

Influence of Anxiety over Emotional Intelligence in Primary School

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Abstract

Emotions should not be ignored and it is fundamental in life to know how to react appropriately to them. This reality, which has traditionally been considered as an element that could make people weaker, becomes a very important weapon with which to face life successfully. For this reason, this work has as main objective to analyze the types and levels of Anxiety and Emotional Intelligence, according to age, gender, culture and socioeconomic and cultural, as well as the relationships that could be given between both variables. To make it possible we focused on 764 participants from seven educational centers; 74.2% of the total were Muslims and 25.8% belonged to the Christian religion, 53.2% were male and 46.8% female. The techniques used in this survey were the State-Trait Anxiety Inventory for Children (STAIC, Spielberger, 2001) as well as an Emotional Intelligence questionnaire, built for its use. The results reflect low levels in Anxiety and medium-high levels in Emotional Intelligence. Anxiety and Emotional Intelligence are influenced in a very different way by the sociodemographic factors of age, gender, culture and socioeconomic and cultural. There is also statistically significant relationship between Anxiety and Emotional Intelligence. This relationship was inversely proportional.

Keywords: Emotions, Anxiety, Emotional Intelligence, Diversity, Multicultural Context.

Introduction

It is important that children learn to manage and transmit both social and emotional skills. Thus the development of emotional skills and competencies must become one of the objectives from the childhood stage. It is fundamental to reflect on the importance of emotional development and the construction of the personality from the moment of birth, starting with the family and continuing through school (Cruz, 2014).

Not considering this component is totally counterproductive, since it is an important part of personal, academic and professional success. Considering these types of emotional states, the focus is on those of a negative nature and, more specifically, on anxiety.

This has unfavorable consequences, hindering the proper development of self-concept and assuming a lack of acceptance by others (Delgado, English and García-Fernández, 2013).

At the same time, it can cause emotional problems such as apprehension, tension or unrest, as well as depression, hopelessness, sadness, ambivalence and hyperactivity (Martínez-Monteaudo, Inglés and García-Fernández, 2013).

A progressive decrease in the diagnosis of anxiety problems can be verified with the subject's age (Franco, Pérez and de Dios, 2014). Another of the most relevant elements within this field is its clear relationship with the genre. This is another of the sociodemographic variables that must be taken into account, finding significant differences, with women having higher levels of anxiety (Moreno-Rosset, Arnal-Remón, Antequera-Jurado and Ramírez-Uclés, 2016 and Quiceno and Vinaccia, 2015). There is also the influence of culture on emotional development and, therefore, on the manifestation of different emotional states such as anxiety (Braz, Cómodo, Del Prette, Del Prette and Fontaine, 2013, Franco et al., 2014 and Gomez-Ortiz, Casas and Ortega-Ruiz, 2016).

Everything that has been commented on for culture is directly related to socio-economic and cultural status. Thus, there are different studies in which a higher level of negative emotional states has been found among subjects belonging to lower socio-economic strata (Pulido and Herrera, 2015 and Roth et al., 2014).

Given this large number of factors that can influence the evaluation of emotional states of a negative nature, it is essential to find instruments validated cross-culturally, adapted to the economic level and the patterns linked to gender, as shown in Tobías-Imbernón, Olivares- Olivares and Olivares (2013).

With respect to the different instruments for assessing anxiety, they are divided into three sections. In the first place, the interviews would appear. Second the self-records. Finally, those that constitute the most used procedure to assess anxiety appear: the questionnaires. Among them, in the case of the sample of this work, the most used is the STAIC (State-Trait Anxiety Inventory for Children, Spielberger, 2001).

It is also important to start by discriminating between those jobs that consider emotional intelligence as a skill set of those who take it into account in a self-perceived way. The

type of questionnaire that we intend to use, approaches this first conception of emotional intelligence, which allows us to talk about a set of specific skills that become one of the main predictors of adjusted emotional adaptation (Pulido and Herrera, 2015).

Elements integrated in this set of skills appear as predictors of emotional states that can hinder the development of dysfunctional behaviors (Peña-Sarrionandia, Mikolajczak and Gross, 2015) through an emotional regulation associated with the good adjustment of the personal and social functioning of the subject. In the same way, high levels of emotional intelligence would be related to a higher quality of life, greater mental health, personal and work wellbeing, a more adjusted emotional adaptation, better psychological adjustment and even better ability to solve social problems (Azpiazu, Esnaola and Sarasa, 2015).

It should be noted that the process of emotional development causes important changes in all the capacities that are part of emotional intelligence. This reality is another way of looking at the incidence that age has on emotional intelligence scores (Billings, Downey, Lomas, Lloyd & Stough, 2014 and Pulido and Herrera, 2015).

Emotional skills have traditionally been linked to the female gender, with women presenting higher levels (Azpiazu et al., 2015, Billings *et al.*, 2014 and Fernández-Berrocal, Cabello, Castillo and Extremera, 2012), which are not it does more than increase the stereotype that indicates that women are more "emotional" than men. Culture is also an element to be considered, if the existing differences in levels of emotional intelligence are taken into account according to the cultural group (Gutiérrez & Expósito, 2015 and Soriano & González, 2013), given that culture brings with it numerous differences in educational patterns and transmitted values, elements that are related to emotional performance. In relation to the commented, the socio-economic and cultural status is also determinant in the levels reflected in this variable (Alonso and Román, 2014 and Pulido and Herrera, 2016), presenting greater emotional capacities those people belonging to higher status.

Clear relationships are also established between anxiety and emotional intelligence, as a set of skills. From this perspective, emotional intelligence becomes one of the main predictors of adjusted emotional adaptation and personal well-being (Limonero, Fernández-Castro, Soler-Oritja & Álvarez-Moleiro, 2015). In this way, emotionally adjusted competences would favor the progressive reduction of anxiety (Sáez de Ocariz, Lavega, Mateu & Rovira, 2014). This would allow to justify the differences in emotional

manifestations to similar stimuli between one person and another. Considering all that has been mentioned, the study carried out is presented with a sample of students enrolled in Early Childhood and Primary Education Centers in the city of Ceuta, where mainly people of Christian and Muslim culture coexist.

The objectives of the work have been to analyze the types and levels of Anxiety and Emotional Intelligence, according to age, gender, culture and socioeconomic stratum, as well as to contemplate the relationships that could occur between both, for a multicultural child population.

Methodology

To carry out this research, a sample of 764 participants was selected, which reflects the characteristics of the pluricultural context of Ceuta (Table 1). They are distributed among seven Early Childhood and Primary Education Centers. 0.2% of the sample was in the second year of Primary Education, 28% was in 3rd, 22% 4th, 23.4% 5th and 24.7% corresponding to the last year of Primary Education. By age, the sample is distributed between 0.2% between 7 and 8 years, 28% between 8 and 9, 22% between 9 and 10, 23.4% between 10 and 11 and 24.7% of students between 11 and 12 years old. Considering culture (which has an important link with religion), the majority group is that of participants belonging to the Muslim culture-religion. These constitute 74.2% of the sample, while 25.8% of it belonged to the Christian culture-religion.

This represents the two majority cultures in our city and make up the pluricultural context that characterizes it. Describing the sample, according to the gender variable, there is a fair degree of equality, although with a slight majority of males, 46.8% being girls and the rest of the sample (53.2%) males.

Regarding their distribution by status, 12.6% of the sample identified their level as low. On the other hand, there were fewer people who identified themselves as belonging to a high level (12.2%). 46.2% corresponds to the medium-low status and 32.1% to the medium. The method for the selection of the sample was through a randomized method of available subjects.

In this way, after requesting written permission, both to the Educational Administration, as well as to the Management of the centers and, of course, to the parents of each child, the information was collected, answering those who wanted it. The sampling error was 3%. Finally, indicate that, in the present work, ethical standards were met.

Table 1. Sample according to sociodemographic variables

Sociodemographic variables	Descriptive average			
	N=764	Media	D.T.	Rank
Age			9.41	1.19
Culture / Religion			N	%
	Christians		196	25.8
	Muslims		564	74.2
Gender	Boys		403	53.2
	Girls		354	46.8

Status	Low	96	12.6
	Medium-Low	330	46.2
	Medium	245	32.1
	High	93	12.2

For the evaluation of anxiety, the State-Trait Anxiety Inventory for Children (STAIC, Spielberger, 2001) was used since, among the different instruments analyzed, it is the one that most closely approximates the achievement of the objectives that are marked in the previous section. The STAIC is applicable to subjects between 8 and 18 years, being divided into two different parts.

The anxiety state evaluates how the person feels at a particular time or situation. Trait anxiety assesses how you usually feel. Each part of the questionnaire was made up of 20 items, with four response possibilities each (0 - none -, 1 - little -, 2 - enough - and 3 - many).

Reliability for the measurement of anxiety was evaluated, first through the Cronbach's α test. Thus, the internal consistency of the questionnaire was .882. In a second analysis, the Spearman-Brown halves test was carried out. This coefficient was .845 for the questionnaire, including all the items. In the section related to the factorial variance, different Exploratory Factor Analyzes (AFE) were used. In this sense, the factors obtained were 6.

The first one is related to the negative emotional traits, constituted by 9 items. These represent 21.58% of the variance explained. The second factor is also made up of 9 items (10.60% of the variance explained).

All of them are related to different worries and difficulties. The third factor, which was linked to positive emotional states, also includes 9 items (9.119% of the variance explained). The fourth factor includes 5 items, belonging to the Anxiety Sensations category (explained variance of 5.774%). The fifth factor, negative emotional states consists of a total of 5 items. The total variance explained is 3.249%. The last of the six factors is related to conflicting emotional states. There are 3 items. Among all the categories, a total variance of 51.27% is explained.

With regard to the second variable, an elaborate questionnaire was used to evaluate the Emotional Intelligence, as a set of skills. In this case, the questionnaire was composed of 65 items, divided into 5 categories, related to the elements of Emotional Intelligence. Its reliability (Cronbach's α) was .875, while Spearman-Brown's two halves test had a result of .829. In the section related to the factorial variance (AFE), the factors obtained were 5.

The first one, represents 16.33% of the variance explained and refers to the Motivation. It is made up of 19 items. The second, consisting of 15 items, (8.016% of the variance explained), is related to the Knowledge of themselves.

The third factor, related to the Self-concept, is composed of 14 items (6.546%).

The fourth factor, related to emotional self-control, is composed of 11 items (3.662%). The final factor, Empathy, is made up of 6 items (3.181%). Among all the factors add a total explained variance of 37.734%.

First, we began by checking the characteristics of the sample, considering its distribution according to the different sociodemographic variables.

The analysis of the psychometric properties of the questionnaires used continued. For the presentation of the results, it began with the descriptive analysis, which allows checking the levels and general types for each of the different variables.

Next we proceeded to the inferential analysis, starting with the regression analysis (stepwise or stepwise multiple regressions).

The sociodemographic variables were considered as dependent, together with the study variables, as predictor variables (independent). Then, each of the study variables (Anxiety and Emotional Intelligence) were considered as criteria variables.

To determine the regression function, the last step was considered and, within it, in the order of the variables' entry in the regression function, the value of each variable, its significance, the regression index (R), the coefficient of multiple determination (R^2) and the explained variance of the most important variable (the one that more percentage $-\beta$ - explains).

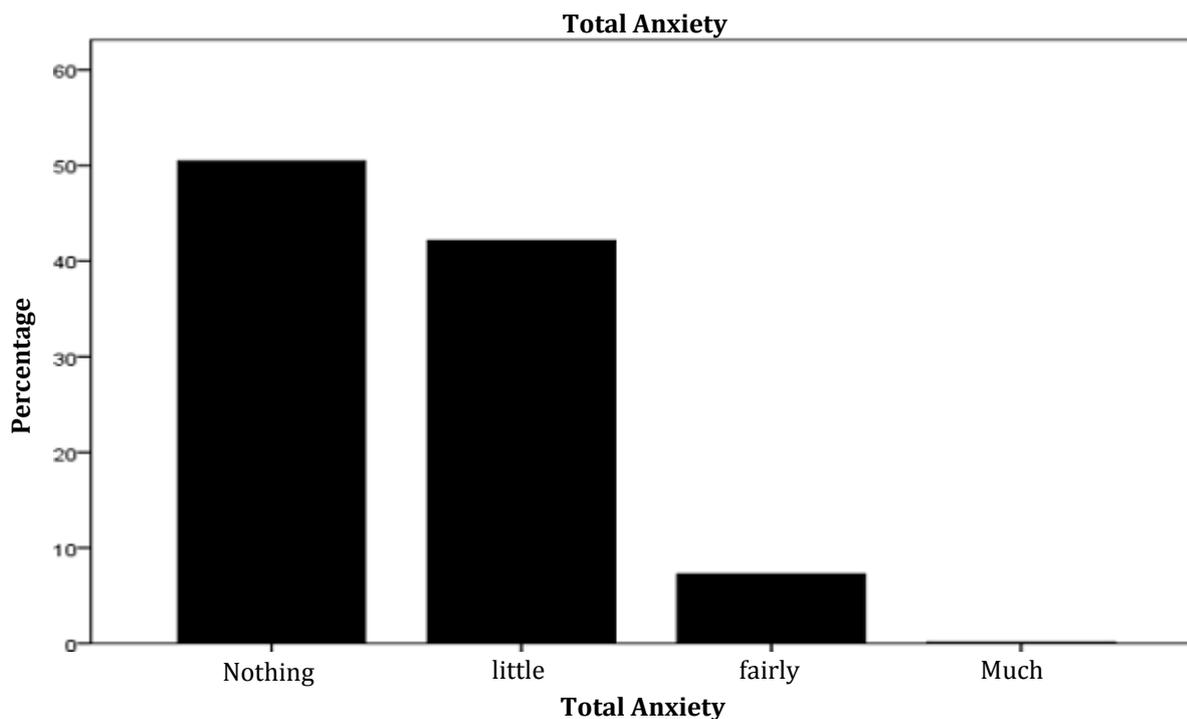
To conclude the inferential analysis, we concluded with the Student's t-test of mean differences for independent samples for those dichotomous variables, while for the rest the analysis of variance (one-way ANOVA) was used.

At the same time, the Pearson Chi-square test was used, taking advantage of the results obtained within the contingency tables that were made for the descriptive statistics.

Results

Primary students, in relation to the variable Anxiety, demonstrate low and very low scores. The option of very little anxiety represents something more than half of the sample (50.5%), followed by the one that reflects little anxiety, reached by 42.2% of the students.

The options that indicate higher levels have minimal scores (7.2% quite and 0.1% much anxiety.) This reality is reflected through the following graph in Fig. 1:

Fig. 1: Total Anxiety

The description of the results of the sample of students begins, based on the variable Course / Age. In this case, the results of both variables (Course and Age) are exactly the same, so they have been combined into one. It is relevant that the group in which the highest levels of anxiety are recorded is that of the students in the 3rd year of primary school (8-9 years with an average of 40.03). The next course, by level, is 4th (9-10 years, reflected 33.70 on average), followed by 2nd (7-8 years, 32.46).

Then 5th grade of Primary (10-11 years, with an average of 30.54) would appear, followed by students of 6th grade (11-12 years and 28.20 on average). In general, if you do not consider 2nd grade students, you can describe a progressive decline as you climb in age (and course). Following the first factor of the variable Anxiety, a similar distribution is again described. In negative emotional traits, the highest averages are given in 3rd (6.66) and the lowest in 6th (3.51).

The same happens in Concerns and difficulties (3^o 11.59 and 6^o 9 on average), Anxiety Sensations (4.17 students in 3rd and 2.68 in 6th), negative emotional states (3.74 in 3rd and 1.98 in 6th) and emotional states opposed (3.12 in 3^o by 2.24 in 6^o).

In the case of positive emotional states, the same distribution is not followed. Once this first approximation was made, through the differences found in the means, an analysis was carried out to contrast the data reflected in the previous section. Considering the Analysis of the Variance (one-way ANOVA), with the variable Course / Age as an independent variable, Total Anxiety ($p = .000$) and in its factors Negative emotional traits ($p = .000$), Concerns and difficulties ($p = .000$), positive emotional states ($p = .000$), Anxiety Sensations ($p = .000$), negative emotional states ($p = .000$) and conflicting emotional states ($p = .000$), statistically significant differences were found. In this case, an increase is observed from 3^o up to the highest 6th year of Primary, between 11 and 12 years of age).

Considering the variable Anxiety, depending on the gender, it can be seen that children have a higher level than girls. For this reason, girls show lower levels of anxiety than men, as reflected by the averages of both (34.42 males and 31.88 females).

This reality is also repeated in each of the factors that make up this variable, where women reflect lower averages (negative emotional traits 4.54, worries and difficulties 10.68, positive emotional states 8.8, feelings of anxiety 2.84, negative emotional states 2.47 and states emotional opposing 2.50) than males (4.82, 10.81, 9.80, 3.24, 2.94 and 2.79, following the same order as in the case of girls).

Once this first approximation was made, the Student's t test of mean differences for independent samples was used. Considering the analysis of this test, with the variable Gender as a factor and the rest of the variables mentioned as dependent, the differences become statistically significant in Total Anxiety ($p = .034$) and positive emotional States factors ($p = .010$), Anxiety Sensations ($p = .041$) and Negative Emotional States ($p = .027$). In all cases, males present higher scores. The differences were not statistically significant in the case of the negative emotional traits ($p = .421$), the concerns and difficulties ($p = .768$) and the conflicting emotional states ($p = .055$).

Taking into account the culture / religion, the analysis starts with the total scores. In this case, the results reflect that the students belonging to the Muslim culture / religion manifest higher levels of anxiety (the average of the Christians is 31.16 while the Muslims reach 34.02).

This is reinforced through the percentages, in which Muslims have lower percentages in the alternatives that reflect a lower level of anxiety (47.9% of Muslims reflect very little anxiety and 58.7% of Christians reach the same score).), compared to those belonging to the Christian religion. This shows that Muslim culture / religion registers higher levels

of anxiety. This situation is also reflected in the factors negative emotional traits (4.14 Christians and 4.91 Muslims), positive emotional states (8.44 Christians and 9.65 Muslims), Anxiety Sensations (2.6 Christians and 3.23 Muslims) and negative emotional states (2.16). Christians by 2.93 Muslims).

In contrast, in the factors Concerns and difficulties (11.07 is the average of Christians and 10.65 that of Muslims) and conflicting emotional states (2.63 Muslims and 2.73 Christians) are Muslims who achieve lower scores. Considering the Student's t-test, statistically significant differences can be confirmed in the variable Total Anxiety ($p = .035$), Negative Emotional Traits ($p = .044$), Positive Emotional States ($p = .006$), Anxiety Sensations ($p = .005$) and negative emotional states ($p = .001$).

In the cases in which the Muslims obtained lower scores (Concerns and difficulties $-p = .388-$ and conflicting

emotional states $-p = .564-$) the differences were not statistically significant. Therefore, it can be said that Muslims have higher levels of general anxiety than Christians.

If socio-economic and cultural status is considered, a disorganized distribution is observed, since, on average, the lowest levels appear in the average status (with an average of 30.91), followed by the high (34.27). Then the low status would appear, reaching an average of 34.62. It is only medium-low status (34.64) that presents slightly higher levels of anxiety. In this way, the differences are again statistically significant in Total Anxiety ($p = .042$), Positive Emotional States ($p = .012$), Anxiety Sensations ($p = .021$), Negative Emotional States ($p = .002$) and Opposed emotional states ($p = .011$). These are joined to those in which the differences were not statistically significant, as is the case of the factors Negative emotional traits ($p = .132$) and Concerns and difficulties ($p = .257$). The most relevant results of the ANOVA test for the Anxiety variable are shown in Table 2.

Table 2: ANOVA anxiety by socio-demographic variables

Variable	N	Lost	Media	Des. Tip.	F	P
Course / Age						
Total Anxiety	15	0	2º (7-8)	32.4667	8.32266	15.676
	211	2	3º (8-9)	40.0379	17.02515	
	168	0	4º (10-11)	33.7024	15.93571	
	178	0	5º (10-11)	30.5449	15.97246	
	185	3	6º (11-12)	28.2054	14.68662	
Negative traits	15	0	2º (7-8)	3.4667	3.09069	15.341
	211	2	3º (8-9)	6.6682	5.69828	
	168	0	4º (10-11)	4.9940	4.45671	
	178	0	5º (10-11)	3.6236	4.28094	
	185	3	6º (11-12)	3.5135	3.80233	
Concerns and difficulties	15	0	2º (7-8)	5.9333	4.23365	9.871
	211	2	3º (8-9)	11.9924	5.43750	
	168	0	4º (10-11)	11.5286	6.12208	
	178	0	5º (10-11)	10.9101	6.10851	
	185	3	6º (11-12)	9.0324	5.25223	
Positive Emotional States	15	0	2º (7-8)	15.3333	4.70056	12.164
	211	2	3º (8-9)	10.7346	5.13213	
	168	0	4º (10-11)	8.7262	4.65544	
	178	0	5º (10-11)	8.1517	5.22538	
	185	3	6º (11-12)	8.9679	5.53280	
Anxiety sensations	15	0	2º (7-8)	2.7333	1.62422	12.966
	211	2	3º (8-9)	4.1706	3.05650	
	168	0	4º (10-11)	2.8631	2.63765	
	178	0	5º (10-11)	2.6461	2.56740	
	185	3	6º (11-12)	2.4866	2.20790	
Negative Emotional States	15	0	2º (7-8)	2.3333	2.91956	10.014
	211	2	3º (8-9)	3.7441	3.45872	
	168	0	4º (10-11)	2.6250	2.70880	
	178	0	5º (10-11)	2.5449	2.87807	
	185	3	6º (11-12)	1.9893	2.17263	
Opposed Emotional States	15	0	2º (7-8)	2.6667	2.22539	4.912
	211	2	3º (8-9)	3.1280	2.07656	
	168	0	4º (10-11)	2.5655	2.22301	
	178	0	5º (10-11)	2.6685	2.12258	
	185	3	6º (11-12)	2.2406	1.62998	

Gender							
Total Anxiety	401	2	Men	34.4214	16.06999	4.522	.034
	352	2	Women	31.8835	16.64239		
Positive Emotional States	401	2	Men	9.8035	5.34063	6.658	.010
	352	2	Women	8.8074	5.23724		
Anxiety sensations	401	2	Men	3.2463	2.72269	4.179	.041
	352	2	Women	2.8442	2.66630		
Negative Emotional States	401	2	Men	2.9478	2.94501	4.892	.027
	352	2	Women	2.4788	2.86341		
Culture							
Total Anxiety	196	0	Christian	31.1633	16.99212	4.447	.035
	560	4	Muslim	34.0232	16.10768		
Negative traits	196	0	Christian	4.1429	4.61102	4.073	.044
	560	4	Muslim	4.9143	4.80382		
Positive Emotional States	196	0	Christian	8.4439	4.92320	7.643	.006
	560	4	Muslim	9.6548	5.39872		
Anxiety sensations	196	0	Christian	2.6071	2.49384	7.781	.005
	560	4	Muslim	3.2313	2.76466		
Negative Emotional States	196	0	Christian	2.1633	2.75939	10.192	.001
	560	4	Muslim	2.9306	2.94401		
Status							
Anxiety sensations	96	0	Low	34.6250	17.88516	2.748	.042
	328	2	Medium-Low	34.6463	16.01251		
	243	2	Medium	30.9177	15.77428		
	92	1	High	34.2717	17.83323		
Positive Emotional States	96	0	Low	10.2083	5.92038	3.653	.012
	328	2	Medium-Low	9.6220	5.32983		
	243	2	Medium	8.4694	4.78943		
	92	1	High	9.8043	5.52564		
Anxiety sensations	96	0	Low	3.6146	3.13342	3.269	.021
	328	2	Medium-Low	3.2256	2.64014		
	243	2	Medium	2.6898	2.59288		
	92	1	High	3.0870	2.73219		
Negative Emotional States	96	0	Low	3.3125	3.29693	5.042	.002
	328	2	Medium-Low	3.0396	2.98133		
	243	2	Medium	2.2286	2.64823		
	92	1	High	2.5543	2.88369		
Opposed Emotional States	96	0	Low	2.7188	1.93420	3.754	.011
	328	2	Medium-Low	2.7043	2.00482		
	243	2	Medium	2.4041	1.97629		
	92	1	High	3.2283	2.36784		

The results presented below show that the variable Total Anxiety is related to Motivation (factor belonging to EI) and Gender. The rest of the variables are excluded. The multiple correlation coefficient ($R = .623$) indicates the relationship between the Anxiety and the predictor variables, explaining, the set of all of them, 38.8% of the variance explained by the model ($R^2 = .388$). The one that has a greater importance is the Motivation, acting of inverse form. Its standardized regression coefficient demonstrates this influence, explaining 10.2% of the variance in the model ($\beta = .102$).

Gender also acts in a negative sense. In this way, the Anxiety is higher as it goes down in the Motivation level and in the masculine gender (it was associated with the score 1, while the women were associated with the value 2).

The regression function and the relevant coefficients appear below and also in Table 3 :

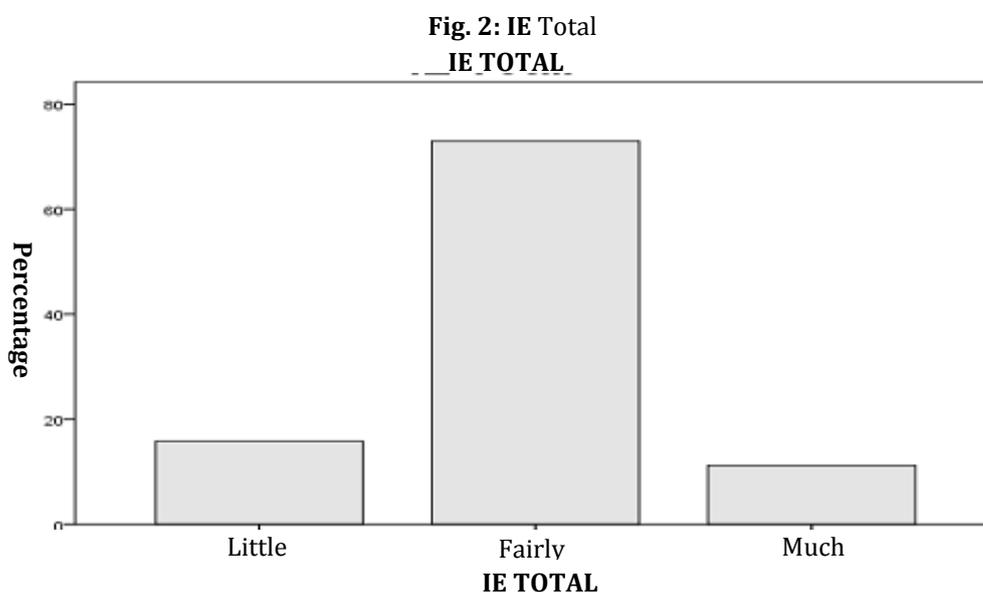
$$\text{Total Anxiety} = 86,960 - .169 (\text{Motivation}) - 2,786 (\text{Gender})$$

Table 3: Coefficients of the regression for Total Primary Anxiety

	$R=.623$	$R^2=.388$	$F=49.186$	$p=.000$
Variables	B	β	t	P
General Constant	86.960		20.239	.000
Motivation	-.169	-.102	-2.434	.015
Gender	-2.786	-.088	-2.168	.031

With respect to the level shown in the Emotional Intelligence variable, it is noteworthy that none of the participants (0%) reflected very low levels in this variable. The majority option is the one that reflects a fairly high level of EI, reached by 72.9% of the sample.

Subsequently, the rest of the sample is distributed in a very similar way between the option of higher level of IE (with 11.2%) and the one that reflects little IE (15.8%). This situation can be observed through the graph that appears below:



With respect to Emotional Intelligence, in its total scores, the last primary course (11-12 years) is the one with the best results (its average is 130.26). The next, by level, would be the 5th (120.63), followed shortly by the 4th year (9-10 years and its average is 117.81). Then appear 2nd (114.19) and 3rd (average of 101.51) course in which the lowest results are reached. In the case of the Motivation (44.36), Self-Knowledge (31.35), Self-concept (25.58), Self-control (15.80) and Empathy (13.07), the group of 11-12-year-old students is the one that reaches higher results. In the case of the Total HHSS, it is the same group (86.23) that obtains the highest results. The lowest level in this factor (80.87) is reached by students in 3rd grade of Primary. All this makes

sense considering the Variance Analysis (one-way ANOVA). In Total IE ($p = .000$), as well as most of its factors were also statistically significant. This is what happens with Motivation ($p = .000$), Knowledge of themselves ($p = .000$), Self-concept ($p = .000$) and Empathy ($p = .000$). In the Autocontrol factor ($p = .066$), no statistically significant differences were found. They were also significant in the HHSS ($p = .001$).

In the case of Emotional Intelligence, the opposite occurs than what was discussed in the case of anxiety and its factors: favorable differences appear for girls, which reflect higher levels. Women show higher percentages in the much

IE option (15.3%) than men (7.8% reflect much IE). In this way, the girls have higher levels (their average is 121.88) than the boys (117.12). The same happens in different factors of this variable (Motivation 38.69 children and 40.31 girls, Self-knowledge women 29.34 and males 28.56, Self-concept 23.27 boys and 23.44 girls, Self-control 15.13 in males and 15.74 in females and Empathy , in which the average of males is 11.35 and that of females of 12.84). However, with regard to Social Skills, you can see great equality.

Despite this, males have a level slightly higher than girls, as reflected in the averages of both (84.35 is the average for boys and 84.22 for girls). Student's t-test of mean differences for independent samples shows statistically significant differences in Total IE ($p = .006$) and the factors Autocontrol ($p = .037$) and Empathy ($p = .000$), with girls being the ones they show higher scores. In the case of Motivation ($p = .052$), Knowledge of themselves ($p = .201$), Self-concept ($p = .738$) and HHSS ($p = .885$), statistical significance was ruled out. In terms of culture / religion, the results reflect that students belonging to the Muslim culture / religion manifest lower levels in EI (the average of Christians is 123.13 while Muslims reach 117.87). This is reinforced through the percentages: Christians outnumber Muslims in the categories that indicate greater mastery of emotional skills (17.9% of Christians by 8.8% reflect much IE). This is reinforced by the scores of Motivation (Christians 40.87 and Muslims 38.89), Knowledge of themselves (Muslims 28.69 and Christians 29.45), Self-concept (Christians 24.13 and

Muslims 23.07), Self-control (Christians 16.27 and Muslims 15.09) and Empathy (12.19 Christians and Muslims 11.98). In the case of Total Social Skills, we can only highlight an enormous equality, since Christians and Muslims have a close average. Thus Christians reach 84.28 on average, while in Muslims it is 84.29. Considering the Student t test, with the variable Culture / Religion as a factor and the rest of the variables mentioned as dependent, we can affirm the statistically significant differences in Total IE ($p = .006$), as well as in some of its factors. This is what happens with Motivation ($p = .033$) and Self-Control ($p = .000$). In all cases, Christians show higher levels in this set of emotional skills. However, in the case of the factors Self-knowledge ($p = .266$), Self-concept ($p = .061$), Empathy ($p = .549$) and HHSS ($p = .994$), they were not statistically significant. For status, a disorganized distribution is observed. In this way, the low status occupies the first position (with an average of 123.1). It is followed, very closely, by the average status (average of 122.46). Then came the medium-low (his average is 117.59) and the high (115.24), which occupies the last position.

The Analysis of the Variance (ANOVA of a factor), considering the socio-economic and cultural status variable shows statistically significant differences in all its factors (Motivation - $p = .004$ -, Knowledge of themselves - $p = .017$ -, Self-concept - $p = .000$ -, Self-control - $p = .000$ - and Empathy - $p = .000$ -), as well as in the Totals ($p = .010$). The opposite occurs with the HHSS factor ($p = .162$). The most relevant results of the ANOVA test for the Emotional Intelligence variable are shown in Table 4.

Table 4: ANOVA IE by sociodemographic variables

Variable	N	Lost	Media	Des. Tip.	F	P	
Course / Age							
Total Emotional Intelligence	6	9	2º (7-8)	114.19	20.660	39.203	.000
	112	101	3º (8-9)	101.51	24.320		
	161	7	4º (10-11)	117.81	19.141		
	170	8	5º (10-11)	120.63	18.475		
	181	7	6º (11-12)	130.26	16.166		
Motivation	6	9	2º (7-8)	41.6667	6.47238	37.005	.000
	112	101	3º (8-9)	30.7632	11.90499		
	161	7	4º (10-11)	39.0108	10.25537		
	170	8	5º (10-11)	40.1206	9.20953		
	181	7	6º (11-12)	44.3641	6.90068		
Knowledge of themselves	6	9	2º (7-8)	23.3750	9.96212	8.035	.000
	112	101	3º (8-9)	27.0875	7.79750		
	161	7	4º (10-11)	28.6224	7.87574		
	170	8	5º (10-11)	27.9254	8.21521		
	181	7	6º (11-12)	31.3536	6.33466		
Selfconcept	6	9	2º (7-8)	23.0417	6.66974	25.568	.000
	112	101	3º (8-9)	18.9569	7.17826		
	161	7	4º (10-11)	22.4923	6.14168		
	170	8	5º (10-11)	24.7353	5.39516		
	181	7	6º (11-12)	25.5883	5.32239		
Self control	6	9	2º (7-8)	14.1667	3.70023	2.214	.066
	112	101	3º (8-9)	14.7336	4.24387		
	161	7	4º (10-11)	15.1825	3.79582		
	170	8	5º (10-11)	15.7337	3.47435		
	181	7	6º (11-12)	15.8065	3.46906		
Empathy	6	9	2º (7-8)	11.9417	4.12316	16.289	.000
	112	101	3º (8-9)	9.6306	4.16290		
	161	7	4º (10-11)	12.4022	3.80768		
	170	8	5º (10-11)	12.2434	3.79425		
	181	7	6º (11-12)	13.0747	3.53535		
	97	116	3º (8-9)	80.8763	10.25940		

Social Skills	150	18	4º (9-10)	85.1400	10.27150	5.779	.001
Total	162	16	5º (10-11)	83.4506	11.45938		
	168	20	6º (11-12)	86.2381	10.61309		
Gender							
Total Emotional Intelligence	335	68	Male	117.12	21.627	7.754	.006
	294	60	Female	121.88	21.052		
Self control	335	68	Male	15.1354	3.83178	4.383	.037
	294	60	Female	15.7485	3.60102		
Empathy	335	68	Male	11.3572	4.13685	23.152	.000
	294	60	Female	12.8419	3.63706		
Culture							
Total Emotional Intelligence	173	23	Christian	123.13	21.424	7.600	.006
	457	107	Muslim	117.87	21.340		
Motivation	173	23	Christian	40.8750	9.77673	4.553	.033
	457	107	Muslim	38.8960	10.66800		
Self control	173	23	Christian	16.2711	3.39325	13.178	.000
	457	107	Muslim	15.0948	3.80865		
Status							
Total Emotional Intelligence	67	29	Low	123.10	16.529		
	283	47	Medium-Low	117.59	21.098	3.818	.010
	190	55	Medium	122.46	23.109		
	92	1	High	115.24	21.177		
Motivation	67	29	Low	41.9552	7.95262		
	283	47	Medium-Low	38.1073	11.17182	4.495	.004
	190	55	Medium	40.9596	10.50081		
	92	1	High	38.5842	8.83559		
Self-knowledge	67	29	Low	29.5366	6.92543		
	283	47	Medium-Low	29.2700	7.87106	3.443	.017
	190	55	Medium	29.2643	7.77637		
	92	1	High	26.5288	7.39533		
Selfconcept	67	29	Low	23.9067	5.86784		
	283	47	Medium-Low	23.0940	5.95089	9.565	.000
	190	55	Medium	24.8424	6.32043		
	92	1	High	20.6848	7.22165		
Self control	67	29	Low	14.5687	3.98164		
	283	47	Medium-Low	15.1477	3.67156	6.047	.000
	190	55	Medium	15.4921	3.81334		
	92	1	High	16.7995	3.22072		
Empathy	67	29	Low	13.1373	3.35020		
	283	47	Medium-Low	11.7492	4.02730	3.242	.022
	190	55	Medium	11.7763	4.13678		
	92	1	High	12.6424	3.75707		

The variable Total Emotional Intelligence is under the influence of two factors. Of these, the one that has a higher standardized correlation coefficient is Age, which represents 37.4% ($\beta = .374$), acting in a directly proportional way. In this way, an increase is understood as the Age advances. The Status acts inversely proportional (indicating higher scores among the lower status subjects). Among all the predictor

variables reach a coefficient of determination of 47.3% ($R^2 = .473$). The regression function and the coefficients appear below and also in table 5.

Total Emotional Intelligence = .064 + 7.690 (Age) + .478 (Negative conditions) - 2.857 (Status)

Table 5: Regression coefficients for Total Primary Emotional Intelligence

	<i>R</i> =.688	<i>R</i> ² =.473	<i>F</i> = 95.703	<i>p</i> =.000
Variables	<i>B</i>	β	<i>t</i>	<i>P</i>
General Constant	.064		.008	.994
Age	7.690	.374	9.942	.000
Negative Conditions	.478	.142	3.651	.000
Status	-2.857	-.130	-3.531	.000

Considering the variable Anxiety (total score) as a factor and the IE and its factors as dependents, we begin by commenting on the scores in the IE totals. An inversely proportional relationship between EI and Anxiety is contemplated. In this way, those who reflect very little anxiety are those who have a better command of emotional skills (their average is 124.08).

They are followed by those that reflect little anxiety (114.34), while those that show a lot (110.01) are those that reach lower scores.

This same distribution is maintained in all factors except Autocontrol and HHSS. Considering the ANOVA test, statistically significant differences appear in the Total scores ($p = .000$), as well as in most of its factors (Motivation - $p = .000$ -, Self-knowledge - $p = .014$ -, Self-concept- $p = .000$ - and Empathy - $p = .042$ -). Self-control ($p = .994$) and HHSS ($p = .015$) are the only categories in which the differences were not statistically significant.

Everything commented can be followed, in summary form, in Table 6.

Table 6: ANOVA IE for Secondary Total Anxiety

Variable	N	Lost	Media	Des. Tip.	F	P
Total Anxiety						
Total Emotional Intelligence	338	45	Very Little Anxiety	124.08	18.739	19.797
	265	55	Little Anxiety	114.34	23.095	
	43	12	Quite Anxiety	110.01	22.309	
Motivation	338	45	Very Little Anxiety	41.6028	9.27576	16.728
	265	55	Little Anxiety	36.9914	11.31367	
	43	12	Quite Anxiety	36.4342	10.17660	
Self-knowledge	338	45	Very Little Anxiety	29.6970	7.52376	3.545
	265	55	Little Anxiety	27.9790	7.82538	
	43	12	Quite Anxiety	27.3013	7.97756	
Selfconcept	338	45	Very Little Anxiety	24.7456	5.93736	21.506
	265	55	Little Anxiety	22.1040	6.33151	
	43	12	Quite Anxiety	19.4408	7.26697	
Self control	338	45	Very Little Anxiety	15.4128	3.54925	.026
	265	55	Little Anxiety	15.4244	4.00307	
	43	12	Quite Anxiety	15.4440	3.41646	
Empathy	338	45	Very Little Anxiety	12.3901	3.60261	2.745
	265	55	Little Anxiety	11.6962	4.28048	
	43	12	Quite Anxiety	11.1791	4.56385	

Discussion and Conclusions

Depending on the academic year (which is completely equated with the subject's age), in Anxiety there are significant differences, being a determining factor in the levels of this negative emotional state. This not only occurs

in the total scores, but in each and every one of the factors that make up this variable (negative emotional traits, worries and difficulties, positive emotional states, negative emotional states, feelings of anxiety and conflicting emotional states). The differences are given by descending from 3^o to 6^o of Primary. Therefore, it can be affirmed that

as the course progresses, levels of anxiety decrease. This reality falls within the expected if we take into account the incidence of anxiety disorders and their diagnosis, given that you can see a progressive decline in this type of problem with the age of the subject (Cazalla-Luna & Molero, 2014; Franco *et al.*, 2014 and Gómez-Ortiz *et al.*, 2016).

Depending on the gender, statistically significant differences are found again for the totals, as well as half of the factors (positive emotional states, Anxiety Sensations and negative emotional states).

People belonging to the male gender reflect higher scores in all cases in which there are significant differences. The meaning of these differences is contrary to those found in most of the works consulted, given that in them (Burnham, Hooper & Ogorchock, 2011, Moreno-Rosset *et al.*, 2016, Quiceno and Vinaccia, 2015, Pulido and Herrera, 2016 and Vélez, López and Rajmil, 2009) are women (or girls) who show higher levels in different emotional states of a negative nature. Given these differences found, you could take conceptions based on biological criteria. They emphasize the existence of hormonal differences (due to the menstrual cycle of women that produces a decrease in serotonin levels) indicated in Pinto, Dutra, Filgueiras, Juruena & Stingel (2013).

However, a shift away from this type of conception is sought, so that works were consulted in which the males show the highest levels of anxiety (Cazalla-Luna & Molero, 2014). It can be noted that the specific context could be very influential, something that is particularly important due to the fact that there are significant differences between samples according to their context (Pulido, 2015).

Considering the culture / religion of the subject, statistically significant differences appeared in Total Anxiety, Negative Emotional Traits, Positive Emotional States, Sensations of Anxiety and Negative Emotional States. Those belonging to the Muslim culture reflect higher levels than those belonging to the Western Christianity.

This reality also appeared in other works in which this cultural context is highlighted as a key element for emotional development, where the culture of origin has a great influence on affective relationships and the constitution of different emotional manifestations. Religion and norms learned in the family, without critically analyzing the elements of the outside, make it possible to assume without question another different point of view, the patterns offered within the family (Soriano & González, 2013), which it can justify these differences between both contexts, as seen in multiple studies (Burnham *et al.*, 2011, Braz *et al.*, 2013, Franco *et al.*, 2014, Gomez-Ortiz *et al.*, 2016 and Pulido y Herrera, 2016), in which the meaning of the differences was the same as that indicated in this paper.

To end with the Anxiety, the differences are discussed according to the socio-economic and cultural status, observing a disorganized distribution in their scores (and the factors Positive emotional states, Sensations of anxiety, negative emotional states and conflicting States). Thus, there are several studies in which a higher level of anxiety and other negative emotional states have been found among subjects belonging to lower socio-economic strata (Burnham

et al., 2011; Pulido and Herrera, 2015a and Roth *et al.*, 2014), something that does not agree with the results obtained.

The next variable, IE, continues according to the course. On this occasion, age is again a determining factor that allows to collect statistically significant differences, both in the general level of EI shown and in the factors (except Self-Control), including HHSS. In the general levels of IE, as well as in almost all the factors in which significant differences appeared, an ascending direction is followed from 3^o (8-9) to 6^o (11-12).

It should be noted that the process of emotional development causes important changes in all the capacities that are part of EI. In this sense, there were works in which to support the results reflected (Billings *et al.*, 2014, Cazalla-Luna & Molero, 2014 and Pulido and Herrera, 2015). Depending on the gender, statistically significant differences were found again. In IE Total, Self-Control and Empathy, girls show higher scores, coinciding with a large number of works (Azpiazu *et al.*, 2015, Billings *et al.*, 2014, Fernández-Berrocal *et al.*, 2012 and Pulido and Herrera, 2015).

In any case, there is a further shift away from those conceptions based on biological criteria (Pinto *et al.*, 2013), to approach those related to patterns of socialization and performance of different roles, directly related to differential socialization. of women and men (Pulido and Herrera, 2015a and Soriano & González, 2013). Everything commented changes if the HHSS are considered, where no statistically significant differences were found. Depending on the culture / religion, the differences were found in the total scores as well as in the motivation and self-control factors.

No significant differences were found in the case of Social Skills. It was the Christians who obtained superior results, given that culture brings with it numerous differences in educational patterns and values , transmitted, influencing the constitution of emotional competencies (Gutiérrez & Expósito, 2015 and Soriano & González, 2013). This section ends with a look at the behavior of the EI according to the status, which is another determinant variable for the totals as well as in all the factors, except in the case of Social Skills. The highest results were given in the average status (without a logical progression).

Coinciding with the presence of differences, according to the status, the works of Alonso and Román (2014) and Pulido & Herrera (2016) appear, in which those persons belonging to higher status have greater emotional capacities.

This section is finalized considering EI according to anxiety levels. On this occasion, there is a clear interaction between both variables. This reality is fulfilled both in the total levels, as in most factors (motivation, self-knowledge, self-concept and empathy.), Describing an inversely proportional relationship, where the highest scores in IE are reached by people with levels lower anxiety, being able to establish an inversely proportional relationship between both variables. Similar realities are described in different works (Ford *et al.*, 2014 and Pulido and Herrera, 2015), increasing EI as fear levels fall. Emotionally adjusted competences would favor the progressive reduction of anxiety (Limonero *et al.*, 2015 and Sáez de Ocáriz, Lavega, Mateu & Rovira, 2014). The thing varies somewhat if reference is made to the HHSS. On this occasion, in HHSS Totals statistically significant differences

appear, although an organized progression is not followed.

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