Journal of Interpersonal Violence

Early Trauma and its Influence in Adult Male Psychopathy

scholarONE™
Manuscript Central

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

ABSTRACT

INTRODUCTION: The factors that interact to drive the development of psychopathy are diverse.   A genetic predisposition has been observed that, when coupled with the experience of traumatic events at a young age, potentiates the development of this behavioral and affective disorder that leads to aggressive and violent acts against society. **OBJECTIVES**: To understand the incidence of traumatic events (e.g., stressful events, physical abuse, emotional abuse, and sexual abuse) and their influence in the psychopathy of adult male convicts. **PARTICIPANTS AND MATERIALS**: Background criminal career reviews and semi-structured clinical interviews were conducted to classify the inmates according to their psychopathy level utilizing the Revised Hare Psychopathic Scale. In addition, the Early Trauma Inventory was applied to assess the frequency and diversity of events experienced before the participants were 18 years of age. **RESULTS:** Inmates with high psychopathy also presented with a high incidence of traumatic events, as well as stressful events, emotional and sexual abuse in a higher frequency than the group with low psychopathy. The incidence of traumatic events and emotional abuse were found to predict the degree of psychopathy among the inmates.   **CONCLUSIONS:** Traumatic events experienced during infancy and adolescence seem to favor the manifestation of violent conduct by interacting with neurobiological factors that underlie psychopathy, such that an association may be observed between the frequency of childhood traumatic events and the level of psychopathy present in adult life.

Key words: adults, convicts, psychopathy, early trauma, violence

Heading words: criminal psychology, forensic psychology.

INTRODUCTION

In recent years, the origins of aggression and violent behavior in individuals who contemplate killing and torturing others have been a subject of study for neuroscientists. A complex interaction of genetic, neurobiological, sociocultural, and learning factors has been described in the development of conduct disorders, such as antisocial personality disorder and psychopathy.

Psychopathy is a personality disorder that exists in 1-3% of the general population and in 15-25% of the inmate population. It can involve violent reactive behavior conduct and/or premeditated acts, or acts of manipulation and superficial charm that may appear normal to achieve personal goals (Hare, 1991; Ostrosky-Solís, Ruíz, Arias & Vásquez, 2008). Emotionally, psychopaths are characterized by an inability to develop affective bonds or to experience normal feelings, especially those of empathy and guilt.

Different theories underscore the importance of psychosocial factors (e.g., living in a hostile environment, abuse and neglect as an infant) in the development of psychopathic personalities. In these theories, a genetic predisposition is potentiated by the environment, learning, and structural changes in cerebral areas during critical stages of cognitive and emotional development, leading to this conduct disorder.

Bandura (1986) emphasized the social factors involved and noted that individuals with a psychopathic personality emerge from homes characterized by negligence and parental indifference. He suggested that aggressive and violent behaviors are learned and serve as a defense strategy for coping with a hostile environment.

The biological perspective maintains that in some individuals, there is a predisposition toward developing psychopathic traits that may be potentiated by living in hostile environments. Genetic studies (Frazzetto, Di Lorenzo, Carola, Proietti, Sokolowska, Siracusano et al., 2007) have found a functional polymorphism leading to reduced

expression of a monoamine oxidase A (MAOA) promoter gene, thus, increasing catecholaminergic and indolaminergic transmission (specifically of dopamine, norepinephrine and serotonin). In adult victims of child abuse or negligence, this polymorphism appears to be associated with the manifestation of violent and antisocial behaviors. It is worth noting that these aggressive behaviors are not observed in adults with the same polymorphism but whose life circumstances were not traumatic.   The researchers concluded that this genetic predisposition increases the sensitivity of adults to negative experiences, leading to the manifestation of aggressive behavior as a defense mechanism.

It has also been observed that the experience of traumatic events (TE) during critical developmental stages directly affects the maturation of various cerebral structures and essential neurobiological systems (De Bellis y Keshavan, 2003; De Bellis, Keshavan, Frustaci, Shifflett, Iyengar, Beers, et al., 2002; Foley, Eaves, Wormley, Silberg, Maes, Kuhn, et al., 2004). For example, the increase in cortisol, catecholamines, and dopamine excretion present in situations of intense anxiety or chronic stress has neurodegenerative effects on the amygdala, hippocampus, and prefrontal cortex, and can lead to hyperactivity of the sympathetic nervous system, thereby increasing the propensity toward aggressive behaviors.

De Bellis (2005) notes that TE interfere in various ways with the development of the prefrontal regions. For example, TE (i.e. stressful events and negligence) may affect the projections this structure receives from the amygdala, while a lack of appropriate stimulation during the first years of life, the abnormal increases in dopaminergic transmission and the serotonergic deregulation may also affect prefrontal development. In addition, it has been observed that the age of onset and duration of abuse have detrimental effects in terms of damaging cerebral development (De Bellis, Baum, Birmaher, Keshavan, Eccard, et al., 1999; De Bellis, Keshavan, Clark, Giedd, Boeing, et al.,1999; De Bellis et al., 2003; De Bellis, 2005).

Supporting these observations, studies using neuroimaging techniques have found that individuals with high levels of psychopathy present reductions in some areas of prefrontal grey matter (Blair, 2001; Blair, Peschhardt, Budhani , Mitchell & Pine, 2006) . Neuropsychological studies have revealed that individuals with a history of abuse, antisocial personality disorder, and psychopathy who exhibit impulsive and premeditated aggression have a deficient performance in tests related to the appropriate functioning of the orbitofrontal and ventromedial cortex, mimicking the execution and damage observed in patients with traumatic brain injury. In addition, autonomic deficits have been observed in these patients, in which an inability to produce anticipatory autonomic responses manifests in the election of risky options; in other words, these individuals show an inability to "make good decisions", contributing to impulsivity, rule-breaking and lack of responsibility.   These are features that the DSM-IV includes in the classification of antisocial behavior (Lapierre, Braun & Hodgins, 1995; Anderson, Bechara, Damasio, Granel & Damasio, 1999; Bechara, Damasio, Tranel & Damasio, 1997). Additionally, structural and metabolic changes have been found in the systems and neural circuits crucial for the processing of emotions and aggression. A close association between the degree of psychopathy and the volume and function of the amygdala has been observed, in which individuals with higher levels of psychopathy exhibit a greater reduction of the amygdala as well as hypoactivity during the processing of negative stimuli (Raine, Lencz, Bihrle, Lacasse & Colletti, 2000; Raine, 2002). It is thought that changes in the function of this structure interfere directly with the process of socialization by disrupting normal fear conditioning and instrumental learning, thus, inhibiting the recognition of feelings of fear and sadness in others, and the ability to modify one's actions based on negative experiences, such as the observed insensibility to punishment (Blair, 2001; Blair, Peschhardt, Budhani , Mitchell & Pine, 2006).

Raine (2001) found that adult victims of past child abuse exhibit a decrease in the activity of the left hemisphere while performing tasks that involve working memory. However, another group of violent individuals and victims of abuse in that study showed a reduction in the right hemisphere in the same tasks, which was associated with deficits in emotional processing (specifically, with conditioning to fear), the perception of pain, and the recognition of anger and fear, in a way that contributed to the manifestation of violent behaviors.

The TE or adverse experiences are the occurrence of stressful events -- for example, witnessing violent acts, accidents and deaths, and physical, emotional, or sexual abuse in children and/or adolescents before the age of 18 (Luntz y Widom,1994; Johnson, Cohen, Brown , Smailes, Bernstein, 1999; De Bellis, 2005). As proposed previously, the development of violent, antisocial, delinquent, and psychopathic behaviors may be potentiated via various mechanisms (Lang S, af Klinteberg B, Alm P-O, 2002; Luntz y Widom, 1994; Krischer & Sevecke, 2008). Weiler and Widom (1996) argue that the TE are directly correlated with psychopathy, which increases the manifestation of violent behaviors. However, Lang et al. (2002) affirm that children with psychopathic traits (e.g., impulsivity, hyperactive and aggressive behaviors, and childhood disorders) are at a higher risk of witnessing and suffering a greater number of violent acts, leading to violent behaviors and, probably, a psychopathic personality. In a study of a reclusive population, Krischer and Sevecke (2007) found that physical and emotional abuse contributed significantly to the observed level of psychopathy.

Given the importance of the TE as a factor associated with psychopathy, the objectives of this study are: 1) to understand the influence of victimization on the level of psychopathy observed in the inmate population; 2) to understand the difference across the various types of TE in inmates with different levels of psychopathy; 3) to assess whether one type of abuse can predict the level of psychopathy observed, and 4) to determine if differences exist in the level of psychopathy between individuals that only witnessed violent acts vs. those who were victims of violence as a direct punishment.

MATERIALS AND METHODS

Participants

Our sample consisted of 194 inmates in a male-only prison in Mexico City, including those residing in high security modules as well as other areas. Confidentiality and the use of all data for research purposes were guaranteed to all participants. Inmates with self-reported or documented histories of neurologic disorders, mental retardation, and psychopathic symptoms were excluded from the study.

Evaluation

Traumatic Events

The degree of abuse and/or neglect was obtained using the Early Trauma Inventory (ETI; Bremner, Vermetten & Mazure, 2000), an instrument of 56 variables that evaluates the frequency, impact, and age of individuals who experienced TE before the age18 was employed. Each variable was assigned a value of 1 if an incident occurred at any time, 2-4 if it occurred on two or more occasions, and 0 if it never occurred.

The inventory is divided into four sub-scales:

-Stressful events (SE; 11 items) - includes events such as having experienced the death or murder of family and/or friends; having witnessed violent acts, intra-familial violence, or parental separation; having lived in foster homes; and having suffered accidents, hospitalizations, robberies, or deprivation of freedom.

-Physical abuse (PA; 5 items) - includes having been a victim of physical punishment, e.g., striking with the hands or objects, strangulation, burning, or having been locked in a closet or small space.

-Emotional abuse (EA; 3 items) - includes having been a victim of verbal abuse or threatened, having been ridiculed or treated with frivolity, and having been deprived of basic needs.

-Sexual abuse (SA; 7 items) - includes the experience of unwanted sexual events, e.g., touching or being touched by someone else, being watched or spied upon while without clothing, and being forced to watch or participate in sexual acts of any other type, including prostitution.

The TE scale has a level of validity, reliability of retest, and internal consistency of 0.91 d.f.=9; p≤0.00; and r=.55-.68, respectively [26].

Psychopathy

Case files related to criminal history were reviewed to classify the participants according to their level of psychopathy. Also, a semi-structured interview that lasted approximately three hours was conducted to obtain details about the criminal and other social, familial, and occupational aspects of the participants' lives. Following this, and according to the information gathered in the interview, the participants were classified according to the level of psychopathy present using the Hare Psychopathy Scale-Revised (PCL-R; Hare, 2003) adapted for a Mexican population (Ostrosky-Solís, 2008). Based on this, participants with a low level of psychopathy (LP) were classified as those who had a score of 0-19 points; participants with a medium psychopathy (MP) with a score of 20-29 points; and participants with high psychopathy (HP) with a score of ≥30 points.

Treatment of Data

To classify the TE incidence, a cutoff point was established wherein participants had to obtain a score of ≥ 8 points to belong to the low victimization (LV) group and $\leq$ 8 points to belong to the high victimization group.

The ETI was divided between those items that relate to being a victim of abuse of directed physical punishment (e.g., beating, strangling, insult, violation) and those that relate to witnessing violent acts (e.g., deaths, accidents, assaults, divorces, intra-familiar violence). With this classification, 14 items pertained to direct abuse and 12 to indirect or "witnessed" abuse.

The degree of psychopathy was calculated using the three intervals established by Hare [1]: low psychopathy, medium psychopathy, and high psychopathy. This resulted in proportions of 48%, 29%, and 22%, which coincides with the percentage of psychopaths that the author previously reported in the inmate population (15-25%).

Statistical Analysis

The statistical program SPSS (SPSS, Chicago, IL) was used to analyze the distributions to determine whether the observed frequencies were lower or higher than those expected from a random distribution model.

To evaluate the difference between the TE among the different groups and the PCL-R according to the level of victimization, an analysis of variance (ANOVA) was conducted with a Bonferroni correction.

Finally, a stepwise regression analysis was conducted, in which the totals from each subscale and the total TE were evaluated as independent variables to establish if these significantly contributed to the PCL-R score.

RESULTS

The total sample consisted of 194 inmates convicted for different criminal offenses. Table I presents the descriptive characteristics of the participants, classified according to their level of psychopathy. Significant differences were found with regard to the age of the inmates; those of medium and high psychopathy were, on average, younger (F= 10.0; p<0.00).

PLEASE ATTACH TABLE I

A contingency table examining the relationship between the level of victimization and degree of psychopathy shows significant associations [$X^2(2)$=30.06, p<0.01]. Inmates with a high psychopathy level appeared more often in the high victimization group than expected, while inmates with low levels of psychopathy appeared less often than expected in the same group (P<0.01). Additionally, inmates with low psychopathy level appeared more often than expected in the low victimization group (P<0.01). These results are presented in Table II.

PLEASE ATTACH TABLE II

Significant differences were found in the total number of stressful events and the total number of TE reported between the three groups, in terms of the variance analysis (F= 2.3, p≤0.01; F= 13.5, p≤0.01). Significant differences were observed among the three groups with regard to the total score for PA (F=11; $p \leq 0.00$). Additionally, differences were found between the low and high psychopathy groups in the areas of EA and SA (F=4.5, $p \leq 0.01$;

F=13.5 $p \leq 0.01$). In Table III, we present details about the variables and totals by scale found to be significant across the groups, as well as the total score for the ETI by group.

PLEASE ATTACH TABLE III

PLEASE ATTACH FIG. 1

PLEASE ATTACH FIG. 2

A regression analysis revealed that total TE experienced during infancy and EA (lack of basic needs) were variables that significantly affected the score and the level of psychopathy of the participants ($r2=.23$, $p \leq 0.00$; $r2= .25$; $p \leq 0.01$).

Finally, the variance analysis revealed that the medium and high psychopathy groups witnessed more violent events than the group with low psychopathy (F=12.5; $p \leq 0.04$). Significant differences were observed in direct abuse between the low psychopathy and high psychopathy groups (F=12.5; $p \leq 0.04$).

CONCLUSIONS

Our investigation evaluated the relationship between traumatic events experienced before the age of 18 and the level of psychopathy in adult male criminal convicts. An association was found between the experience of TE and the level of psychopathy of male inmates. Similarly, it was observed that a greater percentage of inmates with high psychopathy scores underwent significant victimization compared to inmates with low and medium psychopathy scores. In particular, inmates with high psychopathy had experienced more EA and SA than those with low psychopathy scores and had experienced more stressful events than those with low and medium psychopathy scores. Also, the rates of PA were significantly higher in inmates with medium and high psychopathy scores when compared to the low psychopathy group.

It is important to note that the regression analysis revealed that EA contributed significantly to the total psychopathy score. We believe the lack of early affective emotional bonds with caregivers (or other closely related people) at critical ages may have led to an inability to

establish these bonds later in adult life, and as a result, the inability to experience feelings of empathy and guilt observed in the most violent psychopaths.

An important part of our study aimed to corroborate the origin and direction of the TE. Specifically, we attempted to determine if individuals with psychopathic characteristics were exposed to more "direct" abuse as a form of punishment for their behavior or if the environment acted as an important mediator. As Lang et al. [23] observed, individuals with the highest level of psychopathy also received the most intentional or direct abuse and the groups with medium and high psychopathy scores witnessed the highest number of violent acts. Based upon these results, we concluded that the TE originated as forms of punishment for the behavioral disorders or infantile manifestations of psychopathic characteristics. Undoubtedly, however, a hostile environment plagued with violence would also potentiate the manifestation of these traits (i.e. violent acts as defense mechanisms).

In this analysis, it can be observed that the frequency of all varieties of TE increases with the level of psychopathy in the inmates. For this reason, we cannot deny the role of TE in the development of this personality disorder, independently of the biological factors that predispose it.

We believe that the psychopathic personality is a complex personality that conforms to the specific interaction of the previously mentioned components, accounting for its infrequent occurrence in the general population. Individuals at risk, including those with low expression of MAOA, who at critical ages live in hostile environments and who suffer abuse as a result of their impulsive behavior are likely to have deficiencies in their cerebral structure that in turn disrupts their emotional processes and their ability to socialize. As a result of this chain of events, these individuals will learn antisocial behaviors as survival strategies, thereby increasing their level of psychopathy.

This type of studies is of increasing relevance as the number of individuals who harm others using extreme violence and manipulation increases. The manifestation of such personalities could be decreased by identifying the factors that influence their development, especially within vulnerable groups. Interventions at an early age could also decrease their manifestation. In this way, groups of children and adolescents who present with impulsive and hyperactive behaviors and who are at risk for being victims of abuse

and infantile negligence could be referred to early intervention programs to help prevent the development of a psychopathic personality.

BIBLIOGRAPHY

Anderson, SW, Bechara, A, Damásio, H, Tranel D, & Damasio AR. (1999) Impairment of social and moral behavior related to early damage in human prefrontal cortex. *Nat Neurosc,* 2, 1032–1037.

Bandura, A. Social foundations of thought and action: a social-cognitive theory. Englewood Cliffs, NJ: Prentice Hall, 1986

Bechara, A, Damasio, H, Tranel, D & Damasio, AR.(1997) Deciding advantageously before knowing the advantageous strategy. *Science,* 275,1293–1294.

Bellis, M. D., Keshavan, M., Frustaci, K., Shifflett, H., Iyengar, S., Beers, S. R., et al. (2002)

Blair, RJ, Peschhard,t KS, Budhani, S, Mitchell DG y Pine, DS. (2006) The development of psychopathy. *J of Child Psychol and Psych,* 47(3/4), 262–275.

Blair, RJ. (2001) Neurocognitive models of aggression, the antisocial personality disorder, and psychopathy. *J Neurol Neurosurg Psychiatry,* 71,727-731.

Bremner, JD, Vermetten, E, Mazure, C. (2000) Development and preliminary properties of an instrument for the measurement of childhood trauma: The early trauma inventory. *Depr and anx,* 12, 1-12.

Bremner, JD, Mazure, C. (2003) Dept. of Psychiatry, University School of Medicine, Early Trauma Inventory Self Report Revised.

De Bellis, M. D. y Keshavan, M. S. Sex differences in brain maturation in maltreatment-related pediatric posttraumatic stress disorder. (2003)*Sp Ed of Neurosci and Biobehav Rev: Brain Development, Sex Differences, and Stress: Implications for Psychopathology, 27,*103-117.

De Bellis, M.D. The psychobiology of neglect. (2005) *Child Maltr,* 10(2), 150-172.

De Bellis, MD, Baum, A, Birmaher, B, Keshavan, MS, Eccard, CH, et al. (1999) Developmental traumatology part I: biological stress systems. *Biol Psych,* 45,1259 –1270.

De Bellis, MD, Keshavan, MS, Clark, DB, Giedd, CJ, Boring A, et al. (1999) Developmental traumatology, part II: brain development.*Biol Psych,* 45(10), 1271– 1284

De Bellis, M. D., Keshavan M., Frustaci, K., Shifflett H., Iyengar S., Beers S. R., et al.(2002)
Superior temporal gyrus volumes in maltreated children and adolescents with PTSD. *Biol Psych, 51,* 544-552.

Frazzetto, G, Di Lorenzo, G, Carola, V, Proietti, L, Sokolowska E, Siracusano, et al. (2007). Early Trauma and increased risk for physical aggression during adulthood: the moderating role of MAOA genotype. *PLoS ONE* 2007; 2(5): e486. doi:10.1371/journal.pone.0000486.
Foley, D. L., Eaves, L. J., Wormley, B., Silberg, J. L., Maes, H. H., Kuhn, J., et al. (2004) Childhood, adversity, monoamine oxidase :A genotype, and risk for conduct disorder. *Arch of Gen Psych,* 61, 738-744.

Hare, R.D. The Hare Psychopathy-Checklist Revised. Toronto: Multihealth Systems; 1991.

Hare, R. D. Manual for the Hare Psychopathy Checklist-Revised (2nd ed.). Toronto: Multihealth Systems; 2003.

Johnson, JG, Cohen, P, Brown, J, Smailes, E, Bernstein, D.(1999) Childhood maltreatment increases risk for personality disorders during early adulthood. *Arch of Gen Psych,* 56(7), 600-606.

Kiehl, K, Smith A, Hare, R, Mendrek, A, Forster, B, et al. (2001) Limbic abnormalities in affective processing by criminal psychopaths as revealed by functional magnetic resonance imaging. *Biol Psych,* 50, 677-684.

Krischer, M. & Sevecke, K. (2008) Early traumatization and psychopathy in female and male juvenile offenders. *Int J Law and Psych,* 31(3), 253-262.

Lang S, af Klinteberg B, Alm P-O. (2002) Adult psychopathy and violent behavior in males with early neglect and abuse. *Acta Psychiatr,* 106 (412), 93–100.

Lapierre, D, Braun, C. & Hodgins, S. (1995). Ventral Frontal deficits in Psychopathy : Neuropsychological Test Findings. *Neuropsychologia,* 33(2), 139-151.

Luntz, BK, Widom, CS. (1994)Antisocial personality disorder in abused and neglected children grown up. *Am J Psych,* 151, 670-674.

Ostrosky-Solís, F., Ruíz Ortega, H., Arias García, N. y Vásquez Vera, V. Estandarización de la PCL-R en población penitenciaria mexicana. *Rev. Neuropsicología, Neuropsiquiatría y Neurociencias,* 8(2), 49-58.

Raine, A, Lencz T, Bihrle S, Lacasse L, & Colletti P. (2000) Reduced prefrontal gray matter volume and reduced autonomic activity in antisocial personality disorder. *Arch of Gen Psych,* 57,119-127.

Raine, A, Park S, Lencz, T, Bihrle, S, LaCasse, L, et al. (2001) Reduced Right Hemisphere Activation in severely abused violent offenders during a working memory task: an fMRI study. *Aggr Behav.,* 29, 111-129

Raine, A. (2000) Annotation: The role of prefrontal deficits, low autonomic arousal, and early health factors in the development of antisocial and aggressive behavior in children. *J Child Psychol and Psych,* 43(4), 417–434.

Tiihonen, J, Hodgins, S, Vaurio O, *et al*. (2000) Amygdaloid volume loss in psychopathy. *Soc for Neurosci Abs,* 2017 .

Weiler, BL & Widom, CS. (1996) *Criminal Behavior and Mental Health, 6,* 253-271.

FIG. 1 TE (%) reported by Psychopathy Groups

◇   **p≤ 0.05 Low Psychopathy vs Medium Psychopathy**

✦   **p≤ 0.05 Medium Psychopathy vs High Psychopathy**
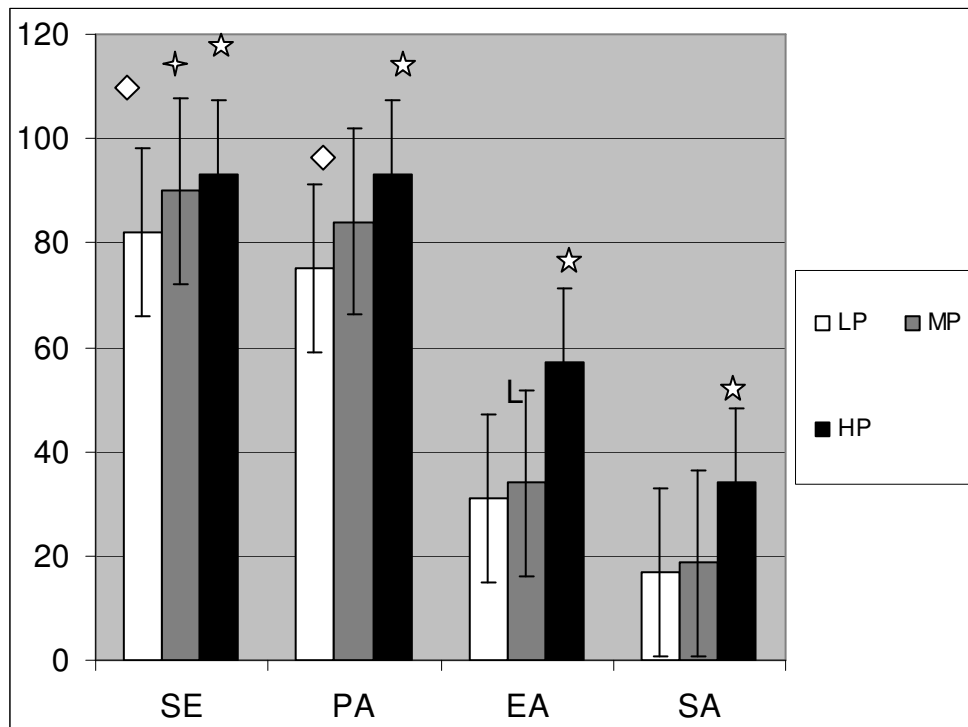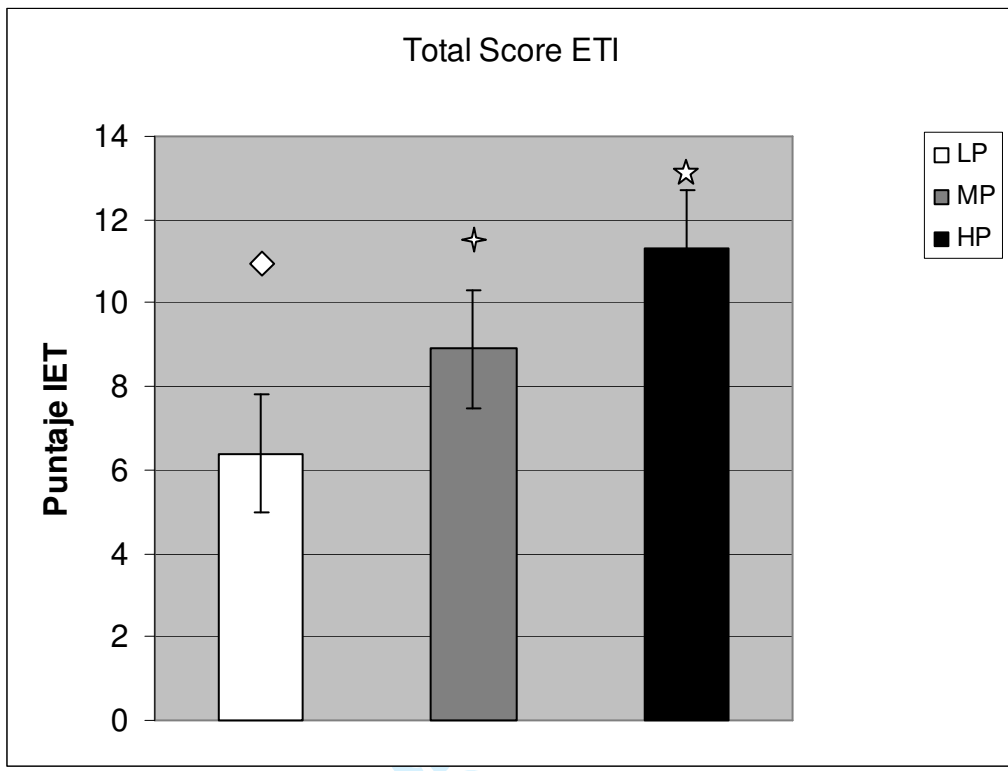
☆   **p≤ 0.05 Low Psychopathy vs High Psychopathy**

FIG. 2 Total scores of the ETI by Psychopathy Groups

◇ **p≤ 0.05 Low Psychopathy vs Medium Psychopathy**

✦ **p≤ 0.05 Medium Psychopathy vs High Psychopathy**

☆ **p≤ 0.05 Low Psychopathy vs High Psychopathy**

Total Score ETI

Table I. Descriptives

	PSYCHOPATHY			**F**	**p**	**Sig. Dif.**
	Low N=94	**Medium** N=57	**High** N=43			
Age(years)	*38.7 (10.6)*	*32.2(9.1)*	*32.6 (8.6)*	10.9	*	LP vs MP LP vs HP
Education (years)	9.8 (3.8)	8.7 (2.8)	9.7 (3.6)			
Years of imprisonment	6.7 (4.4)	3.4 (1.9)	6.4 (3.8)			
Sentence (years)	22.1 (12.6)	17.2 (13)	14.3 (9.3)			
PCL-R	*11(4.3)*	*24.7 (2.8)*	*32.4 (2)*	*679.4*	*	LP vs MP LP vs HP

X(d.e.)
$* p \le 0.01$
LP = Low Psychopathy; MP = Medium Psychopathy; HP = High Psychopathy

Table II. Frequencies (and expected frequencies) of Ss classified into groups of psychopathy according to the level of victimization.

	PSYCHOPATHY			
	Low Psych. N=96	Medium Psych. N=59	High Psych. N=44	n
LV [1]	*66 (51.4)* *	1 (31.1)	*9 (23.5)**	106
HV [2]	28 (42.6)	26 (25.9)	*34(19.5)**	88

Total X² =30.06
p<0.001
[1] Low Victimization
[2] High Victimization

Table III. Early Trauma Events in Psychopathy Groups

STRESSFUL EVENTS	PB	PM	PA	F	p	Dif. Sig.
1. Accidents, injures	26%	49%	56%	9.9	0.00	LP vs HP
2. Illness / hospitalization	22%	36%	39%	4.3	0.01	LP vs HP
6. Death/Homicide of close friends	41%	63%	58%	8	0.03	LP vs HP
						LP vs MP
7. Violent acts, domestic violence	33%	44%	53%	2.3	0.00	LP vs HP
						LP vs MP
Total	3.4 (3.1) 82%	4.6 (3) 90%	6.2 (3.2) 93%	13.3	0.00	LP vs HP
						MP vs HP
PHYSICAL A.						
2. Slapped in the face	30%	46%	57%	5.6	0.00	LP vs HP
3. Kicked, choked, burned	17%	40%	48%	8.5	0.00	LP vs MP LP vs HP
4. Hit with objects	46%	63%	75%	5.6	0.00	LP vs HP
Total	75%	84%	93%	11	0.00	LP vs MP LP vs HP
EMOTIONAL A.						
1. Ridiculed, treated in a cold, uncaring way	31%	34%	57%	4.5	0.01	LP vs HP
SEXUAL A.						
3. Forced to watch sexual acts	2%	0%	11%	5.5	0.01	LP vs HP
TOTAL	16.9%	18.7	34%	13.5	0.04	LP vs HP
ETI TOTAL	6.4 (4.5)	8.9 (4)	11.3 (4.1)	19.1	0.00	LP vs MP LP vs HP MP vs HP

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60