

ORIGINAL PAPER**Effects of Childhood Trauma on Hostility, Family Environment and Narcissism of Adult Individuals****Elena Dragioti**

Laboratory of Medical Psychology, School of Medicine, University of Ioannina, Greece

Dimitrios Damigos

Laboratory of Medical Psychology, University of Ioannina, School of Medicine, Greece

Venetsanos Mavreas

Department of Psychiatry, University of Ioannina, School of Medicine Greece

Mary Gouva

Laboratory of Medical Psychology, University of Ioannina, School of Medicine, Greece; Department of Nursing, Higher Technological Educational Institution of Epirus, Greece

Corresponding author: Mary Gouva, Department of Nursing, Higher Technological Educational Institution of Epirus, address: 4o Klm National Road Ioannina - Athens, 45500 - Ioannina, Greece. (Email: gouva @ioa.teiep.gr; mgouva@yahoo.gr).

Abstract

Aim: This study aimed to investigate the effects of childhood trauma on hostility, family functioning and narcissism in adulthood. 595 healthy individuals participated, classified into two groups— trauma and no-trauma — based on experienced traumatic events.

Methodology: The Hostility and Direction of Hostility Questionnaire, the Aggression subscale of The Symptom Checklist-90-R, the Family Environment Scale and The Narcissistic Personality Inventory were administered.

Results: Higher levels of hostility ($p=.040$) and aggression ($p=.041$) were observed among participants reported exposure to a traumatic event. Apart from the conflict subscale ($p=.018$), no dysfunctional family environment was found. Narcissistic traits did not differ between the two groups ($p=.199$). Logistic regression models found that participants experienced childhood trauma had a higher risk of overall hostility (OR=0.92, 95% CI=.89-.99).

Key Words: Hostility • family conflict • childhood trauma • narcissism • stressful events

Introduction

The term 'trauma' does not have a totally accepted definition (Zepf & Zepf, 2008). According to Freud, 'trauma' is associated with an external violent assault too powerful to be dealt with by the subject (Zepf & Zepf, 2008; Laplanche & Pontalis, 1986). In the Freudian perception trauma is firstly understood in economic terms (Stolorow, 2006; Zepf & Zepf, 2008). Trauma is the answer to a dangerous situation accompanied by regression, compromised ego functioning, and "obligatory psychopathology" (Schore, 2001; Naso, 2008). It reflects the ego's immaturity during the first years of childhood (Schore, 2001). In this point of view, the construction of trauma includes the meaning of fantasy, psychic representation and structure, loss

of the love object, loss of the object's love and explanation of the aetiology of conversion symptom formation (Zepf & Zepf, 2008; Schore, 2001). Its formation and aetiology are considered multidimensional (Roelofs, Spinhoven, Sandijck, Moene & Hoogduin, 2005).

Childhood traumatic events and hostility

Limited studies have demonstrated a direct link between childhood trauma and impairments in adult hostile attitude. Traumatic events by representing interpersonal violence are observed in many adolescents addicted to alcohol (Clark, Lesnick & Hegedus, 1997). Characteristics of traumatic experience, such as dissolution of the empathic bond, failure to assimilate experience into psychic

representation and structure (Laub & Lee, 2003), may explain the role of stressful events in the observed antisocial and violent behaviour during adulthood (Roy, 1999; Roy, 2001; Frazzetto, Di Lorenzo, Carola, Proietti, Sokolowska, Siracusano & et al., 2007). Frazzetto et al. (2007) express the hypothesis that exposure to early traumatic experiences, with low MAOA activity, is a major risk factor for aggressive behaviour in later life. Childhood abuse may constitute an intriguing environmental risk factor for the presentation of trait impulsivity, aggression and suicide attempts in adults with depression (Brodsky, Oquendo, Ellis, Haas, Malone & Mann, 2000) According to Byrne & Riggs (1996) veterans with PTSD symptomatology are at higher risk to showing aggressive behaviour against their partners.

Childhood traumatic events and family environment

Even if childhood trauma seems to change internal family functioning, few studies have focused on effects of traumatic events on family environment. For example, childhood abuse might further dissolve an already dysfunctional family, and moreover, this kind of family may breed intrafamilial child abuse, either sexual or physical (Briere & Elliott, 1993). Persistence of depressive traumas symptomatology is communicated to other family members and could dissolve the supporting bonds, a situation which finally enhances the individual's depression exhausting their resources for recovery (Billings & Moos, 1983). Uruk, Sayger & Cogdal (2007) placed the differences in family cohesion as a significant thesis to explain both trauma symptoms and psychological well-being. Previous data have promoted that this lack of cohesion is responsible for internalizing problems associated with trauma (Bal, De Bourdeaudhuij, Crombez & Van Oost, 2004). It seems that abuse, in particular, is associated with greater use of dissociation, though family pathology accounts for this effect (Nash, Hulsey, Sexton, Harralson & Lambert, 1993).

Childhood trauma and narcissism

In the psychoanalytic way of thinking, 'narcissism' has the role of a protective shield, functioning as a 'black hole' for the trauma patient, leading them eventually into a realm of emotional void, of hole object transference, of deprivation of memories, where there are no reverberations of the trauma patient's experience. However, motion, life and death drive and fragments of memory still survive

in the narcissistic envelope (Gerzi, 2005). Although psychoanalytic view considers trauma to hold a tendency for elevating narcissistic characteristics, there are few existing data to enlighten this possible connection. Baron, Reznikoff & Glenwick (1993) in an interesting project regarding the Holocaust trauma among second generation survivors examining the theory of intergenerational transmission, failed to support that this complex traumatic experience could lead to greater narcissism compared to the control group. Thus, empirical evidence shows that narcissistic traits and vulnerabilities may have a contribution to PTSD, as a result to traumatic exposition (Bachar, Hadar & Shalev, 2005).

Current Study

There are several reasons for investigating the role of childhood traumatic events in adulthood. First of all, early traumatic life events seem to be a key factor in multiple areas of psychosocial dysfunction and psychopathology (Roelofs et al., 2005). Secondly, in accordance to epidemiological evidence, approximately two-thirds of community samples have a life experience of a traumatic event (Rosenberg, Rosenberg, Wolford, Manganiello, Brunette & Boynton, 2000; Mcquaid, Pedrelli, McCahill & Stein, 2001). However, there are poor data concerning the effect of childhood traumatic life events on hostility, family environment and narcissism in later life regarded as a whole of psychosocial functioning, in healthy individuals. On these grounds we hypothesised that subjects who had experienced childhood traumatic life events would present greater levels of hostility, aggressiveness, family dysfunction and narcissism compared to individuals who had not. We chose to perform this study in a non clinical community sample in order to avoid the confounding effect of emotional distress caused by mental or physical illness. To be more specific, the authors aimed to investigate the possible effects of childhood trauma on the psychological parameters mentioned above, clarifying the multidimensional nature of aversive experiences.

Methodology

Sample

The total number of individuals was five hundred and ninety five (595), healthy individuals (164 men and 431 women) that were a) either undergraduates or postgraduate students of Greek Universities or administrative employees at the above Universities,

b) both public servants and/ or employees in private sectors and c) relatives and friends of the above individuals. The average age of these participants was 34 years (range: 18-75 years). All subjects had at least graduated from Primary school and they had no history of mental disorders nor did they require psychiatric medication. Those 595 individuals were divided into two groups on the basis of their responses of experienced negative life events. The first group (CT) consisted of 300 individuals (66 males and 234 females) who reported being exposed to at least one childhood traumatic event. The second group (NCT) consisted of 295 individuals (98 males and 197 females) who reported not being exposed to such experiences.

Procedure

All the participants who fulfilled the study's requirements and accepted to participate in it were informed about the procedure of the study. A self-report questionnaire, asking for certain socio-demographic information (e.g. gender, age, education, etc.), was enriched with a closed question one regarding traumatic experience during childhood: a) have you ever experienced a traumatic live event as a child? –it was the answer to this question that determined the formation of the two groups in the present study - and an open question one b) if the answer to the above closed question was yes, they then had to describe the event and indicate when it occurred. According to this, in this survey the authors selected two types of traumatic life events: (i) time-limited experiences either in childhood or in later life (e.g. accidents, diseases, or attacks by perpetrators); (ii) long-lasting events of danger in childhood, (e.g. repeated intra-familial physical and/or sexual assault) (McFarlane & Girolamo, 1996).

Measures

Hostility

Hostility was assessed by using *The Hostility and Direction of Hostility Questionnaire* (HDHQ; Caine, Foulds & Hope, 1967). The HDHQ is an attitudinal self-report instrument, measuring a wide range of manifestations of hostility as a personality trait, which is irrelevant to aggressive behaviour. It consists of 52 items presented in 5 subscales. Three subscales, namely acting-out hostility, criticism of others and paranoid hostility, are measures of extrapunitiveness. The other two subscales, self-criticism and guilt, measure intropunitiveness. Total hostility is the sum of scores on these five

subscales. HDHQ has been repeatedly used in the Greek population (Lyketsos, Blackburn & Tsiantis, 1978; Drosos, Angelopoulos, Liakos & Moutsopoulos, 1989).

Aggression

In this study aggression was measured by using the Aggression subscale of *The Symptom Checklist-90-R*. The SCL-90-R was developed by Derogatis (1977) to evaluate a broad range of psychological problems and symptoms of psychopathology (Derogatis, 1977). It consists of 90 items that measure three global indices as well as nine indices for certain symptoms (that is, somatisation, obsession-compulsiveness, interpersonal sensitivity, depression, anxiety, aggression, phobic anxiety, paranoid ideation and psychoticism). Aggression is a ten item subscale representing how often aggressive feelings are expressed (Derogatis, 1977). It is rated on a 5-point scale (0-4), indicating the frequency of experiencing the aggressive symptoms described at a specific point in time. It has been standardised for the Greek population and found to possess satisfactory psychometric features (Donias, Karastergiou & Manos, 1991).

Family Environment

The Family Environment was measured by using the *Family Environment Scale* (FES; Moos & Moos, 1986; Moos, 1990). The Family Environment Scale is a true or false-rated scale that consists of 90 statements about families (Billings & Moos, 1983; Moos, 1990). Each participant used the Family Environment Scale (FES) to describe the family milieu along 10 dimensions in three general domains: (a) interpersonal relationships (cohesion, expressiveness, conflict), (b) personal growth orientations (independence, achievement, intellectual orientation, moral-religious emphasis), and (c) system maintenance dimensions (organization, control) (Moos, 1990; Holahan, Moos, Holahan & Brennan, 1995; Holahan, Moos, Holahan, Brennan, 1997). It has been standardised for the Greek population and has been demonstrated to possess satisfactory psychometric features for clinical and non clinical samples (Matsa, 1997).

Narcissism

Narcissism was measured using The Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979). The NPI is a self-reported inventory designed to measure narcissism in non-clinical populations (Emmons, 1981; Raskin & Terry, 1988; Coccosis, Vaslamatzis, Anagnostopoulos, Markidis, 1998).

For each paired statement, the one represents narcissistic traits and the other non-narcissistic ones. The scale used in the present study was the Greek adaptation of the NPI (Coccosis et al., 1998). This version includes 30 forced-choice items pairs that compose a valid and promising measurement for the construction of narcissism (alpha coefficient: .85). High scores indicate strong narcissistic tendencies. A total score (range: 0-30) on the NPI is calculated by summing only the narcissistic choice (Coccosis et al., 1998).

Demographics

All participants were asked to complete these "battery" of self-report instruments and provided their demographic details (age, gender, family status, employment and educational background)

Data Analysis

For the description of the sample's social, demographic and psychological characteristics, distribution frequencies, means and standard deviations were performed. The criteria for testing normality was: $\geq \pm 2,00$ for the Skewness and $\geq \pm 5,00$ for the Kyrtois (Skordilis & Stavrou, 2005). The parametric independent student T test was adopted to compare trauma group and no trauma group's scores on the quantitative variables, since their distribution was symmetric (Papaioannou & Ferentinos, 2000). The Pearson χ^2 (chi-square) tests was performed for the comparison of categorical variables (Ioannidis, 2000). In addition, the one way ANOVA were performed examining the accusations of others sociodemographic potential confounding quantitative variables: marital status, educational level and occupational condition. Then the logistic regression models were used to investigate whether hostility, aggression, family environment and narcissism were independently associated with childhood traumatic events, regardless of other possible covariate effects (Papaioannou & Ferentinos, 2000; Dafermos, 2005). The statistical analyses concerning the descriptive characteristics of the variables examined were performed by both Excel and SPSS14, while those concerning comparisons and correlations of quantitative and categorical variables were

performed by the statistical packet of SPSS 14 (SPSS Inc., 2005) only. For all statistical analyses $p < 0.05$ was considered as statistically significant.

Results

Demographics

Fullness mean standard deviations and distribution frequencies of demographic characteristics of the sample are represented in Table 1. The participants, of this study, were 164 (27.6%) men and 431(72.4%) women with mean age 34 (SD=12), ranged 18-75. Complete data were available also for the two groups (trauma-no trauma.). Age did not differ significantly between the two groups ($t = -1.105$, $df = 593$ and $p = .273$), but significant differences among groups were observed in gender ($\chi^2_{p=9,379}$, $df = 1$ and $p = .002$) and in educational background ($L.R.=24,899$, $df = 7$ and $p = .001$).

Distribution frequencies of childhood traumatic life events

For the trauma group, the first childhood trauma's average age was 10 (SD = 3.5) ranging from 5 to 15 years old. In the CT group, the loss of subject/object was the most commonly endorsed childhood trauma (47%), followed by physical abuse (29%), severe illness in family (20%), school assault (7%), natural disasters (4%) and sexual abuse (3%).

Psychometric Comparisons among groups

The next step to our analysis was to compare the two groups on the quantitative variables by means of t tests. As shown in Table 2 the trauma group reported marginally higher levels of aggressive behavior ($p=.041$) as measured by aggression SCL-90-R. Significant differences between groups were observed on paranoid hostility ($p=.006$), self criticism ($p=.011$), Guilt ($p=.011$), intropunitiveness ($p=.007$) and on the total score of hostility ($p=.040$). The groups were not significantly different on the characteristic of narcissism ($p=.199$) and dysfunctional family environment, except the conflict scale ($p=.018$).

Table 1. Demographic characteristics and differences between childhood trauma group and no trauma group

	Childhood Trauma			Differences
	CTG N=300 (100.0%)	NCTG N=295 (100.0%)	Total N=595 (100.0%)	
AGE*	33.08 ± 12.36	34.16 ± 11.53	34.00 ± 12.00	p-value t =-1,105 .270
	Distribution fréquences	Distribution fréquences	Distribution fréquences	
GENDER				X ² _p =9,379 .002
Men	66 (22.0%)	98 (33.2%)	164(27.6%)	
Women	234 (78.0%)	197 (66.8%)	431 (72.4%)	
FAMILY STATUS				Fisher's Exact Test=4,746 .187
Single	178 (59.3%)	150 (50.8%)	328 (55.1%)	
Marital	108 (36.0%)	130(44.1%)	238 (40.0%)	
Divorced	9 (3.0%)	11 (3.7%)	20 (3.4%)	
Widowed	5 (1.7%)	4 (1.4%)	9 (1.5%)	
EMPLOYMENT				Fisher's Exact Test=7,942 .093
Unemployed/Student	84 (28.0%)	67 (22.7%)	151 (25.4%)	
Housekeeping	16 (5.3%)	13 (4.4%)	29 (4.9%)	
Self-Employed	43 (14.3%)	29 (9.8%)	72 (12.1%)	
Private Sectors	66 (22.0%)	86 (29.2%)	152 (25.5%)	
Public Sectors	91 (30.4%)	100 (33.9%)	191 (32.1%)	
EDUCATIONAL BACKGROUND				L.R.=24,899 .001
Primary Education	17 (5,7)	10 (3,4)	27 (4,5)	
Secondary Education (3 Years)	11 (3,7)	9 (3,1)	20 (3,4)	
Secondary Education (6 Years)	38 (12,7)	71 (24,1)	109 (18,3)	
	109 (36,3)			
Higher Education (Graduate)		108 (36,6)	217 (36,5)	
Postgraduate (Master Degree)	31 (10,3)	38 (12,9)	69 (11,6)	
Postgraduate (P.h.D Degree)	2 (0,7)	3 (1,0)	5 (0,8)	
Undergraduate Student	92 (30,7)	56 (19,0)	148 (24,9)	

*AGE is expressed as Mean ± Standard deviation

CTG=Childhood Trauma Group
NCTG= Non Childhood Trauma Group
L.R. = Likelihood ratio

Table 2. Comparison of psychometric variables between childhood trauma group and no childhood trauma group.

Childhood Trauma				
	CTG N=300 (50.4%)	NCTG N=295 (49.6%)	Total	Differences*
Scores of variables	Mean (S.D.)	Mean (S.D.)	Mean (S.D.)	p-value
Criticism Of Others	5.56 ± 2.78	5.54 ± 2.45	5.65 ± 2.36	.941
Acting-Out Hostility	4.25 ± 2.00	4.22 ± 2.06	4.24 ± 2.03	.891
Paranoid Hostility	2.19 ± 1.92	1.77 ± 1.79	1.98 ± 1.86	.006
Self-Criticism	4.20 ± 2.18	3.74 ± 2.22	3.97 ± 2.21	.011
Guilt	2.21 ± 1.67	1.92 ± 1.52	2.07 ± 1.560	.023
Extrapunitiveness	12.00 ± 4.71	11.54 ± 5.16	11.77 ± 4.94	.259
Intropunitiveness	6.41 ± 3.44	5.65 ± 3.44	6.04 ± 3.46	.007
Total Hostility	18.41 ± 7.04	17.42 ± 7.39	18.81 ± 7.23	.040
Aggression	5.58 ± 4.73	4.82 ± 4.27	5.20 ± 4.52	.041
Cohesion	6.71 ± 2.05	6.92 ± 1.95	6.81 ± 2.00	.217
Expressiveness	5.87 ± 1.58	5.78 ± 1.66	5.82 ± 1.62	.532
Conflict	2.70 ± 2.08	2.30 ± 2.01	2.50 ± 2.05	.018
Independence	5.99 ± 1.55	6.14 ± 1.54	6.07 ± 1.55	.242
Achievement Orientation	6.02 ± 1.50	5.95 ± 1.65	5.99 ± 1.57	.566
Intellectual - Cultural Orientation	5.35 ± 2.18	5.20 ± 2.19	5.27 ± 2.19	.390
Active-Recreational Orientation	4.91 ± 2.38	4.78 ± 2.20	4.85 ± 2.30	.468
Moral-Religious Emphasis	4.25 ± 2.14	4.07 ± 2.12	4.16 ± 2.13	.305
Organization	5.59 ± 1.84	5.64 ± 1.74	5.62 ± 1.79	.741
Control	4.34 ± 1.76	4.56 ± 1.72	4.45 ± 1.74	.133
Family Incongruence Score	51.75 ± 8.54	51.34 ± 8.26	51.55 ± 8.39	.552
N.P.I**	8.00 ± 5.00	8.21 ± 4.78	8.74 ± 5.24	.199

*Means and standard deviations with t tests differences

**NPI = Narcissistic Personality Inventory

CTG=Childhood Trauma Group

NCTG= Non Childhood Trauma Group

Table 3. Logistic Regression Analysis of demographic and psychometric variables for childhood trauma

Variables	p-value	Odds ratio (95% Confidence Interval)
Model 1		
Age	.539	0.995 (.98-1.01)
Gender	.002	1.777 (1.23-2.56)
Education	.595	1.043 (.89-1.21)
Model 2		
Age	.653	0.996 (.98-1.01)
Gender	.013	1.616 (1.10-2.36)
Education	.378	1.074 (.92-1.26)
Paranoid Hostility	.010	1.205 (1.05-1.39)
Self-Criticism	.049	1.135 (.98-1.25)
Guilt	.254	1.096 (.94-1.28)
Intropunitiveness	.047	1.379 (1.14-2.45)
Total Hostility	.014	0.926 (.89-.99)
Aggression	.060	1.066 (.97-1.06)
Conflict	.178	1.063 (.97-1.16)

Methods 1, 2= stepwise.

One way analysis of variances

The one way analysis of variances did not provide significant associations between childhood trauma, marital status ($F= 1.6, p=.19$) and occupational condition ($F= 2.0, p=.93$), while educational background ($F= 3.4, p =.001$) was linked with childhood traumatic events. With regard to the ANOVA, under Bonferoni criterion it was found that the low and post graduate educational level have a stronger connection to childhood trauma ($p<.05$).

Regression models for Childhood trauma

To justify further investigation, models of stepwise approach logistic regression, examining the associations between childhood trauma and late-life hostility and family environment, were performed. Model 1 was adjusted for age, sex, and education level. Hostility, aggression and family conflict scores were introduced in step model 2. As shown in table 3, after controlling for socio-demographic variables, participants who had experienced childhood trauma had a higher risk of paranoid hostility (OR=1.20, 95% CI=1.05-1.39), self criticism (OR=1.13, 95% CI=.98-1.25), intropunitiveness (OR=1.37, 95% CI=1.14-2.45) and

overall hostility (OR=0.92, 95% CI=.89-.99). Finally logistic regression found that participants with traumatic events during childhood were not associated with greater risk of aggression and family conflict in later life.

Discussion

The present study attempted to demonstrate the correlation between early childhood traumatic events and their effects on hostility, family environment and narcissism in adult life, along with the multidimensional nature of aversive events, since it is proven that the two thirds of the general population have had at least one childhood traumatic experience in their life (Rosenberg et al., 2000; Mcquaid et al., 2001). More analytically in our trauma group – consisting of 300 participants (66 men-197 women), we found that the first traumatic event was been experienced in the mean age of 10 years old, with the loss of subject/object being the most prevalent followed by physical abuse severe illness in the family, school assault, natural disasters and sexual abuse. In regard to statistical analyses, higher levels of hostile, aggressive attitude and conflict on family environment were observed among participants

who had reported exposure to a traumatic event during childhood. It is though supported that childhood trauma is a major risk factor for the hostile and aggressive behaviour, thus it may be the explanation for these attitudes in adulthood, leading to a general social and familial dysfunction.

Childhood traumatic events first and foremost affect hostility, which in the present study was measured through the HDHQ (Caine et al., 1967) showing that among people who reported a traumatic life experience during childhood, hostility was present. Our findings coincide with Roy's opinion that early traumas play an important role in the development of hostility among adults, showing both healthy and abnormal patterns of behavior (Roy, 1999; Roy, 2001). As far as aggression is concerned, a dimension which was assessed by the SCL- 90 subscale, in the present study is also indicated that a childhood traumatic event affects the presence of aggressive behaviour in later life. To be more specific, we found that people who had at least one traumatic childhood experience showed marginally higher levels of aggressive behavior compared to our second group of individuals with no reported childhood traumas. Kernberg (1975) supports that a trauma has multiple influences on the subjective sense of time, depending on the nature and duration of the traumatic experience. Furthermore, in the case of acute, brief situations when trauma is the product of willful aggression, there will be an almost intolerable sense of extension of time during the traumatic experience itself, with a fixation to the trauma which, by repetitive "flashbacks", extends its subjectively experience duration (Kernberg, 2008). Our findings are in accordance to the theory that exposure to early traumatic experiences is related to aggressive behaviour in later life (Roy, 1999; Roy, 2001).

The family environment of the participants, unexpectedly, was not found to be dysfunctional, when the R-FES (Moos & Moos, 1986; Moos, 1990) was applied, apart from the conflict subscale. These results are inconsistent with previous studies based on the perception that dysfunctional family relations are involved in the development of the anxiety trait among children who have experienced physical disasters (e.g. earthquakes) (Kiliç, Özgüven & Sayil, 2003). Thus, narcissism as assessed by the NPI (Coccosis et al., 1998) was not found to be pathological among the two groups of this study's participants, with disregard to previous findings. However, pathological narcissism lies in environmental frustrations, oral aggressiveness as well as disturbed object relations (Kernberg, 1975; Kernberg, 2008). There is also a suggestion that the

complex entanglements between adaptive and maladaptive forms of self-love may make it difficult for the individual to understand and assess pathological narcissism (Watson & Biderman, 1993).

Moreover in our study there was no significant correlation between childhood trauma, marital status and occupational condition. Although, concerning the educational background, we found that there is an association with childhood traumas since the subjects with low and post graduate educational level have a stronger connection with childhood trauma. An explanation for this, though, could be that our almost half of our sample constituted of individuals whose educational background either did not include higher education or were undergraduates.

The significant differences on psychometric comparisons was submitted to further analysis. After controlling for age, sex, and education level, multiple logistic models revealed that only hostility and their forms were independently associated with childhood traumatic events. Individuals who had reported exposure to a traumatic event during childhood had a higher risk of paranoid hostility, self criticism, introptiveness and overall hostility. One explanation for the association between hostility and childhood traumatic events could be that hostility negatively distorts memories of childhood (Schore, 2001), thus a childhood trauma may lead to the development of a hostile personality (Roy, 1999; Roy, 2001; Laub & Lee, 2003). Another is that relationship problems have a meditative effect in the association between traumatised peoples symptoms and their use of aggression (Pagano, Skodol, Stout, Shea, Yen, Grilo & et al., 2004). From the demographic variables only gender was found to be related with traumatic events during childhood. These gender differences may be ought to the fact that in our sample the percentages of women were greater than men, despite of the belief that women are more vulnerable to traumatic events (Wang, Du, Sun, Wu, Xiao, et al. 2010) and this may have a contribution to this evidence.

Our study underlined the significance of trauma on psychosocial functioning, thus the effects of childhood trauma appear to last a lifetime, findings consistent with the psychoanalytic thoughts, which support that all types of trauma, are firstly psychological traumas. According to Blum (2007) the childhood trauma is pathogenic if its ideational content and effects were repressed and had not been verbalized in conscious awareness. A destructive trauma does not break through the protective shield

but does breach the pleasure-displeasure principle, so that in the course of its subsequent mastery it leads to a traumatic neurosis (Zepf & Zepf, 2008). However, there are certain limitations in the present study, the most significant of which is that our sample consisted mostly of women. Concerning the educational level of the participants, our sample had individuals the majority of which was graduates and undergraduates, which could provide the explanation for the relationship between the educational level and childhood trauma. Another limitation of the study is the study design itself. Other uncontrolled factors including genetic risk, childhood adversity unrelated to trauma and environmental exposures might have confounded the results. Regardless of these limitations, we believe that our findings contribute to the concept that early trauma is noteworthy because it underscores the psychological significance of events that rarely enter awareness (Schore, 2001; Naso, 2008). This psychoanalytic understanding of how childhood trauma impacts on the mind-brain-body complex (Van der Kolk, 2003; Terr, 2003) can be integrated with the current bio-psychosocial approach of psychosomatic and mental disorders. Further research is required to improve understanding of the pathways as well as to declare which type of trauma has the greater impact in hostile personality development. Our sub-analysis did not succeed in providing evidence about different kinds of traumatic events and their respective effects on the psychometric parameters in adulthood, at least in a statistical significant level.

Conclusions

As shown in this study there is a significant association between childhood trauma and physical as well mental disorders in later adulthood, such as hostile personality. Since hostile and aggressive individuals show a serious social and familiar dysfunctional behaviour, which can be attributed to a childhood trauma experience, there is a need for further studies on this subject so that the health providers could be able to identify the sources of such behaviours and create preventive methods or treatment programmes with the ultimate purpose of reducing the effects of childhood trauma both for the individual and the society in general. The implementation of such methods and programs should not be only international or national but also local so as to identify the individuals at risk as early as possible.

Acknowledgements

We would like to thank the people who participated in this study and the anonymous reviewers for their helpful and insightful comments.

REFERENCES

- Bachar, E., Hadar, H. & Shaley, A. Y. (2005) Narcissistic vulnerability and the development of PTSD: a prospective study. *The Journal of Nervous and Mental Disease*, 193:762-765.
- Bal, S., De Bourdeaudhuij, I., Crombez, G. & Van Oost, P. (2004) Differences in trauma symptoms and family functioning in intra-and extrafamilial sexually abused adolescents. *Journal of Interpersonal Violence*, 19:108-123.
- Baron, L., Reznikoff, M. & Glenwick, D. S. (1993) Narcissism, interpersonal adjustment, and coping in children of Holocaust survivors. *Journal of Psychology*, 127:257-269.
- Billings, G. A. & Moos, H. R. (1983) Comparisons of children of depressed and nondepressed parents: a social-environmental perspective 1. *Journal of Abnormal Child Psychology*, 11:463-486.
- Blum, H. P. (2007) Holocaust trauma reconstructed: Individual, familial, and social trauma. *Psychoanalytic Psychology*, 24:63-73.
- Briere, J. & Elliott, D. M. (1993) Sexual abuse, family environment, and psychological symptoms: on the validity of statistical control. *Journal of Consulting and Clinical Psychology*, 61:284-288.
- Brodsky, B. S., Oquendo, M., Ellis, S. P., Haas, G. L., Malone, K. M. & Mann, J. J. (2001) The relationship of childhood abuse to impulsivity and suicidal behavior in adults with major depression. *American Journal of Psychiatry*, 158:1871-1877.
- Byrne, C. A. & Riggs, D. S. (1996) The cycle of trauma: Relationship aggression in male Vietnam veterans with symptoms of posttraumatic stress disorder. *Violence and Victims*, 11:213-225.
- Caine, T. M., Foulds, G. A. & Hope, K. (1967) *Manual of hostility and direction of Hostility Questionnaire*. London: University of London Press.
- Clark, D. B., Lesnick, L. & Hegedus, A. M. (1997) Traumas and other adverse life events in adolescents with alcohol abuse and dependence. *Journal of the American Academy of Child & Adolescent Psychiatry*, 36:1744-1751.
- Coccosis, M., Vaslamatzis, G., Anagnostopoulos, Ph. & Markidis, M. (1998) The Narcissistic Personality Inventory: Psychometric properties of the Greek version. *Psychiatriki*, 9:119-133.
- Dafermos, B. (2005) *Social Statistics with SPSS*. Thessaloniki: Ziti Publications.
- Derogatis, L. R. (1977) *The SCL-90 Manual I. Scoring, Administration and Procedures for the SL-90*. Baltimore, MD: Johns Hopkins University School of Medicine, Clinical Psychometrics Unit.
- Donias, S., Karastergiou, A., & Manos, N. (1991) Standardization of the symptom check-list-90-R rating scale in a Greek population. *Psychiatriki* 2: 42-48.
- Drosos, A. A., Angelopoulos, N. V., Liakos, A. & Moutsopoulos, H. M. (1989) Personality structure disturbances and psychiatric manifestations in primary Sjögren's syndrome. *Journal of Autoimmunity*, 2: 489-493.
- Emmons, R. A. (1981) Relationship between narcissism and sensation seeking. *Psychological Reports*, 48:247-250.
- Frazzetto, G., Di Lorenzo, G., Carola, V., Proietti, L., Sokolowska, E., Siracusano, A., Gross, C. & Troisi, A. (2007) Early trauma

- and increased risk for physical aggression during adulthood: the moderating role of MAOA genotype. *PLoS ONE*, 2: e486.
- Gerzi, S. (2005) Trauma, narcissism and the two attractors in trauma. *International Journal of Psychoanalysis*, 86:1033-1050.
- Holahan, C. J., Moos, R. H., Holahan, C. K. & Brennan, P. L. (1995) Social support, coping, and depressive symptoms in a late-middle-aged sample of patients reporting cardiac illness. *Health Psychology*, 14:152-163.
- Holahan, C. K. & Brennan, P. L. (1997) Social context, coping strategies, and depressive symptoms: an expanded model with cardiac patients. *Journal of Personality and Social Psychology*, 72:918-928.
- Ioannidis, J. P. A. (2000) *Principles of Evidence-based medicine-Epidemiology-Public Health-Statistical Methods*. Athens: Medical Publications Litsas.
- Kernberg, O. (1975) *Borderline conditions and pathological narcissism*. New York: Jason Aronson.
- Kernberg, O. (2008) The destruction of time in pathological narcissism. *The International Journal of Psychoanalysis*, 89:299-312.
- Kiliç, E. Z., Özgüven, H. D. & Sayil, I. (2003) The psychological effects of parental mental health on children experiencing disaster: The experience of Bolu Earthquake in Turkey. *Family Process*, 42 :485-495.
- Laplanche, J. & Pontalis, J. B. (1967) *Vocabulaire de la psychanalyse (The Language of Psycho-Analysis)*. Paris: PUF.
- Laub, D. & Lee, S. (2003) Thanatos and massive psychic trauma: The impact of the death instinct on knowing, remembering, and forgetting. *Journal of the American Psychoanalytic Association*, 51:433-464.
- Lyketsos, G. C., Blackburn, I. M. & Tsiantis, J. (1978) The movement of hostility during recovery from depression. *Psychological Medicine*, 8:145-149.
- Matsa, K. (1997) *Comparative study of life events and psychological characteristics in family*. Doctoral Thesis (submitted to the Medical School of University of Ioannina).
- McFarlane, A. C. & de Girolamo, G. (1996) The nature of traumatic stressors and the epidemiology of posttraumatic reactions. In: van der Kolk, B. A., McFarlane, A. C. & Weisaeth, L. (eds) *Traumatic stress. The effects of overwhelming experience on mind, body, and society*. New York: Guilford Press: 129-154.
- Mcquaid, J. R., Pedrelli, P., McCahill, M. E. & Stein, M. B. (2001) Reported trauma, post-traumatic stress disorder and major depression among primary care patients. *Psychological Medicine*, 31:1249-1257.
- Moos, R. & Moos, B. (1986) *Family environment Scale Manual*. Second Editions. Inc., CA: Consulting Psychologists press.
- Moos, R. (1990) Conceptual and empirical approaches to developing family - based assessment procedures: Resolving the case of the family environment scale. *Family Process*, 29:199-208.
- Nash, M. R., Hulsey, T. L., Sexton, M. C., Harralson, T. L. & Lambert, W. (1993) Long-term sequelae of childhood sexual abuse: perceived family environment, psychopathology, and dissociation. *Journal of Consulting and Clinical Psychology*, 61:276-283.
- Naso, R. C. (2008) Rethinking trauma: a critical view of invalidation. *Psychoanalytic Psychology*, 25: 67-78.
- Pagano, M. E., Skodol, A. E., Stout, R. L., Shea, M. T., Yen, S., Grilo, C. M., Sanislow, C. A., Bender, D. S., McGlashan, T. H., Zanarini, M. C. & Gunderson, J. G. (2004) Stressful life events as predictors of functioning: findings from the Collaborative Longitudinal Personality Disorders Study. *Acta Psychiatrica Scandinavica*, 110:421-429.
- Papaioannou, T. & Ferentinos, K. (2000) *Medical Statistics and principles of Bio-mathematics*. Athens: Publications "Ath. Stamoulis AE".
- Raskin, R. & Terry, H. (1988) A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology*, 54:890-902.
- Raskin, R. N. & Hall, C. S. (1979) A narcissistic personality inventory. *Psychological Reports*, 45:590.
- Roelofs, K., Spinhoven, P., Sandijck, P., Moene, F. C. & Hoogduin, K. A. (2005) The impact of early trauma and recent life-events on symptom severity in patients with conversion disorder. *The Journal of Nervous and Mental Disease*, 193:508-514.
- Rosenberg, H. J., Rosenberg, S. D., Wolford, G. L., Manganiello, P. D., Brunette, M. F. & Boynton, R. A. (2000) The relationship between trauma, PTSD, and medical utilization in three high risk medical populations. *International Journal of Psychiatry in Medicine*, 30:247-259.
- Roy, A. (1999) Childhood trauma and depression in alcoholics: relationship to hostility. *Journal of Affective Disorders*, 56:215-218.
- Roy, A. (2001) Childhood trauma and hostility as an adult: relevance to suicidal behaviour. *Psychiatry Research*, 102: 97-101.
- Schore, N. A. (2001) The effects of early relational trauma on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal*, 22:201-269.
- Skordilis, E. K. & Stavrou, N. A. (2005) Sport orientation model for wheelchair basketball athletes. *Perceptual and Motor Skills*, 100:1081-1096.
- SPSS Inc. (2005) *SPSS Base 14.0 User's Guide*. SPSS Inc.: USA. <http://www.spss.com>
- Stolorow, R. D. (2006) The relevance of Freud's concept of danger-situation for an inter subjective-systems perspective. *Psychoanalytic Psychology*, 23:417-419.
- Terr, L.C (2003) Childhood Traumas: An Outline and Overview. *Focus*, 1: 322-334.
- Uruk, A. C., Sayger, T. V. & Cogdal, P. A. (2007) Examining the influence of family cohesion and adaptability on trauma symptoms and psychological well-being. *Journal of College Student Psychotherapy*, 22: 51 – 63.
- Vander Kolk, B. A. (2003) The neurobiology of childhood trauma and abuse. *Child and Adolescent Psychiatric Clinics of North America*, 12:293-317.
- Wang, Z., Du, J., Sun H., Wu, H., Xiao, Z. & Zhao, M. (2010) Patterns of Childhood Trauma and Psychological Distress among Injecting Heroin Users in China. *PLoS ONE*, 5: e15882.
- Watson, P. J. & Biderman, M. D. (1993) Narcissistic Personality Inventory factors, splitting, and self-consciousness. *Journal of Personality Assessment*, 61:41-57.
- Zepf, S. & Zepf, F. D. (2008) Trauma and traumatic neurosis: Freud's concepts revisited. *International Journal of Psychoanalysis*, 89:331-353.