# An Analysis of the Social Profile of 15 to 17 Year Old Students in Ecuador Regarding Secondary School Attendance and Truancy

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## Abstract

The objective of this study is to examine the factors influencing school attendance among the secondary school population between the ages of 15 and 17 in Ecuador, by means of a descriptive and multidimensional analysis of statistical data principally from the 2015 National Survey of Employment, Unemployment and Underemployment of Ecuador (ENEMDU). The descriptive analysis demonstrates the frequency and percentages of the variables used in the investigation, while comparing the social characteristics of student attendees and absentees in this age group. This descriptive analysis was conducted in order to provide a more enlightening profile of attendance and truancy regarding this sector of the student population whereas the method of multidimensional statistical analysis used was the hierarchical analysis which classifies the students in clusters according to their common traits.

Keywords: Ecuador, secondary school students, social profile, truancy

## 1. Introduction

In 2006 the Ecuadorian government, specifically the Ministry of Education and Culture, put together a ten-year plan referred to as the Decennial Plan of Education (El Plan Decenal de Educación) (MEC, 2006), to universalize access to primary, secondary and upper secondary education, increase the student population of upper secondary education, eradicate illiteracy, improve the quality of life of Ecuadorian citizens, contribute to the reduction of poverty and foment tolerance and respect for all ethnicities and nationalities that constitute Ecuador.

This plan may be considered a success if we focus on the marked increase in the number of adolescents between the ages of 12 and 17 who receive schooling. Case in point, in 2001, the percentage of 12 to 17 year olds of the lower class enrolled in school was as low as 51.6% compared to the figure of 80.2% in 2014, similarly there has been improvement in this same age group among the middle and upper classes with an increase from 81.6% to 90.9% and 93.9% to 95.6% respectively (SITEAL, 2001/2014). However, one of the most effective ways to determine the validity of the educational system or student outcomes is by looking at the enrolment and attendance rates of the pupils (Rivers, 2010). These rates are seen as tangible evidence that education is reaching the sector of the population being targeted (UNICEF, 2011).

As a result, for this present study, we have chosen to focus on the teenage population of 15 to 17 years old (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

As mentioned before, the statistical information in this article is derived mainly from the 2015 National Survey of Employment, Unemployment and Underemployment of Ecuador (INEC, 2015), which, given the objective of the present study, led to the undertaking of a descriptive and a hierarchical analysis, with the former used to

present, in a more simplified manner, the frequency and percentages of the variables under investigation (Papapostolou & Stefos, 2013; Athanasiadis, 1995), and the latter, the hierarchical analysis, to illustrate the interrelationship between the variables of the survey while helping to define groups of people according to their shared characteristics. The hierarchical analysis is represented in a graph illustrating the classification that connects these clusters (Papapostolou et al., 2013). SPAD v 4.5 software, offered by the Faculty of Humanities of the University of the Aegean, was used to analyse the data.

## 3. The Descriptive Analysis

The percentage of students enrolled in school between the ages of 5 and 14 (97.54%) is virtually the same as the percentage of the students of this age group who attend class (97.52%). There is a high enrolment and attendance rate among the students of this age group (Tables 1 & 2).

 n
 %

 Yes
 3265205
 97.54%

 No
 82402
 2.46%

 Total
 3347607
 100.00%

Table 1. Enrolled in the school year 2015-2016 (ages 5-14)

Table 2. Attend class (school year 2015-2016, ages 5-14)

	n	%
Yes	3264503	97.52%
No	83105	2.48%
Total	3347607	100.00%

On the other hand, 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 3, 4 & 5).

Table 3. Enrolled in school year 2015-2016 (ages 15-17)

	n	%
Yes	842336	85.44%
No	143549	14.56%
Total	985885	100.00%

Table 4. Attend class (school year 2015-2016, ages 15-17)

-		
	n	%
Yes	841021	85.31%
No	144864	14.69%
Total	985885	100.00%

Table 5. Enrolled in school year 2015-2016 (ages 15-17)

-	Attend class		Do not at	ttend class
	n	%	n	%
Yes	838735	99.73%	3601	2.49%
No	2286	0.27%	141263	97.51%
Total	841021	100.00%	144864	100.00%

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 6).

## Table 6. Area (ages 15-17)

	Attend class		Do not at	tend class
	n	%	n	%
Urban	569732	67.74%	72082	49.76%
Rural	271289	32.26%	72782	50.24%
Total	841021	100.00%	144864	100.00%

Regarding gender, more boys (51.93%) than girls (48.17%) attend class, although this difference between the sexes is minimal (Table 7). However, taking into consideration that 2.47% (Table 8) 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 9), 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 7. Sex (ages 15-17)

	Attend class		Do not at	ttend class
	n	%	n	%
Male	436705	51.93%	69777	48.17%
Female	404315	48.07%	75087	51.83%
Total	841021	100.00%	144864	100.00%

Table 8. Reason for not attending class (ages 15-17)

	n	%
Age	619	0.43%
Finished studies	1315	0.91%
No money	47134	32.54%
School failure	5557	3.84%
Work	16384	11.31%
Disease or disability	8495	5.86%
House work	14597	10.08%
Not permitted by family	6339	4.38%
No educational institutions in the area	754	0.52%
Not interested	22741	15.70%
Pregnancy	3576	2.47%
No space in schools	3229	2.23%
Other	14124	9.75%
Total	144864	100.00%

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Table 9. Flegha		lactation	periou	lages	13-1/)	
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	Attend class		Do not at	tend class
	n	%	n	%
Yes	10184	1.21%	18754	12.95%
No	394132	46.86%	56333	38.89%
NA	436705	51.93%	69777	48.17%
Total	841021	100.00%	144864	100.00%

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 10).

### Table 10. Age

	Attend class		Do not attend class	
	n	%	n	%
15	326776	38.85%	28489	19.67%
16	287863	34.23%	46694	32.23%
17	226382	26.92%	69681	48.10%
Total	841021	100.00%	144864	100.00%

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 11).

	Attend class		Do not a	ttend class
	n	%	n	%
Married	6806	0.81%	1767	1.22%
Separated	1911	0.23%	2562	1.77%
Divorced	1332	0.16%	160	0.11%
Widowed	47	0.01%	0	0.00%
Common-law union	11975	1.42%	31355	21.64%
Single	818950	97.38%	109019	75.26%
Total	841021	100.00%	144864	100.00%

Table 11. Marital status (ages 15-17)

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 12).

### Table 12. Shift attended (ages 15-17)

	n	%
Morning	595158	70.77%
Evening	212611	25.28%
Night	14625	1.74%
Full day	169	0.02%
Two full days	3300	0.39%
Distance learning	15157	1.80%
Total	841021	100.00%

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 13).

 Table 13. Language spoken (ages 15-17)

	Attend class		Do not attend class	
	n	%	n	%
Only indigenous language	140	0.02%	0	0.00%
Indigenous language and Spanish	50768	6.04%	10302	7.11%
Only Spanish	780599	92.82%	132500	91.47%
Spanish and foreign language	7903	0.94%	505	0.35%
Indigenous and foreign language	530	0.06%	0	0.00%
Foreign language	771	0.09%	0	0.00%
Do not speak	309	0.04%	1556	1.07%
Total	841021	100.00%	144864	100.00%

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 14).

Table 14. How the subjects identify themselves (ages 15-17)

	Attend class		Do not a	attend class
-	n	%	n	%
Indigenous people	80428	9.56%	17704	12.22%
Afro-Ecuadorian	7917	0.94%	2023	1.40%
Black	18659	2.22%	3241	2.24%
Mulatto	11437	1.36%	1795	1.24%
Montubio	39702	4.72%	12886	8.90%
Mestizo	669849	79.65%	104368	72.05%
White	12741	1.51%	2847	1.97%
Other	288	0.03%	0	0.00%
Total	841021	100.00%	144864	100.00%

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 15). 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.

	Attend class		Do not at	ttend class
	n	%	n	%
Pensioner	17	0.002%	225	0.16%
Student	759453	90.30%	0	0.00%
Housewife	0	0.00%	40208	27.76%
Disabled	0	0.00%	8141	5.62%
Other	455	0.05%	29059	20.06%
NA	81096	9.64%	67231	46.41%
Total	841021	100.00%	144864	100.00%

Table 15. Status of inactivity (ages 15-17)

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 16). 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 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 16. The	e level of hap	piness at wor	k (ages 15-17)
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	Attend class		Do not attend class	
-	n	%	n	%
Нарру	69946	8.32%	40215	27.76%
Not very happy	6109	0.73%	12516	8.64%
Unhappy but conformant	3647	0.43%	5006	3.46%
Completely unhappy	253	0.03%	1738	1.20%
NA	761065	90.49%	85389	58.94%
Total	841021	100.00%	144864	100.00%

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 17). 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.

	Attend class		Do not at	ttend class
-	n	%	n	%
Public	682657	81.17%	3445	2.38%
Private	122267	14.54%	156	0.11%
Semi-private, municipal	33811	4.02%	0	0.00%
NA	2286	0.27%	141263	97.51%
Total	841021	100.00%	144864	100.00%

#### Table 17. The institute in which they are enrolled

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 18).

Table 18. Have an activated cellular phone (ages 15-17)

	Attend class		Do not at	tend class
	n	%	n	%
Yes	360545	42.87%	52600	36.31%
No	457523	54.40%	85361	58.93%
NA	22953	2.73%	6902	4.76%
Total	841021	100.00%	144864	100.00%

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 19).

Table 19. Have a smartphone (ages 15-17)

	Attend class		Do not attend		
	n	%	n	%	
Yes	199770	23.75%	18174	12.55%	
No	160775	19.12%	34427	23.76%	
NA	480476	57.13%	92264	63.69%	
Total	841021	100.00%	144864	100.00%	

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 20).

	Attend class		Do not at	Do not attend class		
	n	%	n	%		
Yes	755747	89.86%	69713	48.12%		
No	62321	7.41%	68249	47.11%		
NA	22953	2.73%	6902	4.76%		
Total	841021	100.00%	144864	100.00%		

Table 20. Have used a computer in the past 12 months (ages 15-17)

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 21).

Table 21. Have used the Internet in the past 12 months (ages 15-17)

	Attend class		Do not attend class		
	n	%	n	%	
Yes	757974	90.13%	70808	48.88%	
No	60094	7.15%	67154	46.36%	
NA	22953	2.73%	6902	4.76%	
Total	841021	100.00%	144864	100.00%	

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 22).

Table 22. Native region (ages 15-17)

	Attend class		Do not attend class	
-	n	%	n	%
Mountain Region	371200	44.14%	49581	34.23%
Coastal Region	419230	49.85%	85742	59.19%
The Amazon Region	49677	5.91%	9477	6.54%
Insular Region	914	0.11%	64	0.04%
Total	841021	100.00%	144864	100.00%

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 23).

## Table 23. Type of activity (ages 15-17)

	Attend class		Do not attend class	
	n	%	n	%
Agriculture, livestock farming, hunting, forestry and fishing	46867	5.57%	36051	24.89%
Mining and quarrying	5394	0.64%	3240	2.24%
Distribution of water and drainage	0	0.00%	71	0.05%
Construction	678	0.08%	4392	3.03%
Commerce and vehicle repair	14996	1.78%	8840	6.10%
Transport and storage	1129	0.13%	1518	1.05%
Accomodation and food storage	5562	0.66%	2875	1.98%
Information and communication	1418	0.17%	242	0.17%
Professional, scientific and technical activities	185	0.02%	41	0.03%
Aministrative services and support	471	0.06%	505	0.35%
Teaching	0	0.00%	55	0.04%
Social services and health	1180	0.14%	0	0.00%
Arts, entertainment and recreation	115	0.01%	186	0.13%
Other service activities	1555	0.18%	1304	0.90%
Domestic services in private homes	801	0.10%	435	0.30%
NA	760669	90.45%	85109	58.75%
Total	841021	100.00%	144864	100.00%

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 24). 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.

	Atten	Attend class		Do not attend class	
	n	%	n	%	
Suitable job	1193	0.14%	7547	5.21%	
Underemployment due to insufficient work	3320	0.39%	8994	6.21%	
Underemployment dues to insufficient income	914	0.11%	3347	2.31%	

Table 24. Activity status (ages 15-17)

Other unsuitable employment	10125	1.20%	19021	13.13%
Unpaid employment	64799	7.70%	20847	14.39%
Open unemployment	468	0.06%	3558	2.46%
Hidden unemployment	277	0.03%	3917	2.70%
Economically inactive population	759925	90.36%	77633	53.59%
Total	841021	100.00%	144864	100.00%

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 25).

	Attend class		Do not attend class	
	n	%	n	%
Not poor	613464	72.94%	91997	63.51%
Poor	218918	26.03%	52132	35.99%
NA	8638	1.03%	734	0.51%
Total	841021	100.00%	144864	100.00%

Table 25. Income poverty (ages 15-17)

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 26). Consequently indigence, like poverty, would still seem to have an impact on non-attendance.

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	Attend class		Do not attend class	
	n	%	n	%
Not indigent	755119	89.79%	123878	85.51%
Indigent	77263	9.19%	20251	13.98%
NA	8638	1.03%	734	0.51%
Total	841021	100.00%	144864	100.00%

### 4. The Hierarchical Analysis

The hierarchical analysis consisted of five groups which are illustrated below in Figure 1 (Stefos & Koulianidi, 2016; Sarmiento et al., 2016).



Figure 1. The classification chart

#### First cluster (6.61% of the sample)

The subjects of the first group are housewives, the majority of whom are either pregnant or in the period of lactation, and who do not go to class because they lack the economic resources to do so. This group also represents subjects who have not used a computer in the past 12 months.

#### Second cluster (7.20% of the sample)

The people of the second group have also responded that they do not go to class due to lack of funds. They are, nonetheless, content with their field of work, which is agriculture and livestock farming. The majority of these workers live in rural areas.

#### Third cluster (11.40% of the sample)

Some of the surveyed subjects of the third group also work in agriculture and livestock farming while others have unpaid jobs. Nevertheless, similar to group two, they are content with their line of work, although, unlike group two, these subjects attend school. They live in the rural areas and the majority of them are indigenous people.

#### Fourth cluster (38.04% of the sample)

The fourth group consists of young men who are single and who attend class. They live in urban areas and the majority of them are on the morning shift.

## Fifth cluster (36.76% of the sample)

The fifth group is made up of female students on the morning shift, who in general, do not think of themselves as poor. Additionally, unlike the women of the first group, the majority of whom are either pregnant or in the nursing stage, they have used a computer in the past 12 months.

These differences between the groups are illustrated in Figure 2 where the Correspondence Analysis graph (factorial level 1x2) displays the centroids of the five groups in the two axes. In addition to this, it defines the differences and similarities between the subjects of the five groups (Benzécri, 1992).



Figure 2. Analysis of multiple correspondences

### 5. Conclusion

A simple comparative analysis between the percentages of Ecuadorian adolescents between the ages of 15 and 17 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, particulary among the indigenous population in rural areas (Orazem, Sedlacek, & Tzannatos, 2009).

López and 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 15 to 17 year olds 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%).

In the framework of this study, a multidimensional statistical analysis was performed, which confirmed the results of the descriptive analysis (Valdivieso et al., 2017; Stefos et al., 2011). The statistical sources of information were able to shed light on the general characteristics of the school attending population of 15 to 17 year olds, nevertheless, there is still need for further studies particularly as they relate to informal work done by adolescents for family members (immediate or otherwise), which may be a hindrance to attendance (Koulianidi & Stefos, 2015; Stefos & Papapostolou, 2013). Additionally, information concerning attitudes towards education in both the adolescent and adult populations, the characteristics of the student's home environment and the quality of the education imparted (UNESCO, 2014) is needed in order to determine with more accuracy the factors which influence attendance. Only then will we be able to gain insight into the present state of education in Ecuador and the degree to which the recent changes in the educational system has led to an improvement in the lives of its most vulnerable citizens (Kampouropoulou et al., 2015; Stefos, 2015).

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