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The Mental Health of Children upon Their Return Home after a Long Displacement Period

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A B S T R A C T

The aim of this study was to determine the different levels of depression, hopelessness and post-traumatic stress disorder between two groups of adolescents, those who returned to Baranja and those from Osijek. The first group consisted of 57 adolescents (32 female and 25 male) with the mean age of 17.36, who were grammar school students in Beli Manastir (Gimnazija, Beli Manastir). The mean duration of displacement period was 7 years. The second group consisted of 58 adolescents of grammar school students in Osijek (III. gimnazija, Osijek) (32 female and 26 male) with the mean age of 17.28. All examinees filled in the Croatian version of the Children's Depression Inventory (CDI), the Hopelessness Scale for Children (HSC) and Children's Post-Traumatic Stress Disorder (PTSD) Inventory. The analysis of the results did not show any statistically significant difference between these two groups regarding levels of depression, hopelessness and post-traumatic stress disorder. The results point out rather good psychosocial adjustment of adolescents upon their return home after 4 years.

Key words: *depression, hopelessness, post-traumatic stress disorder, war trauma, adolescent*

Introduction

The war situation is considered to be one of the strongest stressors since it happens unexpectedly, affects the whole population and causes deep traumas. The children exposed to war traumas and displacements are extremely prone to development of war traumas because they are very sensitive, dependent, and lack the skills to cope with stress[1]. The earliest study results describing children experiencing war date from the World War II. The children exposed to the air raids in London were more likely to develop mental distress if they were separated from their mothers or if their mothers were very anxious or depressed[2]. However, if the children and their family members are not injured, the children and their parents cope with stress far better, as it was shown in the studies about Israeli children during the bombardment in the Arab-Israeli war[3,4]. The same pattern was seen in the children growing up in Belfast, Northern Ireland[5].

The displacement itself is a specific and complicated situation caused by the war. Besides being exposed to an armed conflict, the displaced children experience an additional stress, not only when they run for their safety, but also when they are placed in a new environment and have to adjust to it[6]. The available literature describes the consistent increase of psychopathology among displaced children, especially PTSD disorders, depression and anxiety[7–11]. Fox et al showed that the traumatic experiences before the displacement could cause poor school performance and low academic degrees in Cambodian children who were brought to America[12].

During the war in Croatia from 1991 until 1995 there were numerous refugees and many people were displaced. The statistical data collected during the war show that 55% of all refugees and displaced people in Croatia were children[13]. Studying emotional reactions of children exposed to different kinds of war stress, Živčić finds out that the displaced children express more negative emotions, especially sadness and fear, after having been displaced for 6 months, in comparison to the children who did not have to leave home[14]. Some of the displaced children spent a few years away from their homes because their houses were destroyed or oc-

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cupied. Once they returned, they had to adjust to the new living conditions that were different from those before the war. As far as we know there are not many studies presenting adjustment problems of the displaced children once they have returned home after having been displaced for a number of years.

The aim of this study is to determine the level of depression, hopelessness and PTSD in the group of adolescents from Baranja after the displacement period of 7 years. These adolescents were compared to those from Osijek, who spent 6 months on average out of the city due to the heavy shelling in Eastern Slavonia and Baranja (the end of 1991 till the beginning of 1992).

Subjects and Methods

The study included 115 examinees, divided in two groups. The first group consisted of 57 adolescents, with the mean age of 17.36, who were the students of the second, the third, and the fourth class of the grammar school in Beli Manastir (Gimnazija, Beli Manastir). The mean displacement period was 7 years. The displacement period was so long because the city of Beli Manastir is situated in the area that was occupied even after the war activities in Croatia subsided.

The second group consisted of 58 adolescents from Osijek, with mean age of 17.28 and they were students of a grammar school in Osijek (III. gimnazija, Osijek).

The mean period of the exile from their homes was 6 months, during the intensive bombardment at the end of 1991 and the beginning of 1992. Since the city of Osijek had not been occupied, the children in this group were able to return home as soon as the war activities ended, to continue with the relatively normal life. The basic method applied in the study was to visit the school (the grammar school in Beli Manastir and the grammar school in Osijek) and test the adolescents during their regular classes. Before participating in the study, both the children and their parents were thoroughly informed about the study conduct, its aims and they gave their consent to participate in the study. The study team explained to the students how to fill in the questionnaires, checked whether the participants understood it, and then the children filled it out during one class.

Instruments

Non-standardized structured questionnaire, especially designed by the study group to collect general data (sex, age, class, school), socio-economical factors and family living conditions (the place of residence, parents' education, their employment status, the members of the family, psychiatric disorders of the parents) and the traumatic experiences (exposure to shelling, long stay in the shelter, having witnessed injuring or killing of other people, having been separated from the parents, the death, the wounding or the imprisonment of the closest family members, the family members going to the war and home devastation).

We used the Croatian version of the Children's Depression Inventory (CDI) which is adjusted Children's Depression Inventory (Kovacs 1981), one of the most frequently used and studied scales for the children depression[15]. The Scale turned out to be rather applicable and reliable since it had been used many times to determine early symptoms in the Croatian primary school children[16]. The Scale consists of 27 groups, each with 3 questions testing the child depression symptoms like: sadness, sleeping disorders, appetite, the attitude towards the school and the peers, suicidal thoughts.

For every symptom listed in the questionnaire three levels of intensity were offered. Child would choose one of the 3 offered statements, which described the best how the child felt during the previous two weeks. The answers were scored with 0, 1 or 2, ranging from 0–54 total score. The score of 18 and higher would suggest stronger depression. Our studied group had an internal consistency of 0.76% (Cronbach alfa) confirming the Scale's reliability.

The Croatian version of the Hopelessness Scale for Children (HSC) stands as the shorter form for Hopelessness Scale for Children (Kazdin et al 1986)[17]. After the results and factor analysis the original scale was reduced to 12 statements that mostly clearly describe the feeling of hopelessness[18]. The child would evaluate every statement as true or wrong for him/her and whether it reflected the child's way of thinking. Each answer would get one score, depending on the direction of the given statement. The total score was obtained by summing up the answers, so that the highest score would vary from 0–12. Rather high score would be the one of 8 or higher, and that would mean rather negative future vision. Cronbach alfa was 0.74 in this tested sample.

Children's Post-Traumatic Stress Disorder (PTSD) Inventory (Saigh, 1991) was used to determine the PTSD symptoms and it consisted of 4 question groups that would show the presence and the type of trauma, intrusion symptoms, avoiding symptoms and higher arousal[19]. The highest score was 1 in each question group and the total score of 4 would suggest PTSD. The questionnaire was used among Croatian displaced children within the psychosocial programme for the refugees and displaced people in the refugee camps in Croatia[20]. The internal consistency (Cronbach alfa) was 0.92.

Statistical analysis

Descriptive statistics was done in order to measure of central tendency (arithmetic mean, quartiles, mode) as well as the mesures of variability (variance, standard deviation). To test existance of significant difference in means a t-test was used, and to test the difference in proportions a χ^2-test and Fisher's Exact Test were used.

The internal consistency of the Children's Depression Inventory, the Hopelessness Scale for Children and Children's PTSD Inventory was checked by Cronbach alfa.

Results

The first group consisted of 57 adolescents (age 16–18), students of a grammar school in Beli Manastir, 32 (56.14%) out of who were girls. Analiysis done according to age groups showed that the highest percentage of adolescents from the group 1 (30 adolescents or 52.63%) was at the age of 18. The second group was formed from 58 adolescents (age 16–18), students of a grammar school in Osijek, 32 (55.17%) out of whom were also female. Analysis done according to age groups showed that the highest percentage of adolescents from the group 2 (29 adolescents or 50%) was at the age of 18. Table 1 shows some sociodemographic factors of the investigated groups as well as differences between them.

Both Fisher's Exact Test and Pearson's chi-square test were used in order to test the hypothesis on differences in proportions between groups according to sociodemographic factors. The results showed that there was a statistically significant difference at level of 5% importance between the groups according to professional qualification of the father, parents' employment, the number of children in the family. Although most of the fathers in both groups had finished secondary school, there is a significantly higher number of fathers with elementary school or nonfinished elementary school (19.30%: 10.34%) as well as a significantly lower number of fathers with higher or high professional qualification (10.53%:36.21%). The analysis of the parents' employment showed that the group 1 was characterized by a significantly lower num-

TABLE 1
SOCIODEMOGRAPHIC FACTORS OF ADOLESCENTS FROM GROUP1 AND GROUP 2 AND DIFFERENCES BETWEEN THE TWO GROUPS

Sociodemographic factors	Group 1 (N=57)		Group 2 (N=58)		χ^2	df	p
Age (in years)							
16	10	17.54	13	22.41	0.429	2	0.806
17	17	29.82	16	27.59			
18	30	52.63	29	50.00			
Sex							
Male	25	43.86	26	44.83	0.010	1	0.916
Female	32	56.14	32	55.17			
Family structure							
Live with both parents	52	91.23	53	91.38	0.000	1	0.977
Live with a parent	5	8.77	5	8.62			
Matrimonial status of parents							
Married	52	91.23	53	91.38	0.000	2	0.999
Divorced	4	7.02	4	6.90			
Widow(er)	1	1.75	1	1.72			
Professional qualification (mother)							
Elementary school or nonfinished elementary school	12	21.05	5	8.62	5.783	2	0.055
Secondary school	38	66.67	38	65.52			
Higher school or faculty	7	12.28	15	25.86			
Professional qualification (father)							
Elementary school or nonfinished elementary school	11	19.30	6	10.34	10.936	2	0.004*
Secondary school	40	70.18	31	53.45			
Higher school or faculty	6	10.53	21	36.21			
Employment (parents)							
Both parents employed	39	68.42	47	81.03	7.736	2	0.020*
One parent unemployed	11	19.30	11	18.97			
Both parents unemployed	7	12.28	0	0.00			
Living conditions							
Private house or flat	40	70.18	50	86.21	4.880	2	0.087
Rented accommodation	7	12.28	2	3.45			
Municipal-owned house or flat	2	3.45	6	10.34			
Number of children in the family							
1	5	8.77	12	20.69	6.479	2	0.039*
2	39	68.42	41	70.69			
3 and more	13	22.81	5	8.62			

*level of statistical significance from 0.05%

TABLE 2
FREQUENCY OF WAR TRAUMA EXPERIENCES OF ADOLESCENTS IN GROUP 1, GROUP 2 AND DIFFERENCES BETWEEN THE TWO GROUPS

War Traumatic Experience	Group 1 (N=57)		Group 2 (N=58)		χ^2	df	p
	N	%	N	%			
Experienced general and air alarm	41	71.93	46	79.31	0.850	1	0.356
Stayed in shelters because of shelling	41	71.93	46	79.31	0.850	1	0.356
Experienced shelling at close distance	38	66.67	47	81.03	3.077	1	0.079
Members of the family killed during the war	1	1.75	1	1.72	0.000	1	0.990
Members of the family fought in the war	15	26.32	26	44.83	4.294	1	0.038*
Members of the family were prisoner-of war, missing or injured	1	1.75	2	3.45	0.324	1	0.568
Separated from parents during the war	23	40.35	28	48.28	0.731	1	0.392
Saw somebody being injured	10	17.54	5	8.62	2.018	1	0.155
Saw somebody being killed	4	7.02	3	5.17	0.171	1	0.679
Home destroyed in war	24	42.11	7	12.07	13.172	1	0.000*

*level of statistical significance from 0.05%

TABLE 3
DESCRIPTIVE STATISTICS OF THE VARIABLES IN GROUP 1: CHILDREN'S DEPRESSION INVENTORY (CDI), HOPELESSNESS SCALE FOR CHILDREN (HSC), CHILDREN'S PTSD INVENTORY

Variable	N	Min	Max	X	SD	Median
CDI	57	1.00	22.00	9.75	4.54	10.00
HSC	57	0.00	12.00	2.25	2.09	2.00
Children's PTSD Inventory	57	0.00	4.00	0.50	1.18	0.00

TABLE 4
DESCRIPTIVE STATISTICS OF THE VARIABLES IN THE GROUP 2: CHILDREN'S DEPRESSION INVENTORY (CDI), HOPELESSNESS SCALE FOR CHILDREN (HSC), CHILDREN'S PTSD INVENTORY

Variable	N	Min	Max	X	SD	Median
CDI	58	0.00	31.00	10.72	6.32	10.00
HSC	58	0.00	9.00	2.89	2.25	2.00
Children's PTSD Inventory	58	0.00	4.00	0.63	1.26	0.00

ber of both employed parents (68.42%:81.03%), whereas there was a significantly higher number of both parents unemployed in relation to the group 2 (12.28%:0.00%). Analysis of the family size (total number of family members) showed that there was a significantly lower number of families with only one child in the group 1 (8.77%:20.69%) with regard to the families with three children (22.81%:8.62%) in the group 2.

Table 2 presents frequency of war trauma experiences in the interviewed adolescents from both groups as well as differences between them. Both Fisher's Exact Test and Pearson's χ^2 test were used in order to test the hypothesis on differences in proportions between the groups according to war traumatic events. The results showed that there was a statistically significant difference at level of 5% importance between groups according to the involvment of family members in the war as well as in the destruction of homes during the war. It is characteristic for the group 2 that a higher number of family members fought in the war (44.83%:26.32%) in relation to the group 1. Besides, for the interviewed adolescents from the group 2 it was characteristic that the number of destroyed homes was significantly higher in terms of statistics in relation to the group 1 (42.11%: 12.07%).

Table 3 and Table 4 show the descriptive statistics of the results obtained according to the Children's Depression Inventory (CDI), the Hopelessness Scale for Children (HSC) and Children's PTSD Inventory for each group. T-test was done in both groups in order to test the presence of differences in means. The obtained results showed that there was no statistically significant difference in depression (t=1.934, p=0.347), hopelessness (t=1.145, p=0.111), and in PTSD (t=1.147, p=0.573) between the tested groups.

Discussion

The aim of this study was to determine the mental health of the adolescents that had spent many years as refugees and the study was conducted 4 years upon their return home. The results of these adolescents were compared to those from Osijek who had been refugees for 6 months on average during the intensive bombardment of the town of Osijek (the end of 1991 and the beginning of 1992). The obtained results did not show any statistically significant difference in depression, hopelessness and PTSD between these two groups, meaning that the refugee trauma and the experiences upon home return did not provoke psychopathological conditions in the period after they had come home. Loughry and Flouri got the same results when they studied behavioral and emotional problems in the displaced children in the period of 3 or 4 years upon their home return in Vietnam from the refugee camps in Hong Kong and South East Asia[21]. The authors did not detect any emotional and behavioral disorders in the displaced chil-

dren and the other children who had not left Vietnam. The children who had been displaced, and returned to Vietnam had the level of social support and the abilities to cope with the every day problems like their peers who had not left Vietnam. Their feeling of competence and control was closely connected with their subjective perception of economical prosperity and stability of the adolescents' families and was significantly higher than while they had been displaced.

Živcic, examined the emotional reactions of Croatian displaced children with the Child Depression Inventory showing that both, the displaced and the local children had exhibited more depressive symptoms than the children of same age before the war in Croatia (the CDI average score of the refugee children was 11.28 after six months of displacement, that of the local children was 10.77 and the children assessed before the war was 9.57). The average scores on CDI in this study were lower that in the Živcic study with the displaced children in Rijeka[14]. The results of the study made by Davies and McKelvey support the opinion that the refugee status is not necessarily a risk factor for adolescence psychopathology[22]. The authors mention other risk factors that might promote psychopathology, which would include the subjective perceptions of intact family status, the social and economical living conditions and culturally related differences in perception of what behavioral and emotional problems might mean.

The family status analysis of our examinees shows that 94% of the returned adolescents live in intact families as well as 97% of the children in the control group.

Evaluating the mental health and social adjustment of Iranian displaced children three years after their arrival at Sweden, Almqvist and Broberg showed that the exposure to war and political violence and individual vulnerability before traumatic stress exposure were important risk factors for long-lasting post-traumatic stress symptomatology in children[23]. Although the adolescents investigated in this study experienced stressful events at the time of intensive war operations in the Northeast Croatia, they did not show a higher level of post-traumatic stress symptomatology.

Many displaced children living in refugee camps experienced their life conditions as traumatic as their previous traumatic experiences if not even worse. So Savin et al estimated a rather high level of depression among Cambodian adolescents that had lived in the refugee camps on the Thailand-Cambodian border for ten years, probably due to their living conditions (violence, permanent malnourishment) and anxiety about their future once when they returned to Cambodia[24]. The study was conducted at the time when they returned home. The difference among the children from Cambodia and South East Asia regarding their psychopathological condition, confirms that our way of expressing emotional distress and psychopathological conditions is very much determined by our cultural origin[25].

Studying the correlation between the psychosocial adjustment of the Cambodian adolescents and the traumatic experiences of their parents before the displacement, Rousseau et al came to the conclusion that the adolescents whose parents were exposed to the political violence, adjusted better, had less mental disorders than the adolescents whose parents were less traumatized[26]. The authors explain these findings with the high expectations of the Cambodian parents from their children before the displacement and with the fact that the traditional values were preserved in spite of the threat from the outside. The level of psychopathology in both groups is far smaller than in the displaced children observed in South East Asia and South America, since their prevalence of significant mental disorder was even 50%[24,27].

In the study observing the psychosocial adjustment of the Bosnian adolescents living as refugees in Slovenia, the authors found out that these adolescents expressed far more sadness, anxiety about the future and the physical pain than Slovenian adolescents, but the Bosnian children had a good school performance and did not show any behavioral disorders[28]. The authors came to the conclusion that traumatic experiences did not always provoke psychopathology, but other risk factors must be taken into consideration like: cultural background and the influence of the whole situation.

Some studies about the people who experience different traumas suggest that they can change for better. So the authors observing PTSD growth in the group of the displaced people and the refugees who three and half years after the war in Bosnia, lived in Sarajevo, found out that young people had far higher PTSD growth than the elderly people[29].

Conclusion

The results of this study suggest that if the family stays intact and without additional traumas, the children and their parents could recover from their war traumas and the displacement. The psychosocial adjustment of the children includes many factors including the personal characteristics of the child (his/her vulnerability, developed skills to cope with stress), the intensity and the type of the traumas experienced, as well as the factors of the surroundings (family, social and cultural factors). In order to understand the prolonged effect of the trauma, the psychosocial adjustment of the children should be systematically studied in bigger groups of children with war traumas and displacement. The findings of this study should be incorporated in the programmes of psychosocial interventions for those adolescents who showed signs of psychopathology.

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MENTALNO ZDRAVLJE DJECE POVRATNIKA NAKON VIŠEGODIŠNJEG BORAVKA U PROGONSTVU

SAŽETAK

Cilj istraživanja bio je ustanoviti razlike u razvoju depresivnosti, beznadnosti i posttraumatskog stresnog poremećaja u skupinama adolescenata povratnika u Baranju i adolescenata iz Osijeka. Skupinu I činilo je 57 adolescenta (32 ženskog spola i 25 muškog spola) prosječne dobi 17,36 godina, učenika Gimnazije u Belom Manastiru. Prosječna dužina njihova boravka u progonstvu bila je 7 godina. Skupinu II činilo je 58 adolescenata (32 ženskog i 26 muškog spola) prosječne dobi 17, 28 godina, učenika III Gimnazije u Osijeku. Svi ispitanici ispunili su hrvatske verzije Ljestvice depresivnosti za djecu, Ljestvice beznadnosti za djecu i Upitnik za posttraumatski poremećaj u dječjoj dobi. Analiza rezultata nije pokazala statistički značajnu razliku u razini depresivnosti, beznadnosti i posttraumatskog stresnog poremećaja između skupina. Dobiveni rezultati sugeriraju dobru psihosocijalnu prilagodbu adolescenata četiri godine nakon povratka u Baranju.