

## *Student Personality and Emotional Intelligence: Canton Ambato Case Study*

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### **Abstract**

The aim of this study was to evaluate the personality of students in the eighth, ninth and tenth years of the Private Educational Units of the Ambato-Ecuador canton, using the Eysenck Personality Test. Initially, we worked with a population of 287 students between 13 and 15 years of age of both sexes, the aspects evaluated by the questionnaire are the dimensions of the children's personality, these differential structures shape their relationships with learning situations and their adaptations to the social environment; however, the analysis of criterion "L" - Truthfulness, included in the questionnaire, led to the exclusion of 231 (80.48%) students from the research, originating the presentation of results based on 56 (19.52%) students. The dimensions evaluated were: (i) E = introversion - extroversion; (ii) N = stability - instability; and (iii) L = truthfulness (lie scale) where it was identified that most students are in an ambiverted range, characteristic of age, being able to be considered as flexible people who can be introverted and extroverted depending on social conditions, being this an incident aspect in the formation of emotional intelligence.

Keywords: Personality, Emotional Intelligence, Eysenck Test

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## Introduction

Emotional intelligence allows understanding, managing and examining the emotions of oneself and others, thus achieving positive effects and greater satisfaction with life (Rafique, 2020), it constitutes the human being's ability to perceive, evaluate and express emotions accurately, thus achieving to acquire and or produce feelings while promoting thinking and emotional awareness, which are responsible for regulating emotions, promoting emotional and intellectual growth (Gómez-Leal, 2021), on the other hand emotional intelligence can be understood as the ability to control one's own emotions and influence the emotions of others in any context involving problem solving (Millán-Franco, 2021), it is conceptualized as a combination of self-perceptions related to emotions and behaviors associated with the ability to recognize through information closely related to emotions (Delgado-Bello, 2021).

According to the above-mentioned emotional intelligence is a set of skills that can be assimilated in order to guide thoughts and thus social interaction (Ayala-Servín, 2021), when it comes to emotional intelligence, emotional stability is closely related, as it refers to a person's ability to maintain stability and balance. On the other hand, highly neurotic or emotionally unstable people tend to experience negative emotions easily (Ali Ahmed, 2020), in other words, emotional stability refers to the process by which people influence their emotions, the moments in which they perceive them and how they experience and express them (García Pardo, 2020).

When talking about emotional stability, the following personality traits should be taken into account: extroversion, agreeableness, neuroticism, rectitude and openness (Santos Pazos, Erazo Salcedo, & Mogrovejo Gualpa, 2019). The factors that make up the personality are: Openness to experience - closure before experience, responsibility - lack of responsibility, extraversion - introversion, agreeableness - opposition, and emotional stability - neuroticism (Guadalupe, 2021).

Extraversion - Introversion: Extroverts encompass approach behaviors rooted in the need for greater stimulation caused by cortical understimulation, while introverts demonstrate avoidance behaviors to inhibit overstimulation. Similarly, extroverts are more likely to engage in approach behaviors, usually associated with impulsivity, whereas introverts are more likely to engage in avoidance behaviors (Walker, 2020). Agreeableness - oppositionalism: This refers to the social relationship and the responses that are proposed to others. At one pole of this component would be items such as sympathy, generosity, faithfulness, gentleness or participation and, at the other, being icy, unfriendly, ruthless, stiff and ungrateful (Sanchez, 2020).

Responsibility - lack of responsibility: Reflects the level of organization, persistence, control and motivation in goal-directed behavior, and deals in essence with the way in which people conduct their work. The causative subjects could be those who are characterized by neatness, organization, accuracy, caution, efficiency or care, and at the other extreme would be the abandoned, disorderly, irresponsible, forgetful or independent people (Centelles, 2021). Emotional stability - neuroticism: neuroticism contrasts equality with instability in the emotional adjustment achieved by the individual, where there may be presence of negative affective states, such as anxiety, fear, sadness and guilt. Individuals with high levels of Neuroticism also tend to have irrational ideas and problems in controlling their impulses and coping with stressful situations. At the other extreme, subjects with low levels of Neuroticism are generally calm, controlled and relaxed (Cuyul, 2021).

Openness to experience - closure before experience: This is a new, albeit controversial, dimension that refers to the inquiry of experiences and the pleasure for the unknown and its experimentation. Those who are located at the preeminent end of this magnitude could be subjects with broad interests, original, curious, inventive, witty, ingenious, insightful, imaginative or sophisticated, while the opposite could be conventional individuals in their beliefs and reactions, conservative in their tastes, dogmatic and solid in their beliefs, with limited and unemotional interests (Ruiz, 2020).

## **Population**

In the development of the research, we have considered the students of the private educational units of the Ambato Canton who are part of a study population of a community outreach project.

To indicate the study population, technical exclusion criteria have been used due to the characteristics of the case study with the Eysenck personality questionnaire; initially 287 students from different Private Educational Units of Canton Ambato ranging between 13 and 15 years old are considered; subsequently, after analyzing the dimension "L" (scale of lies) immersed in the questionnaire, the scores obtained exceed the allowed value of "L" in the scales, so 231 students were excluded, the reasons are described in section 2. 5; finally, a study sample of 56 students belonging to eighth, ninth and tenth grades was defined.

In addition, prior to the study, an informed consent was socialized and applied to the students' parents, who agreed to their participation in the assessment process; thus, the information was collected individually, and the data collected are confidential and for academic purposes.

## **Criteria for the Application of the Eysenck Personality Inventory Questionnaire**

Once the study population has been determined, the following criteria were considered for the application of the Eysenck personality inventory: (i) informed consent to the students' parents, (ii) voluntary participation of the students; (iii) students from 13 to 15 years old from private Educational Units of the Ambato canton (Cassilde & Gilson, 2017).

## **Methodology of Application of the Instrument "Eysenck Personality Inventory"**

The instrument applied for the case study is authored by the University of London called "Eysenck Personality Inventory for Children" - Form A by the author H. J. Eysenck; it can be applied to boys and girls from 7 to 16 years old, it does not indicate a specific time of application of the questionnaire, however, the average time ranges approximately between 15 minutes.

The aspects that the questionnaire evaluates are the dimensions of children's personality, these differential structures shape their relationships with learning situations and their adaptations to the social environment.

The following dimensions: (a) Dimension "E" - Introversion - Extraversion, are manifested in the change, or not, in personality and in their susceptibility to fatigue and psychological exhaustion as indicated in Tables 1 and 2; (b) Dimension "N" - Stability - Instability analyzes

the degree of adjustment of the individual to his environment, as indicated in Tables 3 and 4; and, (c) "L" - Truthfulness (lying scale), as indicated in Table 5.

It should be noted that in Tables 1, 2, 3, 4 there are abbreviations whose meaning is as follows: A.I. = Highly Introverted; T.I. = Introverted Tendency; A. = Ambiverted; T.E. = Extraverted Tendency; A.E. = Highly Extraverted which correspond to the scores according to age range and sex.

Age	A.I.	T.I.	A.	T.E.	A.E.
13	0 - 9	10 - 13	14 - 21	22 - 23	24
14	0 - 10	11 - 13	14 - 21	22 - 23	24
15	0 - 7	8 - 12	13 - 21	22 - 23	24

Table 1: Extroversion - introversion scale (GIRLS) Dimension E

Age	A.I.	T.I.	A.	T.E.	A.E.
13	0 - 11	12 - 14	15 - 21	22 - 23	24
14	0 - 11	12 - 14	15 - 21	22 - 23	24
15	0 - 10	11 - 14	15 - 20	21 - 23	24

Table 2: Extroversion - introversion scale (CHILDREN) Dimension E

Age	A.I.	T.I.	A.	T.E.	A.E.
13	0 - 2	3 - 7	8 - 18	19 - 23	24
14	0 - 4	5 - 9	10 - 18	19 - 23	24
15	0 - 4	5 - 9	10 - 18	19 - 22	23 o more

Table 3: Stability - instability scale (GIRLS) Dimension N

Age	A.I.	T.I.	A.	T.E.	A.E.
13	0 - 1	2 - 5	6 - 15	16 - 20	21 ó more
14	0 - 1	2 - 6	7 - 15	16 - 20	21 ó more
15	0 - 1	2 - 5	6 - 15	16 - 20	21 ó more

Table 4: Stability - instability scale (CHILDREN) Dimension N

Age	Girls	Boys
13	3	3
14	3	3
15	2	2

Table 5: Scale of lies

The Eysenck personality test is a verbal-written structured test with dichotomous answers. It uses the forced technique: YES - NO. As indicated in Table 6: Answer key, it has 60 questions, distributed as follows: "E" = 24 questions, "N" = 24 questions and "L" = 12 questions; the questions are interspersed without any special order, an indispensable requirement is that the child knows how to read.

It can be evaluated individually, but also collectively, in groups of no more than 25 members.

To evaluate either individually or collectively, the evaluator reads aloud the instructions and the examinees "read mentally". It is necessary that the participants understand the instructions and all the doubts are clarified by the evaluator, it is necessary to mention that all the

questions are answered; when any question is blank the evaluator must ask the examinee the reason why it was not filled to analyze or provide support.

	YES	NO		YES	NO		YES	NO
1	E		21	N		41	E	
2	N		22	E		42	N	
3	E		23	N		43	E	
4		L	24	L		44	L	
5	N		25	E		45	N	
6		E	26	N		46	E	
7	N		27	E		47	N	
8	L		28	L		48		L
9	E		29	N		49	E	
10	N		30	E		50	N	
11	E		31	N		51	E	
12		L	32		L	52	N	
13	N		33		E	53	E	
14	E		34	N		54	N	
15	N		35	E		55		E
16	L		36	L		56	N	
17	E		37	N		57	E	
18	N		38	E		58	N	
19	E		39	N		59	E	
20		L	40		L	60	N	

Table 6: Answer key

#### 2.4. Consolidation of Information

An Excel spreadsheet shown in Figure 1 was used to consolidate the data, which contains: (i) Database, is the consolidated information of the 287 students, the questionnaires were physically applied and transcribed to the dynamic table "Eysenck Personality Inventory"; (ii) Tabulation, shows results on the 3 dimensions; it is made up of 60 questions, these results are the summation of the results delimited by the dichotomous questions; (iii) Results, are represented in YES - NO, the source of information in the spreadsheet "Eysenck Personality Inventory".

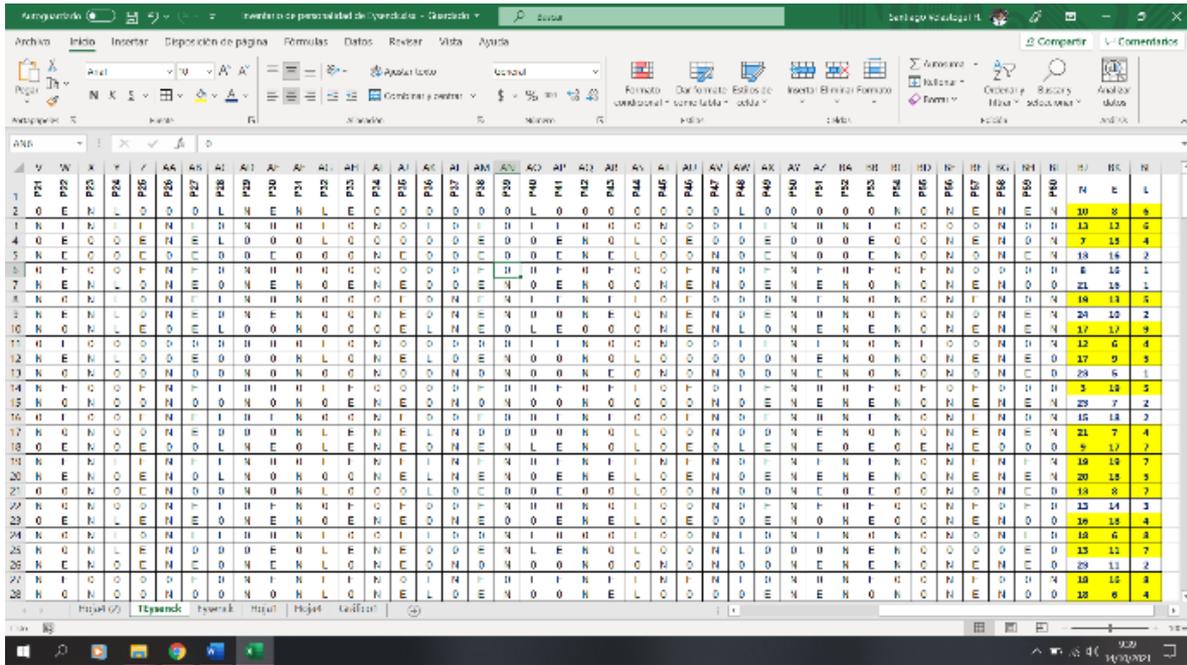


Figure 1: Excel data tabulation tool

### 2.5. Exclusion Based on Dimension "L" Truthfulness (Scale of Lies)

With the dimension of truthfulness or scale of lies, 231 students were excluded, equivalent to 80.49% of the study population, for the following reasons: they do not show interest in the execution of the test, they do not understand the meaning of the questions and/or they read too fast, which is allusive to personality characteristics or situations that the students go through that finally originate can mark the answers randomly.

### 3. Results

The initial results applied to the study population are shown in Table 7: Study population; in general, 55% of participants were male and 45% female.

Age (years)	Sex				Total	%
	Male	%	Female	%		
13	39	14%	61	21%	100	35%
14	50	17%	43	15%	93	32%
15	69	24%	25	9%	94	33%
<b>Total</b>	<b>158</b>	<b>55%</b>	<b>129</b>	<b>45%</b>	<b>287</b>	<b>100%</b>

Table 7: Population to which the Eysenck Personality Inventory was applied

Once the 287 students had been evaluated, the "L" dimension was analyzed, which resulted in the exclusion of 231 questionnaires as shown in Table 8; the reasons were explained in section 2.5 below.

Age (years)	Sex.				Total	%
	Male	%	Female	%		
13	6	11%	10	18%	16	29%
14	7	13%	8	14%	15	27%
15	12	21%	13	23%	25	45%
<b>Total</b>	25	45%	31	55%	<b>56</b>	<b>100%</b>

Table 8: Number of students applying the exclusion criterion (dimension "L")

Subsequently, Table 9 and Figure 2 show the results of the number of thirteen year old students with tendency Extroversion - Introversion Scale or Stability - Instability Scale of students who are 13 years old.

Age 13 years	Extroversion - introversion scale		Stability - Instability scale	
Sex.	H	M	H	M
Highly introverted	0	2	0	0
Introversion Tendency	2	3	0	1
Ambiverted	4	5	4	7
Extraversion Tendency	0	0	2	2
Highly extraverted	0	0	0	0
Total	6	10	6	10

Table 9: Results of the Eysenck Personality Inventory (13 years)

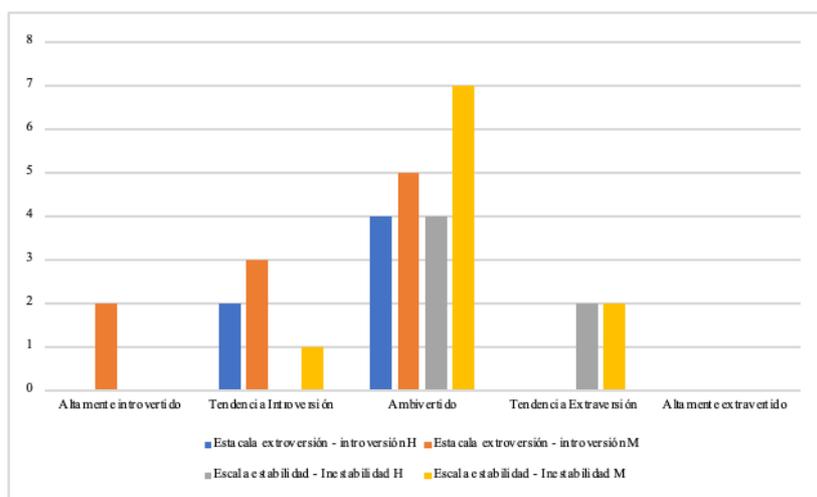


Figure 2: Eysenck Personality Inventory score (13 years)

Table 10 and Figure 3 show the results of the number of thirteen year old students with tendency Extroversion - Introversion Scale or Stability - Instability Scale of students who are 14 years old.

Age 14 years.	Extroversion - introversion scale		Stability - Instability scale	
	H	M	H	M
Highly introverted	2	0	0	0
Introversion Tendency	2	2	0	0
Ambiverted	3	6	6	6
Extraversion Tendency	0	0	1	2
Highly extraverted	0	0	0	0
Total	7	8	7	8

Table 10: Results of the Eysenck Personality Inventory (14 years)

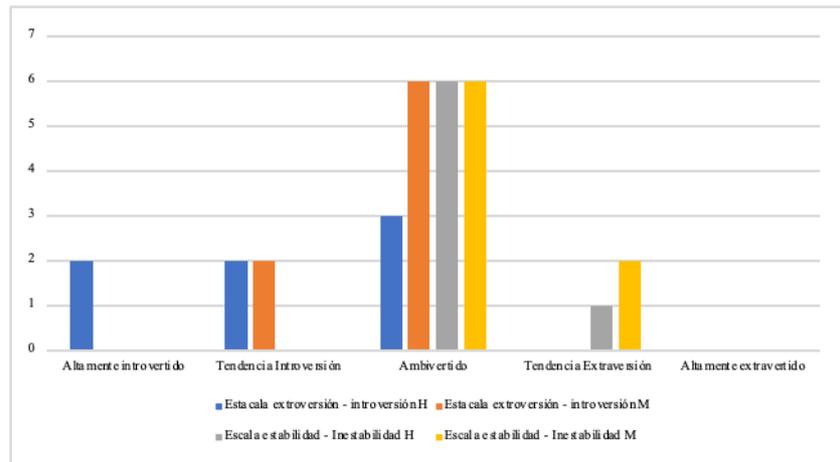


Figure 3: Eysenck Personality Inventory score (14 years)

Table 11 and Figure 4 show the results of the number of thirteen year old students with tendency Extroversion - Introversion Scale or Stability - Instability Scale of students who are 15 years old.

Age 15 years	Extroversion - introversion scale		Stability - Instability scale	
	H	M	H	M
Sex.				
Highly introverted	2	2	0	0
Introversion Tendency	3	3	0	3
Ambiverted	7	8	6	10
Extraversion Tendency	0	0	6	0
Highly extraverted	0	0	0	0
Total	12	13	12	13

Table 11: Results of the Eysenck Personality Inventory (15 years)

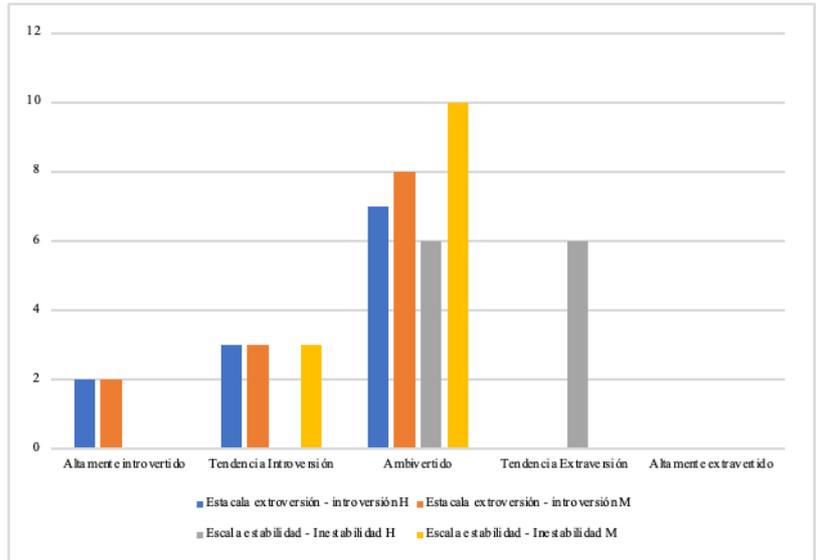


Figure 4: Eysenck Personality Inventory score (15 years)

In addition, tables 12 and 13 show the general results of the number of students under study, after applying the exclusion criterion (dimension "L").

A.I.	T.I.	A	T.E.	A.E.	T
8	15	33	0	0	56

Table 12: Results of the extroversion - introversion scale

A.I.	T.I.	A	T.E.	A.E.	T
0	4	39	13	0	56

Table 13: Results of the stability - instability scale

Finally, Figure 5 shows the tendency that most of the children tend to ambivert.

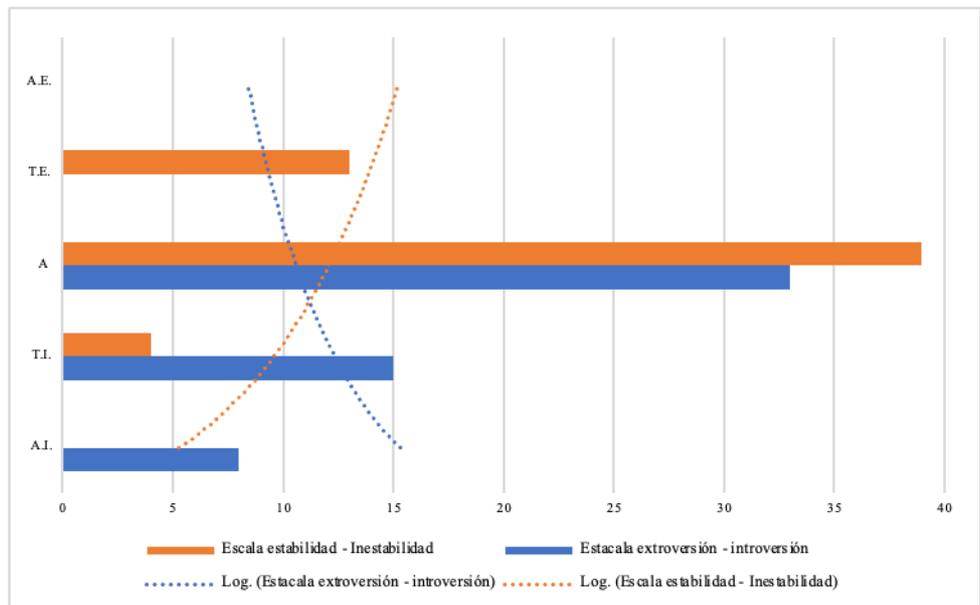


Figure 5: Students with ambivert personality tendency

## **Conclusion**

Of the 287 students evaluated, 231 students equivalent to 80.49% exceeded the indicator "L" - Truthfulness (scale of lies) and were therefore excluded from the research. Therefore, we worked with a population of 56 students between 13 and 15 years of age in the eighth, ninth and tenth grades of elementary school.

The parents of the students, through informed consent, allowed their children to participate in the research.

The study shows that both boys and girls have an Ambivertido tendency.

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A posthumous tribute to Dr. Paúl Santiago Pullas Tapia who promoted with his incomparable leadership the creation and development of educational and scientific activities in favor of the Ecuadorian youth, so that from heaven he may guide us along the path of truth and honesty.

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