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The association betweeen conative functioning of adolescents exposed to intimate partner violence and family dimensions of cohesion and adaptibility

Povezanost između konativnog funkcionisanja adolescenata izloženih interpartnerskom nasilju i porodičnih dimenzija kohezivnosti i adaptabilnosti

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Abstract

Background/Aim. Childhood exposure to various types of emotional, physical and sexual abuse in intimate partner violence (IPV) families is associated with difficulties in emotional and social adjustment, including conduct problems, internalized and externalized symptoms. The aim of this study was to determine the relationship between intimate partner violence and: family system functioning (cohesion and adaptability), conative functioning of adolescents and risk of psychopathological symptomatology development. The specific aim of this study was to establish the mental hygiene and preventive measures in order to reduce the negative consequences of growing up in the IPV families. **Methods.** The study was done on a sample of 308 adolescents, aged 15–18 years, divided into the IPV group (n = 68 adolescents growing up in families with the IPV and exposed to IPV in which the violence was reported and processed), and the control group (n = 240 adolescents coming from families in which there was not found any type of violence or psychosocial pathology on the basis of the results obtained on the Conners' Parent Rating Scale–Revised (CPRS-R) Questionnaire. The Faces III scale of measurement was used for measuring the dimensions of family functioning, and Cybernetic model of conative dimensions of personality (CON-6) for conative functioning of adolescents. The data was processed by using the discriminate and linear regressive analysis. **Results**. The adolescents growing up in the families with the IPV and exposed to IPV showed the statistically significant differences ($p < 0.01$) in conative functioning: psychosomatic β = -.509, anxiety β = -.393, aggressive β = -.398, dissociative β = -.509 and adaptive personality reactions β = -.455, as compared to the control group. There was 32.35% of adolescents exposed to IPV who showed the pronounced pathological values regarding social-adaption reaction, 23.53% regarding pathological anxiety and 23.53% dissociative reactions. The greatest negative relationship was found between intimate partner violence and family dimension of cohesion (β = -0.605, $p < 0.01$). **Conclusion**. Adolescents growing up and being exposed to the intimate partner violence were significantly associated with changes in the conative functioning and risk of externalized and internalized symptoms development in socially-adaptive, anxiety and dissociative reactions and the need to introduce the preventive mental-hygienic measures. The mediator between IPV and conative functioning of adolescents was family cohesion.

Key words:
behavior; mental disorders; adolescent; family; violence; adaptation, psychological; impulsive behavior.

Apstrakt

Uvod/Cilj. Izloženost dece različitim oblicima emocionalnog, fizičkog i seksualnog zlostavljanja u porodicama sa partnersko porodičnim nasiljem (PPN) povezana je sa teškoćama u emocionalnom i socijalnom prilagođavanju, uključujući i probleme ponašanja, internalizovane i eksternalizovane simptome. Cilj istraživanja bio je da utvrdi povezanost PPN sa funkcionisanjem porodičnog sistema (kohezivnost i adaptabilnost), konativnim funkcionisanjem adolescenata i rizikom za razvoj psihopatološke simptomatologije. Specifični cilj studije bio je utvrđivanje mentalno-higijenskih i preventivnih mera radi smanjenja negativnih posledica odrastanja u porodicama sa nasiljem. **Metode.** Istraživanje je sprovedeno na uzorku od 308 adolescenata, uzrasta od 15–18 godina, podeljenih u IPV grupu (n = 68 adolescenata koji su odrastali u porodicama sa partnerskim nasiljem i izloženi partnerskom nasilju, koje je prijavljeno i procesuirano i kontrolnu grupu [n = 240 adolescenata iz porodica u kojima upitnikom *Conners' Parent Rating Scale–Revised* (CPRS-R) nije utvrđen bilo koji oblik nasilja ili psihosocijalne patologije]. Skala Faces III korišćena je za merenje dimenzija porodičnog funkcionisanja, a Kibernetički model konativnih dimenzija ličnosti (KON-6) za konativno funkcionisanje ado-

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lescenata. Podaci su obrađeni diskriminativnom i linearnom regresionom analizom. **Rezultati**. Adolescenti iz porodica sa partnerskim nasiljem imali su statistički značajne razlike ($p < 0,01$) u konativnom funkcionisanju: psihosomatskim β = -.509, anksioznim β = -.393, agresivnim (β -.398, disocijativnim β -.509 i adaptivnim reakcijama ličnosti β = -.455, u odnosu na kontrolnu grupu. Ukupno, 32,35% adolescenata iz porodica sa partnerskim nasiljem imalo je izražene patološke vrednosti u socijalno-adaptivnim reakcijama, 23,53% patološku anksioznost i 23,53% disocijativne reakcije. Najveća negativna povezanost dobijena je između porodičnog nasilja i porodične dimenzije kohezivnosti (β - 0,605; $p < 0,01$). **Zaključak**. Izloženost adolescenata porodičnom nasilju značajno je povezana sa promenama konativnog funkcionisanja i rizikom od razvoja eksternalizovanih i internalizovanih simptoma u socijalno-adaptivnim, anksioznim i disocijativnim reakcijama i potrebom za uvođenje preventivnih mentalno-higijenskih mera. Medijator između porodičnog nasilja i konativnog funkcionisanja adolescenata je porodična kohezivnost.

Ključne reči:
ponašanje; ponašanje, poremećaji; adolescenti; porodica; nasilje; adaptacija, psihološka; ponašanje, impulsivno.

Introduction

Childhood exposure to various emotional, physical and sexual abuses in intimate partner violence (IPV) families is associated with difficulties in emotional and social adjustment, including conduct problems, internalized and externalized symptoms.

This study pointed to the relationship between intimate partner violence (IPV) and family functioning problems in parenting behaviour and numerous psychosocial developmental difficulties of adolescents [1].

Family stability, homework routines, discipline and cohesiveness were associated with the internalized/externalized symptoms and they significantly predicted symptomatology. A positive relation was found between parenting behaviour and child adjustment problems [2]. Family functioning problems in parenting behaviour failed to mediate relations between maternal psychopathology and adolescent problems. Maternal psychopathology was directly associated with adolescent internalized problems. Paternal perceptions of family functioning problems mediated relations between paternal psychopathology and adolescent externalized problems [3]. The adolescents whose mothers were victims of physical IPV showed higher incidence of DSM-IV disruptive disorders and externalized behaviour problems (high risk of serious conduct problems). The adolescents who were directly exposed to physical IPV and were also victims of physical punishment by parents showed increased internalized problems. IPV affected badly children's externalized problems either directly or indirectly through physical punishment [4].

Adolescent exposure to IPV was associated with aggression [5], impulsive behaviour, attention deficit disorder (ADD), attention deficit disorder/hyperactivity disorder (ADHD), conduct disorder (CD) – authority issues, disorders of habits (thumb sucking, night terrors), hyperactivity, bulimia and delinquent behaviour [6].

Numerous studies found the association between adolescent exposure to IPV and internalized symptoms: depression, anxiety, hypersensitivity, learned helplessness and fear and acute condition [7, 8].

Childhood exposure to traumatic experience of witnessing, or being a victim of intimate partner violence showed increased incidence of somatic symptoms (SS), which might result in diminished daily functioning. Over 95% of children showed at least one SS on the child-rated measure. The children who had been victims of sexual abuse had the higher rates of SS, anxiety, depression, post-traumatic stress, dissociation and anger. Anxiety mediated the association between sexual abuse and child-rated SS [9].

Growing up in the families with various forms of violence influenced the development of expressed symptoms of post-traumatic stress disorder, due to the presence of children to murders, suicides or fights between parents. Further development of post-traumatic symptomatology in youth led to the appearance of depression, suicidality [10], anxiety [11], drug addiction (cigarettes, marijuana) and the intergenerational transmission of family violence [12].

The study examined the relationship between IPV, child abuse and neglect, other traumatic experiences and children's post-traumatic stress (PTS) symptoms, and explored the moderating role of family functioning in the aftermath of IPV with the PTS symptoms. For family functioning, the higher levels of parenting stress were associated with the higher levels of PTS symptoms [13].

An increase in the index of intimate partner violence in Serbia and its consequences on the murder rate and number of psychic difficulties of family members led to defining a "National strategy for preventing and containing violence against women in the family and intimate partner violence" [14].

Methods

The study was conducted on a sample of 308 adolescents, aged 15–18 years [mean ± standard deviation (SD) = 16.5 ± 1.5]. There were no differences between the groups by the age ($t_{(198)} = -1.09$, non-significant). The sample consisted of two subsamples: the IPV one was made up of adolescents exposed to IPV, which was reported to and processed at the Centre for Social Work in Vranje, Serbia (n = 68/22.1%) and the control one made up of 240/77.9% adolescents coming from families in which there were not found any type of violence and social pathology using the revised CPRS-R Questionnaire. The Scale of Family Adaptability and Cohesion (FACES III) was used for measuring family functioning dimensions (cohesion, adaptability) and Cybernetic model of conative personality dimensions (CON-6) for conative functioning of adolescents.

After being acquainted with the Approval of the Ethics Committee of the Faculty of Medical Scinces, University of Kragujevac, Serbia, as regards conducting the design of study and upon getting the respective Consent by the Centre for Social Work in Vranje and Secondary School "Gimnazija Bora Stanković" in Vranje, Serbia, the respondents gave, after being acquainted with the aims of the study, written information consent for participating in the study.

The testing was conducted by psychologists and specialist teachers, who did therapeutic work with the parents and the adolescent or the adolescent only. The study was anonymous. Testing the total test material took one hour. The respondents filled out the CON-6 in 30 minutes, while answering the Questionnaire CPRS-R and FACES III lasted up to 15 min. The study was conducted during the period from 2010 to 2012.

The results for the control group of adolescents coming from the families without IPV were obtained by using the CPRS-R. It contained 20 items [15]. In this study, the reliability estimates for the scores was $\alpha = 0.94$.

Family cohesion and adaptability dimensions were measured by using the FACES III, which consisted of 20 items. The obtained results were expressed by using the raw scores and categories (cohesion: low – dissociated; mild – separated; developed – coherent, and high – intertwined; adaptability: low, moderate – flexible; developed – structured; high – rigid) [16]. In this study, the reliability estimates for the scores was $\alpha = 0.89$.

The conative dimensions, measured by the CON-6 were: reaction activity -introversion/extroversion, psychosomatic reactions (anxiety, defence reactions, aggressive reaction – response attacks, dissociative reactions, integrative reaction – social adaptation). It contained 180 items. The conative personality dimensions were expressed in the following categories: superior, above–the–average, average, below-the-average, and pathological functioning [17]. In this study, the reliability estimates for the scores were $\alpha = 0.96$.

The data analysis was performed using the software package SPSS version 11.5. Discriminative analysis was used for determining the level of pronunciation of family and conative dimensions of adolescents. The significance of differences between the samples was determined by using the χ^2 test, One-Way ANOVA and *t* test. Linear regression model was used for determining the relationship between family violence, family and conative functioning of the adolescents. The level of statistical significance was less than 1% ($p < 0.01$) and 5% ($p < 0.05$).

Results

The family dimension of cohesion was statistically larger in the functional non-violence families. The IPV families and functional non-violence families significantly ($p \leq 0.002$) differed when it comes to the level of pronunciation of adaptability dimension (Table 1).

The category of high cohesion, closeness among family members, was more pronounced with the functional non-violence families, as opposed to the families with violence ($p \leq 0.001$) (Table 2).

Table 1

Family dimensions of cohesion and adaptability in the functional, non-violence families and IPV families

Family dimensions	Statistical parameters	Type of family		
		Functional	IPV	Total
Cohesion	mean ± SD	41.050 ± 4.314	29.088 ± 1.616	35.069 ± 2.965
	F*		157.049	
	df		1	
	p		0.000	
Adaptability	mean ± SD	29.887 ± 5.388	26.667 ± 6.521	29.943 ± 6.127
	F		10.010	
	df		1	
	p		0.002	
Total	n	240	68	308

IPV – Intimate partner violence; SD – standard deviation; *One-way ANOVA.

Table 2

Dimension categories of cohesion in the functional, non-violence and IPV families

Cohesion	Type of family, n (%)		
	Functional	IPV	Total
Low, disunited	0 (0.0)	4 (5.9)	4 (1.3)
Moderate, separated	1 (0.4)	22 (32.3)	23 (7.5)
Developed, related	62 (25.8)	28 (41.2)	90 (29.2)
High, intertwined	177 (73.8)	14 (20.6)	191 (62.0)
Total (n)	240	68	308
$\chi^2 = 126.191$; df = 6; $p = 0.000$			

IPV – Intimate partner violence

The category of rigid/high adaptability was more pronounced with the IPV families than with the functional non-violence families. The functional non-violence families had the most prevalently developed adaptability, whereas 50% of IPV families had the moderate and developed adaptability dimension (Table 3).

The conative functioning of adolescents growing up in the families with IPV and were exposed to IPV statistically significantly differed from the control group ($p \leq 0.001$) in the measured dimensions: organic regulator (χ – psychosomatic reactions), defence reaction regulator [alpha–anxiety reactions, attack reaction regulator (sigma–aggressive reactions), system for coordinating regulation functions (delta–dissociative reactions), system for integrating regulation functions (etha–social im/maturity)], except for the activity regulator dimension (epsylon introversion / extroversion) (Table 4).

The study found a significant ($p \leq 0.001$) difference in the pathological functioning of conative dimensions between the adolescents exposed to family violence: in the dimension of activity-introversion/extroversion regulator; psychosomatic reactions; defence reactions/anxiety reactions; attack reactions/aggressive reactions; system for coordination of regulation functions/dissociate reactions; system for integrating regulation functions or social adaptation problems, as opposed to the adolescents from functional non-violence families (Table 5).

The regression linear analysis was used for determining the relationship of IPV with the family dimensions (cohesion and adaptability) and conative functioning of adolescents, as opposed to the adolescents from the functional non-violence families. Intimate partner family violence was significantly ($p \leq 0.001$) associated with the family dimensions and conative functioning of adolescents. The slight relationship was found between IPV and the activity dimension. The low negative relationship was found between IPV and conative dimensions: defence reactions (anxiety reactions) and defence reactions – aggressive reactions. The moderate, negative, relevant correlation was found between IPV and the system for integrating regulator functions – social immaturity, organic functioning regulator – psychosomatic reactions and system for coordinating regulator functions – dissociative reactions ($p \leq 0.001$). The mediator between IPV and the conative functioning of adolescents was family cohesion. Intimate partner family violence and adaptability were significantly, but slightly related ($p = 0.002$). The relationship between intimate partner family violence and conative functioning of adolescents was not significant in the activity dimension (epsylon–introversion/extroversion, $p = 0.260$). IPV predicted the best the development of family cohesion and conative dimension of adolescents: psychosomatic, dissociative reactions and social adaptation (Table 6).

Table 3

Dimension categories of adaptability in the functional, non-violence and IPV families

Adaptability	Type of family, n (%)		
	Functional	IPV	Total
Moderate, flexible	44 (18.3)	30 (44.1)	74 (24.1)
Developed, structured	178 (74.2)	30 (44.1)	208 (67.5%)
High, rigid	18 (7.5)	8 (11.8)	26 (8.4%)
Total (n)	240	68	308
$\chi^2 = 24.319$; df = 4; $p = 0.000$			

IPV – Intimate partner violence.

Table 4

Pronunciation of conative dimensions of adolescents from functional, non-violence and dysfunctional IPV families

Type of family	Statistical parametars	Epsylon	χ	Alpha	Sigma	Delta	Etha
Functional	mean	112.88	47.05	69.91	82.81	41.92	54.52
	SD	14.375	11.348	18.169	12.214	9.774	13.257
IPV	mean	115.91	72.06	94.44	99.97	70.68	77.47
	SD	17.140	26.058	24.036	18.118	26.487	23.452
ANOVA	F	1.275	95.262	49.753	51.299	145.705	70.922
	df	1	1	1	1	1	1
	p	0.260	0.000	0.000	0.000	0.000	0.000

IPV – Intimate partner violence; SD – standard deviation.

Table 5

Pathological functioning of conative dimensions of adolescents from functional non-violence families and IPV families

Pathological functioning of conative dimensions	Type of family, n (%)		
	Functional	IPV	Total
Extroversion-Introversion	4 (1.7)	6 (8.8)	10 (3.2)
Psychosomatic reactions	2 (0.8)	12 (17.6)	17 (5.5)
Anxiety reactions	2 (0.8)	16 (23.5)	18 (5.8)
Aggressive reactions	4 (1.7)	14 (20.6)	18 (5.8)
Dissociative reactions	0 (0)	16 (23.5)	16 (5.2)
Social im/maturity	4 (1.7)	22 (32.4)	26 (8.4)
Total (n)	240	68	308

IPV –Intimate partner violence.

Table 6

Linear regression analyses of adolescent and family conative dimensions

Variables	R	R^2	Adjustment R^2	F	*p*	β	*t* test	*p*
Epsylon	0.068	0.005	-0.001	1275	0.266	-0.068	23.127	0.000
χ	0.509	0.259	0.257	95.262	0.000	-0.509	19.889	0.000
Alpha	-0.393	0.155	0.152	49.753	0.000	-0.393	17.962	0.000
Sigma	0.398	0.159	0.156	51.299	0.000	-0.398	25.670	0.000
Delta	0.591	0.349	0.346	145.705	0.000	-0.591	21.912	0.000
Etha	0.455	0.207	0.204	70.992	0.000	-0.455	19.347	0.000
Cohesion	0.605	0.366	0.364	157.049	0.000	-0.605	9.420	0.000
Adaptability	0.188	0.035	-0.032	10.010	0.002	0.188	12.139	0.002

The data obtained in the study showed that IPV was significantly associated with the changes in the conative functioning and risk of development of internalized and externalized psychosomatic symptoms of adolescents, where the mediator was decreased family cohesion (Figure 1).

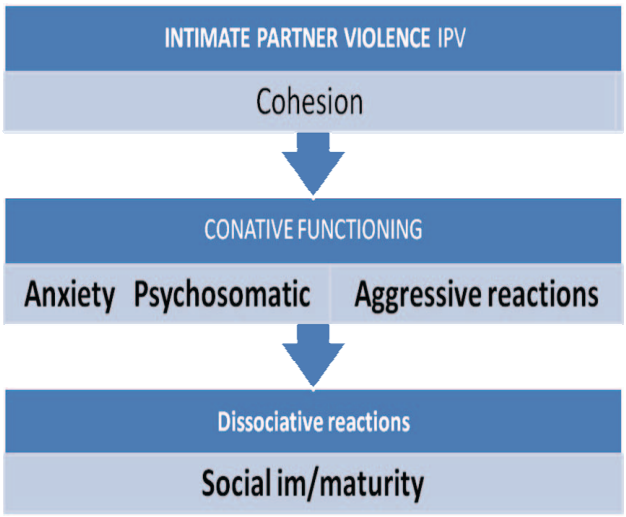

Fig. 1 – The association between conative functioning of adolescents exposed to intimate partner violence and family dimensions.

Discussion

The theoretical and conceptual basis of the study was a family system theory, which defined a family with IPV as a dysfunctional system, caused by the dysfunction of a subsystem, or a violent parent, in which a multiple damaged spouse differentiation led to the impossibility of developing differentiation in children growing up in such families [18, 19].

The data obtained in the study indicated that IPV and a conflict in a marital dyad caused the significant disorders in the family functioning by reducing the family dimensions of cohesion and adaptability. The emotional difficulties, constant conflicts and different forms of violence in the functioning of marital dyad caused reduced closeness, cohesion, unity and trust among all family sub-systems. The Dimension category of high cohesion was statistically significantly less established in the IPV families as opposed to the functional non-violence families. Changes in cohesion within the IPV families were also confirmed by the regressive linear analysis, which determined the greatest influence of intimate partner family violence on this dimension. In the functioning of family dimension of adaptability, realization of disciplining children, setting norms, habits and boundaries in conduct, there was found a statistically significant, yet slight difference between the IPV families and functional non-violence families. The category of developed adaptability was more pronounced in the families without violence as opposed to the IPV families. The disorders in the IPV family parents' capability to fulfil family roles, disrupted quality of the parent–child relationship, and not being interested in the functioning of children were all associated with psychosocial adjustment and development of internalized and externalized symptoms in the adolescents coming from such families [20, 21].

Marital dyad imbalance was associated with the disorders of conative functioning of adolescents exposed to IPV. Adolescents adjusted to emotional, physical and sexual IPV through increased defence, attack and internal organ reactions [4, 22].

According to the Cybernetic model of personality dimensions, six hierarchical conative personality dimensions, cognitive and motoric system regulated the whole psychological functioning of the personality. The disorders of lower regulation functions: organic, defence and attack reaction regulator cause impaired functioning of higher systems for the coordinating and integrating regulation functions [17].

Conative functioning of adolescents growing up in families with IPV and exposed to IPV was significantly different in hierarchically lower and higher dimensions: defence regulator, attack, organic reactions, and systems for coordinating and integrating regulation functions, except for the hierarchically lowest activity regulator. Although the significant differences in the functioning of activity regulator was not found in the study did not find, the hierarchically lowest located system which regulates the energy level of all other systems, including cognitive and motoric processors, the category of pathological functioning of this dimension was more pronounced with the adolescents exposed to IPV from an early age, as opposed to the adolescents coming from the functional non-violence families. Pathological functioning of the activity regulator led to abulic, depressive and hypomanic reactions [2, 4, 8]. Given that the activity level determined the speed of information flow within the central nervous system, those disorders affected the efficiency of cognitive and motoric processes. The adolescents exposed to IPV experienced mental health consequences: psychological, social and academic difficulties in accomplishing school assignments [23].

The family cohesion disorders, such as self-control problems, were associated with the statistically significant differences in the functioning of hierarchically higher conative dimensions: defence/anxiety regulators, attack/aggressive and organic/psychosomatic reactions of adolescents exposed to IPV, as opposed to the adolescents coming from the functional non-violence families [24]. The adolescents growing up in the families with IPV and exposed to IPV showed a significant disordered functioning of the organic function regulator (χ), responsible for organic function centres, as opposed to the adolescents coming from the functional non-violence families. The category of pathological functioning of the organic function regulator was more pronounced in the adolescents growing up in the families with IPV and exposed to IPV. With approximately 10% of adolescents exposed to IPV, the disorders of this regulator could cause the functional disorders of the basic organic systems (cardiovascular, respiratory, urogenital, sensory, motoric), and control of biological processes, which secondarily formed a hypochondriac reaction system and the onset of psychosomatic illnesses [9, 13, 25].

The adolescents exposed to IPV had significantly more pronounced defence reactions, anxiety and trauma symptoms, as opposed to the adolescents coming from the functional non-violence families [5]. The category of pathological functioning of this conative dimension was found with almost one quarter of adolescents exposed to IPV. The disorders of regulator functioning of defence reactions (alpha) led to anxiety symptoms and formed the basis of pathological reactions such as: phobias, obsessive-compulsive disorders, sensory and emotional hypersensitivity [8]. Dysfunction of the regulator dimension of defence reactions coupled with activity regulator dysfunction formed the basis of possible future psychopathology, depression modalities and psychasthenia [26]. Along with the dysfunctions of the system for coordinating regulation functions (dissociative reactions), the defence regulator dysfunction caused more serious depressive, obsessive and compulsive reactions, while neuroticism was a consequence of defence and organic reaction regulator dysfunction [9, 27].

The significant disorders in the functioning of the superior system of coordinating regulation functions (delta), as opposed to the adolescents coming from the functional non-violence families.

Pathological functioning of the system for coordinating regulation functions was more pronounced with the adolescents growing up in and exposed to IPV. The pathological values Dysfunctional communication in IPV was characterized, among other things, by low levels of verbal expressiveness and emotional responsiveness, low tolerance to criticism and its interpretation as a threat, or intimidation, and consequently, increased anxiety and subsequent escalation of an argument into violence [28].

The attack regulator reactions (sigma), or aggressive reactions were significantly more pronounced with the adolescents growing up in the families with IPV and exposed to IPV, as opposed to the adolescents coming from the functional non-violence families. Because of the energy potential necessary for the aggression to be carried out, a model represented a significant relationship between the attack regulator and activity regulator. The attack reaction regulator dysfunctions were manifested by the variously modelled aggressive reactions and weak control of immediate impulses. The conative dimension of pathological values of aggressive reactions were found with one fifth of adolescents exposed to IPV. In the unfavourable development, this percentage of adolescents' increased aggressive reactions might develop various externalized symptoms: impulsiveness, destructiveness, conduct disorders, delinquency [5, 29]. The aggressive reactions of adolescents exposed to IPV were associated with the maternal mental health, lack of family warmth, and child maltreatment. Witnessed and experienced intimate partner physical violence, maltreatment and abuse in the family relationships caused the development of aggression, aggression perpetration in the future and a risk of trans-generational violence transfer to the adolescents [30, 31]. Dysfunction of lower conative regulators with the adolescents growing up in the families with IPV and exposed to IPV, such as psychosomatic, anxiety and aggressive reactions, was associated with of the system for coordinating regulation functions caused disorganization and dissociation of cognitive and conative processes and motoric function disorders. The schizoid, paranoid and manic symptoms were the direct products of this system disorder. The more serious disorders of system for coordinating regulation functions produced the secondary disorders of all the functionally subordinated systems: severe forms of sensory and motoric conversions, some forms of inhibitory conversions and fixed phobias, obsessions and compulsions [9, 22, 32].

The disorders of hierarchically lower conative dimensions with the adolescents exposed to IPV led to the significant differences in the functioning of the highest system for integrating regulation functions, etha, as opposed to the adolescents coming from the functional non-violence families. The system for integrating regulation functions (etha) integrated the conative changes in the form of psychological field structure, especially in the form of social field and changes in that field. Because of that, a set of programmes which determined the functions of this system was primarily formed during the process of upbringing, through conditioning and identification. Pathological functioning of the system for integrating the regulation functions were more pronounced with the adolescents exposed to IPV, as opposed to the adolescents coming from the functional non-violence families. Unfavourable development of pathological system for integration was associated with the social maladaptation, lower level of social maturity and externalized symptoms. The adolescent exposure to IPV, together with the parenting psychopathology and low self-regulation with the adolescents, influenced antisocial behaviour, alcohol addiction, aggression, hostile reactions and trans-generational violence transfer [20, 29, 33]. Dysfunctional familial relationships, family communication and interaction were often accompanied by suicidal behaviour.

The related scientific works stated that the protection factors for the adolescents exposed to IPV were found within family, school and social community. Family characteristics

were the most important ones when it came to the influence of violence on the appearance of the symptoms in adolescents: a) close family relationships and social support at school for internalized symptoms (e.g. anxiety, depression, post-traumatic stress disorder PTSD) and b) close family relationships for externalized symptoms (e.g., aggression, substance use) [34].

The limitation of this study and the possibility of new research was the fact that apart from the family dimensions of cohesion and adaptability, the associations among other forms of family functioning were not investigated (e.g., unemployment, material well-being, education level of the parents, psychopathology of the parents) and conative functioning of adolescents growing up in the families with IPV and exposed to IPV from early age.

The second limitation was that our results were based on self-reported information. Therefore, the offering could be connected with a high confidence in the capacity to describe own self.

This study has scientific relevance in clarifying the mechanisms linking family violence and cohesion with conative dysfunctioning as well as investigating the high risk of developing psychopathological behaviour.

Conclusion

This study suggested that growing up in a dysfunctional family with IPV, which damaged the multiple basic dimensions, communication and cohesion between the sub-systems and the exercise of parental roles, was associated with the cognitive, social, emotional, and behavioural problems, and significantly predicting psychopathological symptomatology of these adolescents as opposed to the adolescents from the functional non-violence families. The adolescents exposed to IPV showed the significantly higher pathological values for the following dimensions: psychosomatic, anxiety, aggressive, dissociative and social maladjustment reactions. Growing up in a dysfunctional violence family was accompanied by the continuous exposure to negative, stressful and traumatic experiences, which in turn was associated with intensified reactions of attack and defence, but also with weak potential for integrative functions. The data illustrates the need for introducing some preventive and psychotherapeutic measures in working with the adolescents exposed to IPV. The preventive measures for stopping the development of psychopathological internalized and externalized symptoms represented preservation, or restoration of close family relationships and social support at school.

R E F E R E N C E S

1. *DeFife JA, Drill R, Nakash O, Westen D.* Agreement between clinician and patient ratings of adaptive functioning and developmental history. Am J Psychiatry 2010; 167(12): 1472–8.
2. *Harris AN, Stoppelbein L, Greening L, Becker SP, Luebbe A, Fite P.* Child Routines and Parental Adjustment as Correlates of Internalizing and Externalizing Symptoms in Children Diagnosed with ADHD. Child Psychiatry Hum Dev 2014; 45(2): 243–53.
3. *Burstein M, Stanger C, Dumenci L.* Relations Between Parent Psychopathology, Family Functioning, and Adolescent Problems In Substance-Abusing Families: Disaggregating the Effects of Parent Gender. Child Psychiatry Hum Dev 2012; 43(4): 631–47.
4. *Miranda JK, de la Osa N, Granero R, Ezpeleta L.* Maternal experiences of childhood abuse and intimate partner violence: Psychopathology and functional impairment in clinical children and adolescents. Child Abuse Negl 2011; 35(9): 700–11.
5. *Holmes MR.* Aggressive behavior of children exposed to intimate partner violence: An examination of maternal mental health, maternal warmth and child maltreatment. Child Abuse Negl 2013; 37(8): 520–30.
6. *Evans SE, Davies C, DiLillo D.* Exposure to domestic violence: A meta-analysis of child and adolescent outcomes. Aggression Viol Behav 2008; 13(2): 131–40.
7. *Self-Brown RS.* Effects of family violence and parental psychopatology on the psychological outcome of urban adolescents exposed to comunity violence [thesis]. Pensacola, FL: Department of Psychology, University of West Florida; 2004.
8. *Moylan CA, Herrenkohl TI, Sousa C, Tajima EA, Herrenkohl RC, Russo MJ.* The Effects of Child Abuse and Exposure to Domestic Violence on Adolescent Internalizing and Externalizing Behavior Problems. J Fam Violence 2010; 25(1): 53–63.
9. *Kugler BB, Bloom M, Kaercher LB, Truax TV, Storch EA.* Somatic Symptoms in Traumatized Children and Adolescents. Child Psychiatry Hum Dev 2012; 43(5): 661–73.
10. *Tschan T, Schmid M, In-Albon T.* Parenting behavior in families of female adolescents with nonsuicidal self-injury in comparison to a clinical and a nonclinical control group. Child Adolesc Psychiatry Ment Health 2015; 9: 17.
11. *Briggs-Gowan MJ, Pollak SD, Grasso D, Voss J, Mian ND, Zobel E,* et al. Attention bias and anxiety in young children exposed to family violence. Child Psychol Psychiatry 2015; 56(11): 1194–201.
12. *De Bellis MD.* The intergenerational transmission of family violence: the neurobiology of the relationship between child victimization, parental mental health and addiction. In: *Widom CS*, editor. Trauma, Psychopathology and Violence: Causes, Correlates or Consequences? New York: American Psychiatric Press, Inc, 2012. p, 79–108.
13. *Telman MD, Overbeek MM, de Schipper JC, Lamers-Winkelman F, Finkenauer C, Schuengel C.* Family Functioning and Children's Post-Traumatic Stress Symptoms in a Referred Sample Exposed to Interparental Violence. J Fam Violence 2016; 31: 127–36
14. National strategy for preventing and containing violence against women in the family and intimate partner violence. Government of Serbia 2011. 027/ -20.04. (Serbian)
15. *Conners CK, Sitarenios G, Parker JD, Epstein JN.* The Revised Conners, Parent Rating Scale(CPRS-R): Factor Structure, Reliability, and criterion Validity. J Abnorm Child Psychol 1998; 26(4): 257–68.
16. *Olson D.* Outcome Study of Alcoholic Families Polish FACES. 2014.
17. *Momirović K, Wolf B, Đžamonja Z.* KON-6. Cybernetic model of personality dimensions. Beograd: SDPS-Center for Practice Psychology; 2002. (Serbian)
18. *Coulter S.* Systemic family therapy for families who have experienced trauma: A randomised controlled trial. Trial Br J Soc Work 2011; 41(3): 502–19.

19. *Pearson MR, D'Lima GM, Kelley ML*. Self-regulation as a buffer of the relationship between parental alcohol misuse and alcohol-related outcomes in first-year college students. Addict Behav 2011; 36(12): 1309–12.
20. *Visser MM, Telman MD, de Schipper JC, Lamers-Winkelman F, Schuengel C, Finkenauer C*. The effects of parental components in a trauma-focused cognitive behavioral based therapy for children exposed to interparental violence: study protocol for a randomized controlled trial. BMC Psychiatry 2015; 15: 131.
21. *van Rooij FB, van der Schuur WA, Steketee M, Mak J, Pels T*. Interparental Violence: Similarities and Discrepancies Between Narratives of Mothers and Their Children. J Child Fam Stud 2015; 24(11): 3350–62.
22. *Miranda JK, de la Osa N, Granero R, Ezpeleta L*. Multiple Mediators of the Relationships Among Maternal Childhood Abuse, Intimate Partner Violence, and Offspring Psychopathology. J Interpersl Violence 2013; 28(14): 2941–65.
23. *Alisic E, Krishna RN, Groot A, Frederick JW*. Children's Mental Health and Well-Being After Parental Intimate Partner Homicide: A Systematic Review. Clin Child Fam Psychol Rev 2015; 18(4): 328–45.
24. *Conners-Burrow N, McKelvey L, Kyzer A, Swindle T, Cheerla R, Kraleti S*. Violence Exposure as a Predictor of Internalizing and Externalizing Problems Among Children of Substance Abusers. J Pediatr Nurs 2013; 28(4): 340–50.
25. *de la Vega A, de la Osa N, Ezpeleta L, Granero R, Domènech JM*. Differential effects of psychological maltreatment on children of mothers exposed to intimate partner violence. Child Abuse Negl 2011; 35(7): 524–31.
26. *Kassis W, Artz S, Scambor C, Scambor E, Moldenhauer S*. Finding the way out: A non-dichotomous understanding of violence and depression resilience of adolescents who are exposed to family violence. Child Abuse Negl 2013; 37(2–3): 181–99.
27. *Levendosky AA, Lannert B, Yalch M*. The Effects of Intimate Partner Violence on Women and Child Survivors: An Attachment Perspective. Psychodyn Psychiatry 2012; 40(3): 397–433.
28. *Lecic-Tosevski D, Draganic-Gajic S, Pejovic-Milovancevic M, Popovic-Deusic S, Christodoulou N, Botbol M*. Child is father of the man: child abuse and development of future psychopathology. Psychiatriki 2014; 25(3): 185–91.
29. *Ehrensaft MK, Cohen P*. Contribution of Family Violence to the Intergenerational Transmission of Externalizing Behavior. Prev Sci 2012; 13(4): 370–83.
30. *Callaghan JE, Alexander JH, Sixsmith J, Fellin LC*. Children's experiences of domestic violence and abuse: Siblings' accounts of relational coping. Clin Child Psychol Psychiatry 2016; 21(4): 649–68.
31. *Narayan AJ, Englund MM, Egeland B*. Developmental timing and continuity of exposure to interparental violence and externalizing behavior as prospective predictors of dating violence. Dev Psychopathol 2013; 25(4 Pt 1): 973–90.
32. *Martinez W, Polo AJ, Zelic KJ*. Symptom Variation on the Trauma Symptom Checklist for Children: A Within-Scale Meta-Analytic Review. J Trauma Stress 2014; 27(6): 655–63.
33. *Hardaway CR, McLoyd VC, Wood D*. Exposure to Violence and Socioemotional Adjustment in Low-Income Youth: An Examination of Protective Factors. Am J Community Psychol 2012; 49(1–2): 112–26.
34. *Ozer EJ, Lavi I, Douglas L, Wolf JP*. Protective Factors for Youth Exposed to Violence in Their Communities: A Review of Family, School, and Community Moderators. J Clin Child Adolesc Psychol 2017; 46(3): 353–78.

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