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## Process of socialization and mood's symptoms in incarcerated juvenile offenders

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### ABSTRACT

This paper deals with the relationship existing between sociodemographic variables and symptomatic mood changes from Beck Depression Inventory (BDI) in a sample obtained from incarcerated juvenile offenders. The sample was composed of 90 inmate males, convicted in the Penitentiary Centre of Seville (Spain). All of them are from 18 to 25 years old, with an average of 21.4 years old (DT=1.96). The results evidence that the main factors to predict criminal behaviour in young people are the following: urban origin (58.9%), lack of family members (47.8%), large family (63.3%), low individual educational level (21.1%) low educational level in family members (57.2%) and low income. Our information also demonstrates that sociodemographic variables have an influence on the development of mood symptoms in criminal youngsters who are inmates in any prison.

*Key Words* Mood, Juvenile Offenders, Incarcerated, Process of Socialization

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### INTRODUCTION

There are many factors involved in the aetiology of juvenile delinquency, and therefore, several explanatory theories, authors and scientific schools have existed and exist in the scientific field. In general terms, we may affirm that the most relevant factors in the development of delinquency may be classified in: individual, biological, and social or environmental (Farrington, 1995; Torrente and Merlos, 1999; Wilson and Howell, 1995). Actually, there are many research studies that studied the influence of such factors on delinquency, among them the work that focus on the relationship existing between mental health and criminal conduct in which many authors conclude that antisocial personality disorders, those associated with alcohol and drug abuse, mental retardation, psychosis, affective disorders and epilepsy are the disorders which are most directly related to criminal behaviours. (Hagell and Newburn, 1996; Hare, 1984; Herranz, Martín, Garrido and Núñez, 1990; Llorente, 1987; Marchiori, 1990). Likewise, many research studies have been conducted to prove the link between crime and the influence caused by heritage.

We highlight the studies on chromosomal abnormalities and their relationship with criminal and violent behaviour in individuals with Jacobs' Syndrome or the existence of an additional Y chromosome (XYY) or the Klinefelter's Syndrome (García, 1996; Rutter y Giller, 1988; Trasler, 1983). As regards the study of families and twins, there seems to be a higher number

of criminal children in the families where the pnts showed an antisocial behaviour (Garrido, Stangeland and Redondo, 1999), and a clear relationship between monozygotic twins and criminal conduct (Eysenck, 1976). Nowadays, studies are focused on the study of DNA in criminal subjects to determine the difference existing between them and non-criminal population (Garrido *et al.*, 1999), and the relationship between endocrine and hormonal systems and criminal conducts, having established that the study of testosterone may prove to be very useful to differentiate men from women in aggressive conducts and social withdrawal of children and adolescents (Aromäki, Lindman and Peter, 1999; Chance, Brown, Dabbs and Casey, 2000).

Nevertheless, and in spite of the existence of many works purporting to find the influence of individual and biological factors in the aetiology of delinquency, most of them do not obtain conclusive data, therefore we agree with Delgado (1994) when affirming that the psychobiological factors may influence in the aetiology of delinquency, but the presence of other factors is also necessary for a clear understanding of criminal behaviour.

Therefore, it seems clear that the environmental pressure is essential for the genesis of delinquency. In other words, if the environment has criminogenic burdens, it may not only influence on or favour criminal behaviour, but may also act as a triggering factor of such conducts, because we should not forget that behaviours are not inherited, but learned and individuals grow and develop receiving negative and positive burdens from the environment that surrounds them (Valverde, 1996). Of all these factors, the most influential in the development of criminal

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behaviour and, therefore, the most studied and analysed ones are the family, school and labour occupation (Wilson and Howell, 1995).

Studies on the influence of the family in criminal conduct have shown that those individuals whose socialization process was based on family disruption, with temporary or permanent separations between the parents, despising attitudes from the parents to the children (Farrington, 1995; Heaven, 1994; Peiser and Heaven, 1996), parents with a recurring criminal record (Otero, Romero and Luengo, 1994), where there is a total lack of intimate communication among the family members that disables a clear identification that might favour a positive parent-child relationship (Olson, 1986; Peiser and Heaven, 1996), a paternal discipline based rather on physical than verbal violence (Valverde, 1996) and an incomplete and large family composition (Torrente and Merlos, 1999), are factors of utmost importance that will favour the development of objective maladjustment (Valverde, 1996) and therefore, will produce a greater number of psychological disorders that will cause criminal behaviours (León, 1996).

From another point of view, poor or absent school attendance and school structure itself as a source of disorganization in social adaptation are the most influential factors in objective maladjustment (Valverde, 1988). This situation causes the individuals to experience school failure, develop negative attitudes towards school, frequent conflicts with teachers, receive several punishments, (Otero *et al.*, 1994), misbehaviour in class, disturbing behaviour for class rhythm and unjustified absence from school (Torrente and Merlos, 1999; Tremblay, Masse, Perrón, Leblanc, Schwartzman *et al.*, 1992).

Another factor to be taken into account is labour, occupation, or rather the lack thereof. Because of the abandonment or interruption of the School activities, the individual is subjected to inactivity, thus feeling as a burden for the family and, in which the characteristics of the employments causes primal emotions and distress, as well as serious tensions and social rivalries, thus provoking feelings of abandonment, persecutory ideas and psychological conflicts that may determine, in many cases criminal conduct (León, 1996; Valverde, 1996).

It seems clear therefore, that the study of juvenile crime aetiology is not an easy task to perform, because several factors are involved in it, that make its explanation very complex. This complexity is worsened when it is attempted to study the juvenile offender subjected to the prison environment. In this sense, and although the penitentiary regime is consistent with the principles of scientific individuation, and which main purpose is the resocialization of the offender, most part of the scientific research has evidenced the negative effects caused by incarceration, from the psychosocial point of view. Thus, there are studies that analyse the effect of crowdedness (Redondo, 1993; Sancha, 1992; Valverde, 1996), as well as penitentiary's facilities and inmate's health and hygiene (Redondo, 1993), the inefficiency of prison's educational models (González, 1992), labour occupation in prison (Brown and Blount, 1999; Galán, 1992; Triplett, Mullings and Scarborough, 1999), stress in prison's environment or the influence of psychosocial factors and their link with the penitentiary

variables (Gutiérrez, 1997; Martínez-Taboada and Arnoso, 1999, Torrente and Merlos, 1999; Valverde, 1996).

Of all these factors, affectivity seems to be the most influential one on the inmates subjected to incarceration, because studies show that depression, together with hopelessness and suicidal tendencies are the most prevalent psychopathological episodes among inmates (Boothby and Clements, 2000, Boothby and Durham, 1999). Actually, recent studies show that imprisonment influences on the onset of affective disorders, and that such situation becomes worse as a consequence of all those factors, school, labour, and social factors that the individual or the juvenile collective had before their incarceration so that all the treatments of the inmates' depressive episodes depend directly on those sociodemographic variables and not on the variables involved in the prison environment (Baillargeon, Black, Contreras, Grady and Pulvino, 2001; Crighton, 1999; Jenkins, 2001; Lewis, 2000; Mills and Kroner, 2004; Towl and Crighton, 1997).

Therefore, the essential aim of this paper is to understand the sociodemographic variables that define objective maladjustment of juvenile offenders and its link to the development of mood symptoms associated to incarceration, which will define individual subjective maladjustment.

## METHOD

### *Participants*

The selected sample consisted of 90 inmates, all of them males, convicted in the Penitentiary Centre of Seville, all of them from 18 to 25 years old, with an average age of 21.4 (DT=1.96).

### *Assessment Tools*

All the inmates complied individually with the following tools in the general facilities of the Penitentiary Centre:

- Semi structured Interview: for the collection of sociodemographic data, an interview that collected information about family, school, and labour details of the inmates as well as from their families of origin was elaborated

- Beck Depression Inventory, BDI (Beck, Ward, Mendelson, Mock and Erbaugh, 1961). The tool, adapted to Spanish by Conde and Useros (1975a, 1975b) was used, like the original version, BDI is composed of 21 items that assess depression intensity. In each one of these items, the individual chooses the affirmation that better describes his mood during the last week, including the assessment day, from among a set of four to six alternatives. Each item is valued from 0 to 3 points, according to the affirmation chosen by each one of them, later the score are added and the total score that ranges from 0 to 63 is obtained.

The version of Conde and Useros (1975b) was used, although Vázquez and Sanz (1997) advise the use of the 1978 version instead of the 1974 one, nevertheless the latter is still used in research, because it has been proved that even though the different affirmations are not ranked according to the severity of the symptoms, with this issue being a basic requisite as well as the main disadvantage of the tool, there are studies that prove that the random presentation of the affirmations in each item has the advantage of

preventing biased responses tending to choose the first or last affirmation, which would then enable the collection of a better scoring range and may cause the subjects to focus more attentively on all the BDI affirmations (Dahlstrom, Brooks and Peterson, 1990). Therefore, and if we take into account the difficulty of the studied population, it is advisable to avoid response election bias.

### **Procedure**

Once the entry permit was obtained from the Secretariat of Penitentiary Affairs, which bureau operates within the scope of the Ministry of Justice and Internal Affairs, to access the Penitentiary Centre of Seville, in order to collect data for our work, contact was made with the Under Direction of Treatment that assigned a Counsellor of the Centre in order to make the lists of inmates that would meet the following inclusion criteria: ages ranging from 18 to 25 years old (such age range being preferred because the Organic Act of 1/1979, passed on September 26, General Penitentiary, in this Title I, section 9.2 establishes that any person under the age of 21, either male or female, is a "juvenile". Exceptionally, and taking into account the personality of the individual, anyone older than 21 and below 25 may remain in juvenile centres), all of them should be males (women were not included in our study because the incarcerated women population did not meet the inclusion criteria for the research purposes), that they should be included in the Ordinary Regime (second degree) they should have a permanence of at least a month in prison and up to 36 months and they should be willing to participate in the research done by the University of Seville. Of the 150 inmates that present in the Juvenile Module a total of 98 inmates was assessed out, of which 3 of them were excluded, because they refused to complete the questionnaire, because no penitentiary benefit was derived from their participation, other 5 subjects were excluded because they did not master Spanish, owing to their foreign nationality, and the 52 remaining did not meet the inclusion criteria.

Once the inmates were selected, data was collected during which process each one of them received an individual explanation about the study and they were made sure that, at any moment, their identity would remain anonymous and their responses would receive a confidential treatment, that the study was completely voluntary, and that it had no influence on the reduction of the sentence, for the mere fact of being a part of the study. In this connection, and before the interview was carried out, the inmate was asked to sign the informed consent in which they stated that they were aware of the objectives of the study and they consented to be assessed and that their data should be used for a further analysis thereof in a scientific study. Both, the semi structured interview and the BDI were administered orally and individually.

Upon collection of the data, they were statistically treated with the SPSS program version 11.5 under license of use granted to the College of Psychology of Seville. Data analysis was performed by descriptive analysis (frequency and rates) non-parametrical tests (Kruskal-Wallis X<sup>2</sup> and de Mann-Whitney U) at a confidence level of  $p < 0.05$ .

Non-parametrical tests were used because the sample did not meet the assumption criteria of

normality and homocedasticity. As regards the independence of the measures used as criterion variable, we were not able to determine it because we only had a measure to assess the symptomatology of mood. Finally, and before administering non parametrical tests, and internal consistency analysis was performed (Cronbach alpha) of the BDI, with a reliability of  $\alpha = .798$  being obtained.

## **RESULTS**

### **Sample descriptive análisis**

In the first place, an univariant descriptive analysis of data was performed. All the variables presented are qualitative and the distribution of frequencies and rates that represent the categories in each one of them are shown in Table 1.

As it is shown, more than one half of the assessed inmates, 55.6% aged between 18 to 21 years old. This data shows that the incarceration age is increasingly lower, because only 28.9% of the inmates are not re-offenders, therefore the incarceration record in Juvenile Centres and Prisons is very high within that age range.

As regards the origin and current residence of the inmates 58.9% come from and live in urban areas, as compared to 41.1% of the subjects that live in rural areas. This data, together with the current residence of the inmates, determines that there have not been many migrations from rural to urban areas, as a matter of fact, only 13 cases (14.4%) have been found, out of the total studied sample.

In the variable that refers to the inmate type of cohabitation it is found that living alone is the leading category with 81.1%; 73.3% has no children and the most characteristic original family composition is the incomplete family (32.2%), in other words, there is a family member missing in the nuclear family, which in many cases it is the assessed inmate, in 47.8% of the studied sample. This data shows that family disintegration in which these subjects grow and that would suggest the affective withdrawal and deracination they undergo. At the same time, 63.3% are part of nuclear families where there is a large number of brothers and sisters, which situation is not common within the general population.

As regards the educational level of the inmates, we observed that, although illiteracy rates are still very high in the studied sample (21.1%), this situation has improved owing to the compulsory school attendance until 16 years old, therefore, although there are many illiterates, most of them (78.9%), can read and write. In this sense and with respect to the educational level of the parents, it becomes evident that illiteracy rates, both paternal, by 48.9%, and maternal, by 65.5%, are very high, with the parental educational deficit being supposed as having an important influence on the socialization process of such individuals.

The studied variable of the inmate's employment and professional status, 74.4% belong to the working class, thus performing tasks that do not require any kind of qualification or professional specialization. This situation is also found in connection with the paternal occupation, where 93.3% perform non-specialized tasks. As regards the mother, 38.9% perform this kind of non-specialized as compared to 56.7% which are housewives, and therefore, do not

<b>Sociodemographic Variables</b>	<b>N= 90</b>	<b>%</b>
<b>Age intervals</b>		
1. 18 – 21 years	50	55.6
2. 22 – 25 years	40	44.4
<b>Inmate Origin Environment</b>		
1. Urban	53	58.9
2. Rural	37	41.1
<b>Current Inmate Residential Environment</b>		
1. Urban	66	73.3
2. Rural	24	26.7
<b>Inmate Cohabitation</b>		
1. Single	73	81.1
2. Other (Marriage /Couple/Friends/Alone)	17	18.9
<b>Number of Children of the Inmate</b>		
1. None	66	73.3
2. With children	24	26.7
<b>Inmate Family Background</b>		
1. Complete Family	18	20.0
2. Incomplete Family	29	32.2
3. Other (Friends/Other Relatives/Alone)	43	47.8
<b>Number of brothers and/or sisters of the Inmate</b>		
1. From 1 to 3 brothers and/or sisters	33	36.7
2. 4 brothers and/or sisters or more	57	63.3
<b>Study level of the inmate</b>		
1. Illiterate	19	21.1
2. Elementary School	17	18.9
3. Compulsory High School Education or higher	54	60.0
<b>Working Occupation of the Inmate</b>		
1. Non professional/Student	23	25.6
2. Non-specialized Occupation	67	74.4
<b>Inmate Income Level</b>		
1. none or less than 150.25 €	25	27.8
2. between 150.25 and 450.75 €	31	34.4
3. more than 450.75 €	34	37.8
<b>Leisure Time Activities of the Inmate</b>		
1. Crime oriented	36	40.0
2. Non-criminal activities	54	60.0
<b>Cohabitation of the Inmate father</b>		
1. Married	52	57.8
2. Other (Separated /Divorced)	38	42.2
<b>Cohabitation of the Inmate Mother</b>		
3. Married	52	57.8
1. Other (Separated /Divorced)	38	42.2
<b>Inmate Father's Profession</b>		
1. Non specialized Job	84	93.3
2. Specialized Job	6	6.7
<b>Inmate Mother's Profession</b>		
1. Non specialized Job	35	38.9
2. Specialized Job	4	4.4
3. Housewife	51	56.7
<b>Study Level of the Inmate Father</b>		
1. Illiterate	44	48.9
2. Elementary School	28	31.1
3. Compulsory High School Education or higher	18	20.0
<b>Study Level of the Inmate Mother</b>		
4. Illiterate	59	65.5
5. Elementary School	19	21.1
1. Compulsory High School Education or higher	12	13.3
<b>Labour Situation of the Inmate's Father</b>		
1. Active	37	41.1
2. Special Labour Situation	31	34.4
3. Deceased	22	24.4
<b>Labour Situation of the Inmate's Mother</b>		
1. Active	33	36.7
2. Special Labour situation	53	58.9
3. Deceased	4	4.4
<b>Income Level of the Inmate's Father</b>		
1. None or less than 150.25 €	35	38.9
2. Between 150.25 and 450.75 €	16	17.8
3. More than 450.75 €	39	43.3
<b>Income Level of the Inmate's Mother</b>		
1. None or less than 150.25 €	44	48.9
2. Between 150.25 and 450.75 €	23	25.6
3. More than 450.75 €	23	25.6

Table 1. Descriptive Analysis of Sociodemographic Variables

perform any kind of paid job. Thus, and concerning the inmates' income level, only 37.8% have an income level which are equal or higher than the inter-professional minimum salary, with this situation being repeated in the case of the paternal income (43.3%) and maternal (25.6%). It is also observed that, likewise, 38.9% of the inmates' fathers and 48.9% of the mothers have income levels which are equal or lower than 150.00 €/per month. Only 41.1% of the fathers and 36.7% of the mothers are occupationally active, which evidences large unemployment rates or other special working circumstances within the inmate's family environment. This situation is caused by the educational level, both of the family and the inmate that forces these subjects to apply only for low-paid or under-qualified occupations.

Finally, it should be pointed out that 40% of the studied inmates devote their free and leisure time to delinquent activities, mainly to those related to burglary and drug purchase and sale, which in turn reinforces even more the marginal environment that defines the socialization process of these subjects.

**Bivariant Analysis of the socio demographic variables and affective symptomology**

Once the descriptive analysis of the studied sociodemographic variables was performed, we describe the results obtained after applying non-parametrical contrast to discover the link existing between sociodemographic variables and affective symptoms as measured using the BDI.

<i>BDI</i>	<i>Sociodemographic Variables</i>	<i>X<sup>2</sup></i>	<i>Sig.</i>
<b>Mood</b>	<i>Marital Status of the Father</i>	3.968	.046
	<i>Marital Status of the Mother</i>	5.217	.022
<b>Pessimism</b>	<i>Marital Status of the Father</i>	5.158	.023
	<i>Marital Status of the Mother</i>	6.118	.013
	<i>Labour Situation of the Father</i>	9.082	.011
<b>Guilty feelings</b>	<i>Labour Situation of the Father</i>	8.864	.012
<b>Punishment Feelings</b>	<i>Family Background of the Inmate</i>	7.429	.024
<b>Self-hatred</b>	<i>Marital Status of the Mother</i>	4.526	.033
<b>Self-blame</b>	<i>Marital Status of the Mother</i>	4.628	.031
<b>Suicidal tendencies</b>	<i>Habitational Background of the Inmate</i>	9.490	.002
	<i>Profession of the Mother</i>	7.931	.019
	<i>Labour Situation of the Mother</i>	6.779	.034
<b>Irritability</b>	<i>Educational level of the inmate Income</i>	6.378	.041
	<i>level of the inmate</i>	7.419	.024
	<i>Educational level of the mother</i>	6.179	.046
<b>Indecission</b>	<i>Labour Situation of the Father</i>	7.253	.027
<b>Body image</b>	<i>Inmate Profession</i>	3.872	.049
<b>Working capacity</b>	<i>Inmate Profession</i>	10.475	.001
	<i>Income level of the inmate</i>	7.897	.019
<b>Loss of appetite</b>	<i>Habitational Background of the Inmate</i>	4.503	.034
	<i>Profession of the Mother</i>	7.938	.019
	<i>Labour Situation of the Mother Income</i>	8.449	.015
	<i>level of the mother</i>	9.450	.009

Table 2. Relationship between Sociodemographic variables and Affective symptomology

Table 2 shows statistically significantly differences existing between demographic variables and BDI items that assess intensity and severity of affective symptoms of cognitive and mood type as compared to somatic and behavioural type ones.

Therefore, we can state that labour, educational and family variables of incarcerated juvenile offenders, that define their objective poor adaptation process, are related to an increase of the

affective symptoms, characterized by high levels of irritable or depressed mood, an increase worthlessness or guilty feeling and an increase of recurring ideas of death and suicide, and to a lesser extent, certain damage to body image and labour capacity and appetite loss.

As regards the relationships between mood type affective symptoms and sociodemographic variables, further analysis show that there are statistically significant differences with the items that assess mood and irritability.

Table 3 indicates that inmates coming from emotionally withdrawn and unstructured families show lower individual and family educational levels and their income are lower than the interprofessional minimum salary. Within the prison those individuals are likely to develop an increased number of disphoric and mood symptoms, in other words, they will be more sad and irritable than the other inmates.

In this connection, we may state that the results show that those subjects who have a more normalized socialization process have a stronger mood to cope with problems arising in prison daily life.

When analysing the link between sociodemographic variables and cognitive type affective symptoms we observed that there are statistically significant differences in the items that measure worthlessness or guilty feelings and suicide impulses. Thus, it is evidenced in Table 4 that such inmates who had a socialization process characterized by affectively withdrawn and unstructured family relationships and who had lost one of the parents during childhood, experience during incarceration an increase of cognitive symptomology that is evidenced by pessimistic feelings, hopelessness, despair and guilt for the situation they are undergoing thus falling into an existential vacuum that may lead them to recurring death thoughts.

BDI	Sociodemographic Variables	Mann Whitney U			
		U <sub>2</sub>	sig.	U <sub>3</sub>	sig.
Mood	<b>Civil Status of the Father</b> 1. Married 2. Other (Separated/Divorced)	759.50	.046		
	<b>Civil Status of the Mother</b> 1. Married 2. Other (Separated/Divorced)	719.50	.022		
Irritability	<b>Educational level of the inmate</b> 1. Illiterate	128.50	.279	334.50	.019
	2. Elementary School				
	3 Compulsory High School Education or higher	361.50	.166		
	<b>Income Level of the Inmate</b> 1. None or less than 150.25 €	297.50	.124	361.50	.305
	2 between 150.25 and 450.75 €				
3. More than 450,75 €	330.50	.007			
	<b>Educational level of the Mother</b> 1. Illiterate	558.00	.976	198.00	.012
	2. Elementary School				
	3 Compulsory High School Education or higher	69.00	.054		

Table 3. Relationship between sociodemographic variables and mood-type affective symptomology

In the same table 4, we find that the inmates come from nuclear families where there is a certain structure and affective connection, experience in prison more guilty feelings and an increase of autolytic ideas, owing to the fact, in part, of the loss of interpersonal relationship imposed by the Penitentiary Institution that, even if it affects all the inmates, would have a greater influence on those who had kept a strong family and interpersonal relationship outside.

Concerning further comparisons performed between sociodemographic variables and somatic type and behavioural type affective symptoms, we observe that there are statistically significant

differences in the items that assess the alteration in body image, working ability and loss of appetite.

If we observe tables 5 and 6 we see that the inmates who were performing any kind of non-qualified job, the same as their mothers', experienced during incarceration, an increase of somatic symptoms, in other words, show a decay of body image that is coupled with appetite loss, because within the institution the tasks performed are focused on resocialization and are therefore, of a more educational nature, so there is a greater loss of motivation among such subjects that in their external life performed a certain kind of job.

BDI	Sociodemographic Variables	Mann Whitney U			
		U <sub>2</sub>	sig.	U <sub>3</sub>	sig.
Pessimism	<b>Civil Status of the Father</b> 1. Married	735.00	.023		
	2. Other (Separated/Divorced)				
	<b>Civil Status of the Mother</b> 1. Married	706.00	.013		
	2. Other (Separated/Divorced)				
Guilty feelings	<b>Labour Situation of the Inmate's Father</b> 1. Active	354.00	.003	332.50	.213
	2. Special Labour Situation				
	3. Deceased	266.00	.114		
Punishment Feelings	<b>Labour Situation of the Inmate's Father</b> 1. Active	460.50	.108	300.50	.074
	2. Special Labour Situation	198.50	.004		
	3. Deceased				
Self-hatred	<b>Inmate Family Background</b> 1. Complete Family	166.50	.017	240.50	.012
	2. Incomplete Family				
	3. Other (Friends/Other Relatives/Alone)	589.50	.665		
Self-blame	<b>Civil Status of the Mother</b> 1. Married	754.00	.033		
	2. Other (Separated/Divorced)				
Suicidal tendencies	<b>Civil Status of the Mother</b> 1. Married	743.50	.031		
	2. Other (Separated/Divorced)				
	<b>Inmate Origin Environment</b> 1. Urban	698.00	.002		
	2. Rural				
	<b>Inmate Mother's Profession</b> 1. Non specialized Job	59.00	.333	653.00	.005
	2. Specialized Job	87.50	.577		
	3. Housewife				
Indecision	<b>Labour Situation of the Inmate's Mother</b> 1. Active	672.00	.015	40.00	.032
	2. Special Labour Situation	95.00	.680		
	3. Deceased				
Indecision	<b>Labour Situation of the Inmate's Father</b> 1. Active	385.50	.012	398.00	.881
	2. Special Labour Situation	235.00	.034		
	3. Deceased				

Table 4. Relationship between sociodemographic variables and cognitive -type affective symptomology

This situation is reproduced with respect to the food, because in prison food is rejected and deemed to be of a low quality, therefore, this is the reason why, the lack of appetite is a consequence, among other causes, of the Institution itself, and not only of the inmate.

Briefly, and making a global analysis of the results we may state that the inmates that are born and come from rural zones, where education is based on more homogeneous parameters than in the urban zones, have more autolytic ideas as a consequence of

the disruption of the flexible rules of the rural zones that impacts more directly on those juvenile offenders when making contact or living in the prison environment that is characterized by the inflexibility of timetables and social and affective isolation involved in incarceration, in other words, the inmates coming from urban zones are more adapted to the heterogeneous rules involved in normal civil society, and therefore, are more adapted to the totalitarian environment of the Penitentiary Institution.

At the same time, we have proved that the subjects who have lived in a conflicting family environment, characterized by disruptions and separations between the parents, are more pessimistic and with a more depressive and irritable mood because incarceration stresses even more family withdrawal, and consequently social isolation implied

We also observed that those subjects who had a process of socialization characterized by a greater economic, labour, school, and affective stability feel that they deserve to be punished by the in incarceration evidences the loss of affective relationship actions they committed during their life outside, nevertheless their emotional and affective status gives them more strength to cope with the social situation they are facing. Therefore, we may

state that the inmates who had a socialization process based on more or less stable affective relationships, make their development and relational and personal security strengthened even in environments having such inflexible rules as the ones defined within the prison environment.

Therefore, we may confirm that the incarcerated juvenile offenders that during their childhood were subjected to a socialization process characterized by the internalisation of cultural and moral values and guidelines contrary to pro-social normal behaviours or, at least, socially accepted, are sadder, pessimistic, and with higher levels of discourage caused by the surrounding reality, because, even their own parents of these inmates have not given importance to their own emotional, family, educational, working and economic stability.

BDI	Sociodemographic Variables	U de Mann Whitney			
		U <sub>2</sub>	sig.	U <sub>3</sub>	Sig.
Body Image	<b>Working Occupation of the Inmate</b> 1. Non professional/Student 2. Non-specialized Occupation	601.00	.049		
	<b>Working Occupation of the Inmate</b> 1. Non professional/Student 2. Non-specialized Occupation	481.00	.001		
Working Capacity	<b>Inmate Income Level</b> 1. none or less than 150.25 €	286.00	.055	280.00	.008
	2. between 150.25 and 450.75 €				
	3. more than 450.75 €	470.50	.331		

Table 5. Relationship between sociodemographic variables and behavioural -type affective symptomology

BDI	Sociodemographic Variables	Mann Whitney U			
		U <sub>2</sub>	sig.	U <sub>3</sub>	Sig.
Loss of appetite	<b>Inmate Origin Environment</b> 1. Urban 2. Rural	736.00	.034		
	<b>Inmate Mother's Profession</b> 1. Non specialized Job 2. Specialized Job 3. Housewife	34.00	.065	688.50	.059
		36.00	.025		
	<b>Labour Situation of the Inmate's Mother</b> 1. Active 2. Special Labour Situation 3. Deceased	570.50	.004	43.00	.206
		95.00	.721		
	<b>Income Level of the Inmate's Mother</b> 1. None or less than 150.25 € 2. Between 150.25 and 450.75 € 3. More than 450.75 €	401.00	.149	345.50	.023
		143.00	.004		

Table 6. Relationship between sociodemographic variables and somatic -type affective symptomology

## DISCUSSION

The main objective of this work was to describe the sociodemographic characteristics of a

sample of incarcerated juvenile offenders and to determine the relationship existing between such variables and the onset of affective disorders within the prison environment. Recent studies (Mills and



Kroner, 2004) show how within the penitentiary environment the most frequent pathology treated is the depressive one and that such disorders have a greater impact depending on the family, school, working and, finally, social environment from which the inmate comes.

Likewise, the greater part of the authors consider that age is one of the most important factors that may predict criminal behaviour of individuals and juvenile collectives, thus suggesting that the early onset of the delinquent activities predicts a greater number of crimes that may be committed and therefore, the number of re-offences is greater. (Dessureault, Cote and Lessage, 2000; Farrington, 1995; Tolan, 1987; Torrente and Merlos, 1999). Our results point out in such direction, because as it is evidenced, the greatest part of the assessed subjects are between the ages of 18 and 21 years old (55.5%) and a very high prison entry record of about 71.1%, which would confirm that the onset of the criminal activities occurs increasingly earlier.

As regards the cohabitation of the inmates our data show that most of them do not have a couple and live in situation other than a family one (81.1%) which evidences the isolation and affective withdrawal of them. These data are coincidental with those found by Rutter and Giller (1988) by pointing out that in the case of juvenile offences there are difficulties in the relationships, and consequently, they are individuals who are most likely to be isolated. Nevertheless, and owing to the low age of the interviewed subjects, it seems logical that they have no stable legal couples and moreover if we take into account that in the general population most part of the youngsters are still unmarried.

Besides, León (1996) suggests that many juvenile offenders live in urban zones, specifically, marginal neighbourhoods that, in many cases are originated by rural zones, therefore migrant movements displacements are determining factors in juvenile offences. Nevertheless, our study does not agree with this affirmation because most of the participants come from and reside in urban zones, therefore we may not be able to conclude that there is a link between the inmate place of origin and criminal behaviour.

As regards family composition, our data show that there is a tendency to the incomplete family origin (73.3%) and large families (63.3%). Therefore, both composition and family size may be considered as two factors that may influence in the onset of criminal conducts in youngsters. These data are coincidental with the studies of Wilson and Hernstein (1985) where the existence of a statistically significant relationship is evidenced between the family size and juvenile crime or as Valverde (1988) points out, most of the maladjusted tend to be likely to come from families having a larger number of members than the general population. These results have been recently compared to the study performed by Torrente and Merlos (1999) who state that a recurrent factor in juvenile offenders is the fact that they come from incomplete families or with a large-sized ones.

When analysing the educational level, studies on this subject suggest that maladjusted subjects have serious problems at school, in a way

that, integration difficulties, as a consequence of exclusion from normalized standard society, makes that the deficit in school performance (Vazsonyi and Flannery, 1997) and the long record of school failure (Torrente and Merlos, 1999), are considered as determining elements to predict a future criminal conduct (Farrington, 1995; León, 1996; Torrente and Merlos, 1999). These conclusions are partially confirmed by the results obtained in our work having evidenced that 21.1% of the inmates are deemed to be illiterate, therefore their educational process has many times been arrested by many social circumstances that take place throughout their socialization process.

Nevertheless, and in spite of these data, school failure and juvenile illiteracy is not clearly considered a determining factor for criminal conduct, because in most of the cases, as shown by our results, it is the educational level of the parents, which in many cases reaches alarming illiteracy levels, that may account for the lack of interest in literacy and educational development of their children that in most of the cases causes absenteeism and school poor performance, because they did not have such concern in their respective socialization process. Such hypothesis is confirmed by the works of Morash and Rucker (1989) when demonstrating that the age and poor educational level of the parents are very important factors as possible determining factors of juvenile criminal conduct, because, in many cases, parents develop poor socialization tools, because their respective socializing models also showed failures.

As regards the socio-economic level of the inmate, we may observe that our data show that most of them perform non specialized jobs (74.4%) and have income levels equal to or higher than the minimum interprofessional salary (72.2%) which confirms our statement that social class or socio-economic level is not a potentially determining factor for the onset of criminal conduct, because, even if their educational level does not enable them to perform qualified jobs, most of the assessed inmates have a certain economical or social independence. Such situation also occurs with respect to the socio-economic level of the inmates' parents. Such results disagree, to a certain extent, with some studies suggesting that low family socio-economic level, that is to say, economic poverty is a characteristic factor in juvenile offenders (Larzelere and Patterson, 1990; León, 1996; McLoyd, 1990; Morash and Rucker, 1989). Nevertheless, our study is more coincidental with the thesis proposed by Rutter and Giller (1988) when affirming that juvenile delinquency is present in all social levels and not only in marginal ones. This point of view, does not imply that there are not more probability of criminal conducts in less favoured social structures, but that there are other factors involved that may favour criminal conducts in a juvenile collective or individual.

As regards leisure time prior to imprisonment, 40% of the inmates devoted such time to antisocial activities, specifically to burglary in order to obtain money to support their addictions. This data coincides with the work of Bloch, Chemana, Gallo, Leconte, Leny *et al.* (1996) that suggest that juvenile offenders misuse their leisure time, this implies that they perform activities that

may prevent their personal maturity and development.

We may affirm, therefore, that in juvenile offenders there exist certain sociodemographic characteristics, as the urban environmental origin, a numerous and incomplete family composition, the presence of a low family and individual educational level and a economic and labour low-medium level situation, both at a personal level and family level, which constitute the most important factors for the development of juvenile criminal conducts. This conclusion being contrasted by several studies suggesting that individual factors, school and family influence, and, finally, a poor socialization process will determine, in most of the cases, the development of criminal conducts (Otero *et al.*, 1994; Peiser and Heaven, 1996; Torrente and Merlos, 1999; Wilson and Howell, 1995; Valverde, 1988).

As regards the relationship between sociodemographic variables and the development of mood related symptoms in incarcerated juvenile offenders, our results show that the presence of a conflictive family background, characterized by affective disruption and withdrawal, cause the inmates to undergo a poor socialization process, thus enhancing the cognitive type affective symptomatology, and therefore, they feel more pessimistic, with guilty feeling, worried about their personal situation, irritable and unmotivated and unable to express their feelings and emotions because of the affective lability and blocking that they undergo. These results agree with the works that have demonstrated that personal characteristics and life background of youngsters are the most influential variables in offenders' mood and are, in turn, determining factors of juvenile delinquency (Capaldi, DeGarmo, Patterson y Yoerger, 2002; Coy and Torrente, 1996; Farrington, 1995; Heaven, 1994; Peiser and Heaven, 1996; Ríos and Cabrera, 2000; Torrente and Merlos, 1999; Valverde, 1996).

We may conclude that our work agrees with the theoretical proposal of Valverde (1988, 1991, 1996) that considers that juvenile collective or individual objective social maladjustment has a powerful influence of the development of affective disorders when the individual has to face a Penitentiary Institution and reaches the level of subjective social maladjustment, so that the inmate faces a situation of situational and affective insecurity that will continue throughout the term of his incarceration.

This study presents certain limitations that should be taken into account for the possible generalization of the results, mainly the lack of non-institutionalised incarcerated inmates that may enable a more precise analysis of the incarceration factor and the lack of other clinical criterion (i.e. clinical diagnosis, psychopathological records, and/or other emotional assessments, personality traits or substance-abuse related assessments). We consider that, in spite of these limitations and those implied by the number of participants and the descriptive nature of the study, our study may be used as a basis for the further study of the psychopathological aspects associated to incarceration and to design intervention programs that may include development and strengthening of the deficiencies of the individual as

necessary elements to strengthen affective and relational safety skills as coping adaptational tools not only for the prison environment but also for the life outside the prison.

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