do not attend class (72.05%). Regarding the status of inactivity, the great majority of those who attend class (90.03%) have no other activity but school. Despite this, however, more than a quarter of the population who do not attend class (27.76%) are 'housewives' and another 24.89% are involved in agriculture, livestock farming, hunting, forestry or fishing. Hence, to some extent adolescent labour (whether formal or informal) would seem to have some sort of impact on school attendance. With regard to the cost of education, roughly one third (32.54%) of the subjects surveyed declared the lack of economic funds as the principal reason for not attending school. As it stands, poor students make up the minority of the adolescents who attend school (26.03%) and also the minority (albeit a larger minority) of those who do not attend school (35.99%), leading us to believe that poverty may still be an influential factor in school attendance in Ecuador. The percentage of indigent students who do not attend class (13.88%) is higher than those who do (9.19%). Although the majority of students who attend school are not apparently involved in any job related activities, the degree of happiness on the job of those who are may adversely affect attendance as the number of students who attend class and are happy in their jobs is almost a third (8.32%) of those who are satisfied with their jobs and do not attend class (27.76%). The type of institution attended would also appear to affect attendance, with the highest percentage of attendance (81.17%) being found in public schools as opposed to the percentage of students who attend school and are from private schools (14.54%). Due to insufficient data, it is difficult to assess, however, whether this is due to a larger number public as opposed to private schools, a greater number of students enrolled in public schools or simply a stricter policy in public schools with regards to attendance.

With relation to technology, there is not a huge difference between students who attend class and have an activated cellular phone

(42.87%) and those who attend class but do not have an activated cellular phone (54.4%). More than an indicator of the likelihood of attendance, the possession or not of an activated cellular could be taken as indicative of the economic status of the student as more than half of the population who do not attend class (58.93%) do not own a cellular phone, which brings us back to the relationship between limited economic funds and school attendance. On the other hand, with regards to non-attendance, there seems to be no notable difference between those students who do not attend class and have had access to a computer over the past 12 months (48.12%) and those who do not attend class and have not had access to a computer in the past year (47.11%). In terms of region, the coastal (49.85%) and the mountain (44.14%) regions make up the vast majority of the school attending population, although the highest percentage of truancy comes from the coastal region (59.19%).

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