

The Peculiarities of Neuropsychological Characteristics of Orphaned Adolescents

Tea Jaliashvili

Department of Epidemiology and Public Health, Georgian State Medical Academy;
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ABSTRACT

Adolescents with developmental problems related to emotional deprivation have attracted the attention of scientists for a long time, because of the many problems associated with this social group. One category within this group are orphaned adolescents. The neuropsychological characteristics, among 12–18 years-old orphaned adolescents in Martkopi Region Children Home (MRCH) and Katchreti Adolescent Rehabilitation Center (KARC), are the subject of this study. These characteristics are: Visual-spatial recall ability (VS), speed of cognitive function (C), memory (M), and attention (A), which in this study assessed with the Rey Tailor Complex Test and Recognition Trial (RCFT). Based on the RCFT, the subjects of this study showed decreased visual-spatial recall ability (VS), speed of cognitive function (C), memory (M), and attention (A). Importance of projection children and adolescent Mental Health psycho- preventive measures and activities are considered as a key area of concern.

KEYWORDS: *adolescent mental health, prevention, neuropsychological research, emotional deprivation, orphaned adolescents*

Currently, few statistical data exists on children and adolescents psychosocial and neuropsychological problems in Georgia. The gathering of such information would be valuable in developing children and adolescent Mental Health psycho-prevention measures. Therefore, this study attempts to identify children and adolescents with deviant behavior in different social groups.

The target group of our research consists of children and adolescents from public schools and from other juvenile institutions. This study examines some of the neuropsychological characteristics of the children and adolescents in two juvenile institutions: Martkopi Region Children Home (MRCH) and Katchreti Adolescent Rehabilitation Center (KARC).

MATERIAL AND METHODS

The neuropsychological characteristics that are considered with the context of this study were: Visual-spatial recall ability (VS), speed of cognitive function (C), memory (M) and attention (A). Total of 68 adolescents were examined.

In order to facilitate the development of effective children and adolescents Mental Health preventive measures, the study will eventually employ four types of tests. These includes:

Psychosocial questionnaire includes some social aspects about children and adolescents and their families, about children and adolescents interpersonal feelings, about their attitudes towards family members, friends, society. Also the questionnaire covers some educational problems, delinquent behavior and consumption of alcohol, drugs and tobacco.

Rey Tailor Complex Test and Recognition Trial (RCFT) - RCFT is only one of a number of psychological tests that provide information on important areas of neuropsychological functioning and presents clinical interpretation from mildly to severe impaired functions.

The results of factor analysis suggest that RCFT captures several domains of neuropsychological functions. These are: visuospatial recall memory, visuospatial recognition memory, response bias, processing speed, and visuospatial construction ability. It reveals attention deficit problems and impaired memory profile. The combination of psychosocial questionnaire and Rey Tailor Complex Test and Recognition Trial reveal a correlation between psychosocial deviations and neuropsychological functions.

Rubinshtein Self-Evaluation and Rockich Value Test - These tests measure the attitude of children and adolescents with respect to self-esteem, and towards family, community, and society as a whole.

RESULTS

The results allow us to determine those problems that concern children and adolescents who live in non-nuclear family settings. Most of them come from vulnerable segments of society. From childhood, they experience a lack of social and pedagogical attention. They reveal problems in behavior and some other psycho neurological problems, which are not detected during the early stages of life. The results of the psychosocial questionnaire, Rubinshtein Self-Evaluation and Rockich Value Test are still preliminary, but at this stage, some insights into common neuropsychological problems have been observed using the RCFT.

The RCFT revealed a marked delay in all age groups in the development of Visual-spatial recall ability (VS), speed of cognitive function (C), memory (M) and attention (A) characteristics. Visual-spatial recall ability (VS) was decreased in 70.5%, The speed of cognitive function (C) was decreased in 56%, disrupted memory pattern (DMP) was found in 70.5% of adolescents. Out of this 70.5%, 37.5% had marked deterioration, 45.5% had memory retrieval pattern (DRP), disrupted encoding (DEP) and storage process (DSP) was equally distributed in 17% of adolescents, 47% of adolescent revealed disrupted attention (DA) function.

Groups	Number of adolescents	12-14 year		15-16 year		17-18 year				
		male	female	male	female	male	female			
CHMR	32	15	12	3	9	5	4	8	5	3
KARC	36	14	7	7	12	4	8	10	4	6
Total	68	29	19	10	21	9	12	18	9	9

Tab.1 Distribution of children and adolescent studied by age and sex.

Number of 12-18 year adolescents	VS		C		M		DA	
	Norm	Impaired	Norm	Impaired	Norm	Impaired	Norm	Impaired
68	20	48	30	38	20	48	36	32
	29,5%	70,5%	44%	56%	29,5%	70,5%	53%	47%

Tab.2 Normal and impaired neuropsychological functions distribution in all age groups.

DISCUSSION

The results of the research shows that subjects of the study have markedly decreased indicators of neuropsychological characteristics in comparison with the same age group adolescent's standard parameters (RCFT). At this stage, one cannot draw conclusions about the real causes for such impairments, or about the impact of emotional deprivation and institutional houses; however one conclusion that can be drawn is that neuropsychological impairment constitutes one of the major problems in academic achievements, which decreases the cognitive ability and impairs the learning process (Lebedinski V.V. 1985). The experience of low self-intellectual ability is a traumatic factor for adolescent which leads to behavior disorders. (Rezenkova M.N. 1996), (M.Gegelashvili 2002).

CONCLUSIONS

1. The neuropsychological characteristics: of visual-spatial recall ability (VS), speed of cognitive function (C), Memory (M) and Attention (A) function among orphaned adolescents in comparison with the same age group of adolescent's with standard parameters show marked delay.

2. The low level of neuropsychological characteristics leads to the delay of cognitive ability, which facilitate development of behavior problems. Therefore improvement of neuropsychological problems of orphaned adolescents must be considered in children and adolescent Mental Health preventive and rehabilitation programs.

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Некоторые особенности нейропсихологических характеристик у воспитанников детского дома

Тea Джалиaшвили

Кафедра эпидемиологии и общественного здравоохранения Государственной медицинской академии, Грузия

Р Е З Ю М Е

Издавна внимание исследователей привлекают проблемы развития детей, воспитывающихся в детских домах. Изучены нейропсихологические характеристики у 68 воспитанников детских домов Каджрети и Марткопи в возрасте 12-18 лет. Визуально-пространственное восприятие, скорость когнитивных процессов, состояние памяти и функции внимания определяли по нейропсихологическому тесту - RCFT (Rey Tailor complex test and recognition Trial). Установлено резкое ухудшение всех нейропсихологических функций. Для успешного планирования превентивных мер в деле охраны детского психического здоровья считаем важным решение этой проблемы.

КЛЮЧЕВЫЕ СЛОВА: психическое здоровье подростков, превенция, нейропсихологические исследования, эмоциональная депривация, воспитанники детских домов