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## THE NEED OF AN INDIVIDUALIZED MUSIC THERAPY ASSESSMENT PROFILE IN THE EDUCATIONAL PROCESS FOR A PEDAGOGICAL AND PSYCHOLOGICAL ASSESSMENT OF THE PERSONALITY OF A GIFTED CHILD

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**Abstract.** The main purpose of this academic research is to clarify the need of implementing **IMTAP**- Individualized Music Therapy Assessment Profile, in the pedagogical and psychological assessment of the personality of a gifted child in the educational process, from the aspect of special educational needs, through analysis of the obtained results from the assessment of the social segment of the personalities of gifted children with **IMTAP**, and the results of the testing of the same children with **AMP**- Achievement Motivation Profile used as comparison.

The **IMTAP** was used for the first time in our country, based on the world-wide experiences of its use for obtaining relevant data about the global functioning of the child's personality. It was used with two groups of adolescents: adolescents gifted for fine arts and adolescents gifted for music. Within 20 music-therapy workshops, where the method of active music therapy of **Nordoff & Robbins** and the technique of musical improvisation were applied, we identified the strengths and weaknesses of a personality and successfully tracked the progress of the skill for establishing relationships, as a determined problem in the social-emotional area of one's personality. The results of the **IMTAP** were compared and statistically analyzed with the results for the social-emotional area of the personality, obtained during the verbal evaluation (self-evaluation) of the two groups of adolescents with **AMP**. The use of **IMTAP** showed the usability of musical activities as a multi sensor medium and recognizable non-verbal communication and showed that their usage as instruments for the pedagogical and psychological assessment of the social segment in a gifted child's personality, allows recognition and tracking of the strengths and weaknesses of the child's personality from the aspect of special educational needs.

**Key words:** gift, adolescents, social-emotional area of the personality, pedagogical and psychological assessment of the personality, special educational needs, Music Therapy non-verbal communication.

### Introduction

The main purpose of this academic research is to clarify the need for implementing **IMTAP** - *Individualized Music Therapy Assessment Profile*, in the pedagogical and psychological assessment of the personality of a gifted child in the educational process, from the aspect of special educational needs, through the analysis of the obtained results from the assessment of the social segment of the personality of gifted children with **IMTAP** and the results of the testing of the same children with **AMP**- *Achievement Motivation Profile* used for comparison.

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Gifted children need enriched and accelerated education, but they also have a need for social adaptability for their personal emotional intensity and social introversion. The identification and monitoring of gifted children in terms of support and development of their giftedness is highly important, but no less important is the recognition and monitoring of the development of their weaknesses and timely actions for overcoming them in the interest of optimal development of children's personality and talents. For that purpose, a timely detection and identification of adjustable instruments for personality assessment is needed, primarily qualitative assessments with a possibility of results quantification combined with verbal test procedures (Koren, I.1989; Winner, E. 2005).

In this context, the research is being conducted in order to identify the strengths and weaknesses of the personality of gifted children, based on the experiences of applying the **IMTAP** internationally. The **IMTAP** uses music activities through methods and techniques of music therapy to provide quantitative data for non-music areas of a personality – from cognitive through sensory and motor to socio-emotional areas and gaining information on the area of musicality (Baxter, HT and all, 2007:21).

In the Republic of North Macedonia, the **IMTAP** is being used for the first time in the pedagogical-psychological assessment of a personality on two categories of gifted children in adolescent age.

A comparative analysis of results obtained from **IMTAP** in the emotional-social area is being conducted, as a weakness of personality, with the results of the relevant area of the psychological test **AMP** on a sample of gifted adolescents in musical arts and gifted adolescents in fine art. In a group of gifted children with identified impediments in the socio-emotional area a monitoring progress is being included in that area using the **IMTAP** quantification list through several months of music-therapy workshops and using the **IMTAP** pre-test and post-test procedure.

The statistical processing of data enabled confirmation of the global experience of the application of **IMTAP** as a tool for pedagogical and psychological assessment of personality and was realized through:

- *Correlation* procedure to determine the level of association between variables of the two instruments of scientific research (**IMTAP** and **AMP**), with the Pearson's correlation coefficient ( $r$ );
- Procedure of *variance analysis* (ANOVA) and post hoc Tukey HSD Test testing the significance of data differences from the progress monitoring of the selected skill of establishing relationships from the emotional-social area of the **IMTAP**; as well as
- *Pre-test and post-test procedure* with Student t test for dependent samples to test the significance of data differences in the **IMTAP**.

I personally hope that the results of the research will enrich the science and theory of recognition, identification and treatment of gifted children in terms of their special educational needs and their overcoming.

Namely, it will serve as a basis for comparative research studies on the problem of the research, due to the limitations of one study paper to present all the answers to the questions raised by the research.

Being a first scientific study on this issue in the Republic of North Macedonia, it will contribute to the creation and establishment of a new pedagogical-psychological approach to the recognition, identification and monitoring of gifted children, applying musical activities in a new creative way through the methodology of music therapy.

### **Recognition and identification of gifted children and tools for pedagogical-psychological assessment of personality's strengths and weaknesses**

*Giftedness* represents singularity in the behavior of one person noticed in the achieved results unlike other individuals with similar characteristics. Perceptions of gifted children incorporate characteristics of a gifted person that are organized into several areas: cognitive,

sensory, social, emotional, and intuitive; encompassing the developed general intellectual ability and creativity, but also the existence of the intrinsic achievement motivation.

Typically, gifted children do not have common interests with their chronological peers and children from their environment perceive them as being odd. Gifted children significantly differ in three important aspects from their chronological peers: superior intrinsic motivation to achieve and enjoy challenges, passionate rebellion, independence and tendency to withdraw from others. These differences, despite the fact that they offer them more pleasing and unusual experiences, also represent a greater burden of pain, isolation and stress than in average population. Gifted children have few common social-emotional features that include *increased sensitivity, emotional intensity and reactivity, differences in feeling, perfectionism, and uneven development of the intellectual and emotional area* that could lead to some vulnerability in the social-emotional lives of gifted children, especially due to the existing discrepancy between their intellectual development and the socio-emotional development of a personality. The recognition and identification of gifted children is a process that relies on multidimensional conditionality and structural complexity of the emergence of giftedness and it involves identification of undiscovered resources as soon as possible in order to provide appropriate educational support.

It represents a unique diagnostic-prognostic procedure conducted through teamwork with all participants of the child's environment. It includes: *an assessment method* of characteristics and products (self-assessment and assessment by teachers, peers, school professional service and parents) and a *testing method* (tests of intelligence, special abilities, creative abilities, personality tests, knowledge and achievement). Sometimes it is problematic to implement due to the existence of certain categories of children that are difficult to recognize: children with developmental impediments, the so called "Failed gifted children", or children who do not manifest high school performance, children from socially unfavorable environments, and children with emotional impediments and disorders.

Therefore, it is recommended to use instruments that would use non-verbal communication more than verbal, as well as combining tests which are based on present motivation level with assessment instruments. Usually, recognition and monitoring of the developmental potential of a child's personality is being implemented by psychologists with their instruments, but at **international level assessment procedures with the use of innovative methodologies are being used, including the recently introduced methodology - Music Therapy.**

A tool for non-verbal assessment of global functioning of children's personalities using music activities, designed for use in pediatric or adolescent environment as a multi-assessment process that provides information from a wide range of capabilities for the functioning of a person with different problems equally successful as individuals with normal and intellectual development impediments in persons with intellectual disabilities, is the *Individualized Music Therapy Assessment Profile - IMTAP.*

**The need for a research** and the genesis of this study paper has arisen from the analysis of the relevant literature in the world and in our country regarding this issue, facing the state of neglecting the category of gifted children and their unawareness, and the lack of monitoring in our educational system, lack of the usage of instruments for pedagogical-psychological assessment of a gifted child's personality, his/her strengths and weaknesses, as well as my several years of work in the field of music therapy and gifted children.

### **Research on the need for individualized music therapy assessment profile in the educational process for pedagogical - psychological assessment of the personality of a gifted child**

The subject of this research is the determination of usability of musical activities as a multisensory medium and recognizable nonverbal communication in pedagogical-psychological assessment of the strengths and weaknesses of the child's personality and

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especially the emotional-social personality segment of the gifted child in terms of special educational needs in different categories of gifted children.

The research attempted to give an answer to few questions:

- Can musical activities through methods and techniques of music therapy be used as a tool for pedagogical-psychological assessment of personality also in children who are not gifted for music and do not practice musical activities?
- Are **IMTAP** results valid for pedagogical-psychological assessment of a child's personality?
- Does **IMTAP** allow recognition of the strengths and weaknesses of a person?
- Does **IMTAP** allow monitoring of strengths and weaknesses of a person?

## **Research Methodology**

### **Method and materials**

During the elaboration of the topic, the research is being based on the analysis of literature referring to giftedness and instruments for pedagogical and psychological personality assessment, literature referring to the preparation of the protocol on music therapy treatment and the protocol for treatment assessment and the literature on the application of **IMTAP** and **AMP** and the comparative analysis of the results obtained from the two instruments.

The research was conducted using two measurement instruments: **IMTAP** and **AMP**, to confirm the possibility of **IMTAP** and conducted musical activities for identification and monitoring of strengths and weaknesses of the child's personality through a comparative analysis of the data from the results obtained from the use of these instruments to assess personality profile and pre-test and post-test procedure.

The research was conducted in two phases with a period of preparation for both phases, starting from January 2011 to May 2012. Activities have been conducted in the following order:

1. Preparation for the **first phase** of the study (sampling of gifted children, definition of the method Nordoff & Robbins of music therapy with a technique of musical improvisation of **IMTAP** implementation, choice of music for **IMTAP** implementation according to the recommendations for preferred adolescent music by Katrina McFerran, preparation of instruments for research);
2. Sample Testing with **AMP**;
3. Implementation of **IMTAP** personality assessment;
4. Preparation for the **second phase** of study (sampling of gifted children with social-emotional problems, definition of the method Nordoff & Robbins of music therapy with the technique of musical improvisation for music therapy workshops, protocol defining and music selection);
5. Realization of twenty (20) music therapy workshops with samples;
6. Conducting of post-test **IMTAP** personality assessment;
7. Creation of three databases;
8. Statistical data analysis.

**Research Sample.** The following is being formed:

- sample of the critical case of seventy (70) gifted adolescents out of which 35 gifted for fine art (according to their subject teachers assessment, students from several elementary schools in Skopje, and participants in the art colony of Children's Cultural Center "Karposh") and 35 gifted for music - playing musical instruments and vocal soloists (according to testing done by IMMA Gordon test, participants in the Children's Cultural Center "Karposh" and in the Center for Children's Artistic Expression, Music Therapy and Psycho-physical relaxation "Dzundzule" in Skopje, and students from elementary schools in Skopje);

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- sample of ten (10) gifted children with equal representation of gifted children for fine art and music, equal gender representation and present weaknesses in the emotional-social personality segment detected by **AMP** test junior form and **IMTAP**.

#### **Creation of database**

Three (3) databases have been created:

- *First base* – created from the comparative results for the social-emotional area of **IMTAP** and results of the areas of internal skills and interpersonal benefits of **AML** Junior test on a critical case sample,
- *Second base* – created from the quantification list results for monitoring the progress of **IMTAP** on the skill of establishing relationships among the ten respondents with the presence of weaknesses in the emotional-social personality segment,
- *Third base* - created from the pre-test and post-test scores for the social-emotional area of **IMTAP** from the assessment of the second sample of ten respondents.

Each response to a conducted skill in the musical activity of the **IMTAP** is scored numerical 0-6 and summarized for each subdomain and domain calculated in percentage. Scoring the **AMP** Junior test is made according to a given key in the manual test and total scores of the columns for each subdomain are recorded as a raw score to which certain percentage corresponds. Scoring in the quantification list on progress monitoring of the **IMTAP** is made first by writing five (5) levels of response and the result is calculated in percentage for each music therapy workshop.

#### **Statistical data analysis**

*The first database* was processed through the statistical correlation procedure to determine the level of association between variables of the two instruments of scientific research with the Pearson's correlation coefficient ( $r$ ).

*The second database* was statistically processed with the procedure of *variance analysis* (ANOVA) and post hoc Tukey HSD Test by testing the significance of differences of the obtained results in the progress of the selected skill of establishing relationships in the emotional-social area of the **IMTAP** and the lack of skill for verbal distraction, motor distraction or the lack of interaction during the music therapy workshop.

*The third database* was statistically processed by Student t test for dependent samples to test the significance of differences between the average values of the **IMTAP** results (at ten respondents with the presence of weaknesses in the emotional-social personality segment) before the start and after the end of the music therapy workshops for both children gifted in music and fine arts in terms of the emotional and social areas of the **IMTAP**.

## **RESULTS AND DISCUSSION**

### **The comparative results from IMTAP and AMP**

In order to verify the main hypothesis of the research, that the usage of musical activities as an instrument for the pedagogical and psychological assessment of the social segment of the personality of a gifted child through **IMTAP allows recognition** of the strengths and weaknesses of the child's personality from the aspect of its special educational needs, the **Null hypothesis a)** was set: the usage of musical activities as an instrument for the pedagogical and psychological assessment of the social segment of the personality of a gifted child through **IMTAP does not allow recognition** of the strengths and weaknesses of the personality.

In order to reject the **Null hypothesis a)** the results obtained from the assessment with **IMTAP** (social-emotional area) from sample  $N_1$  - children gifted for music and from sample  $N_2$  - children gifted for fine arts were analyzed and compared with the results obtained from both samples with **AMP** (in the area of inner resources and interpersonal strengths) through a

procedure of correlation to determine the level of correlation between the variables of the two instruments with the Pearson's correlation coefficient ( $r$ ).

From the Pearson's correlation coefficient ( $r$ ) between the results of the two instruments used in the scientific research (**IMTAP** and **AMP**), we can see the presence of high values of the Pearson's correlation coefficient ( $r > 0,60$ ) between the results of the compared areas with **IMTAP** and **AMP**. According to this, the **Null hypothesis a)** is rejected and it is proved that the usage of musical activities as an instrument through the **IMTAP allows recognition** of the strengths and weaknesses of a child's personality.

**Table n.1.**

Areas of IMTAP with two samples of gifted children ( $N_1$ and $N_2$ )	AREAS OF AMP							
	Inner resources				Interpersonal strengths			
	RLX	HAP	PAT	SCN	AST	DIPL	EXT	COOP
Emotional area of IMTAP for $N_1$	$r=0,71$	$r=0,79$	$r=0,68$	$r=0,75$	$r=0,38$	$r=0,66$	$r=0,51$	$r=0,12$
Social area of IMTAP for $N_1$	$r=0,67$	$r=0,65$	$r=0,79$	$r=0,64$	$r=0,14$	$r=0,61$	$r=0,27$	$r=0,39$
Emotional area of IMTAP for $N_2$	$r=0,80$	$r=0,83$	$r=0,79$	$r=0,76$	$r=0,61$	$r=0,85$	$r=0,78$	$r=0,32$
Social area of IMTAP for $N_2$	$r=0,73$	$r=0,83$	$r=0,70$	$r=0,71$	$r=0,45$	$r=0,74$	$r=0,64$	$r=0,60$

$N_1$  = gifted children for music       $N_2$  = gifted children for fine arts

**RLX** = Relaxed Style  
**HAP** = Happiness  
**PAT** = Patience  
**SCN** = Self-confidence

**AST** = Assertiveness  
**DIPL** = Personal Diplomacy  
**EXT** = Extroversion  
**COOP** = Cooperativeness

### **Analysis and discussion of the results from the quantification list from IMTAP for monitoring the skill in establishing relationships from the social area of IMTAP during music therapy workshops**

*In order to verify the main hypothesis* of the research, that the usage of musical activities as an instrument for the pedagogical and psychological assessment of the social segment of the personality of a gifted child through **IMTAP** allows monitoring of the strengths and weaknesses of a child's personality from the aspect of its special educational needs, the **Null Hypothesis b)** was set: The usage of musical activities as an instrument for the pedagogical and psychological assessment of the social segment of the personality of a gifted child through **IMTAP does not allow monitoring** of the strengths and weaknesses of the personality.

In order to reject the **Null hypothesis b)** the results obtained from the assessment performed with the quantification list of **IMTAP** for the chosen skill in establishing relationships from the social-emotional area were analyzed during twenty (20) music therapy workshops by

the sample of ten (10) gifted children ( 5 children gifted for music and 5 children gifted for fine arts) with the already present weaknesses in the social-emotional area of the personality, detected with **AMP** junior test form and with **IMTAP**; and also the results obtained from the assessment with **IMTAP** (social-emotional area) by the same sample before and after launching the music therapy workshops.

The analysis of the results from the quantification list of **IMTAP** for all the workshops was conducted with the statistical procedure called *analysis of variance* (ANOVA) and post hoc Tukey HSD Test through testing of the meaning of differences from the accomplished results about the progress of the selected skill in establishing relationship from the social-emotional area and no developing of the skill because of verbal distraction, motor distraction, or not having interaction during the music therapy workshop. The analysis of the results obtained from the assessment with **IMTAP** (social- emotional area) by the same sample before and after launching the music therapy workshops (before and after test procedure) was conducted with the statistical procedure of the Student t test for dependent samples.

From the tabular and the graphic show of the results analyzed with ANOVA and the tabular and graphic show of the results analyzed with the Student t test, the progress of the skill in establishing relationships from the sample between the first and the last music therapy workshop and the differences in the results from the assessment with **IMTAP** in the social-emotional area can be monitored.

The existence of statistically significant differences in the mean values of the shown skill in establishing relationships and statistically significant differences in the mean values of the state with no interaction during the music therapy workshops between the first and last music therapy workshop, and a statistically significant difference between the mean values of the results from the assessment with **IMTAP** before and after the launch of the music therapy workshops with children gifted in music and with children gifted in fine arts in terms of the emotional and social area of **IMTAP**, the **Null hypothesis b)** is rejected and it proves that the usage of musical activities as an instrument for pedagogical and psychological assessment of the social segment of the personality of a gifted child through **IMTAP** allows monitoring of the strengths and weaknesses of the personality. Here follows the distribution of the tabular and graphic show of the results analyzed with ANOVA (of the shown skill in establishing relationships and the state of no interaction during music therapy workshops) and a tabular and graphic show of the results analyzed with the Student t test.

**Table no. 2.** Mean values of the shown skill in establishing relationships given in % from the quantification list of **IMTAP** during the twenty music therapy workshops

Number of the music therapy workshop	mean	N	SD	min	max
1	23,2	10	9,20	12	40
2	22,0	10	6,32	20	40
3	28,0	10	10,32	20	40
4	44,0	10	8,43	40	60
5	40,0	10	16,33	20	60
6	46,0	10	13,52	20	60
7	48,0	10	19,32	0	60
8	52,8	10	23,16	20	80
9	40,0	10	21,08	0	60
10	58,0	10	20,14	20	80
11	61,2	10	21,42	20	80
12	58,0	10	14,76	20	80

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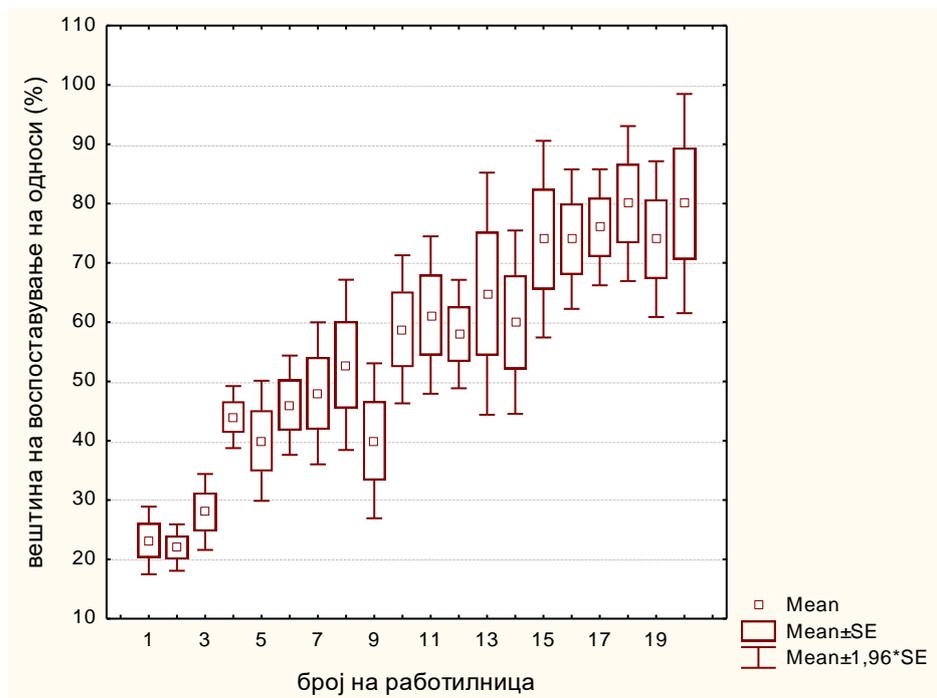
13	64,8	10	32,92	0	100
14	60,0	10	24,94	20	100
15	74,0	10	26,75	40	100
16	74,0	10	18,97	40	100
17	76,0	10	15,77	60	100
18	80,0	10	21,08	40	100
19	74,0	10	21,19	40	100
20	80,0	10	29,81	20	100

The analysis of the variance showed that there are statistically significant differences between the mean values in the shown skill in establishing relationships given in % from the quantified list of **IMTAP** during the twenty music workshops (ANOVA:  $F = 8,540$   $p = 0,000001$ ) – (Table no. 2 and Chart no. 1)

Tukey HSD Test shows the differences in the mean values of the shown skill in establishing relationships between all of the held music therapy workshops separately.

According to the Tukey HSD Test, between the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> workshop there are no significant differences in the mean values of the shown skill in establishing relationship in % ( $p =$  from 0,3747 to 1). The results of the 1<sup>st</sup>, 2<sup>nd</sup> and the 3<sup>rd</sup> workshop are significantly lower compared with the results from the 10<sup>th</sup> to the 20<sup>th</sup> workshop. ( $p =$  from 0,0205 to 0,0013). There are no significant differences between the mean percentage results obtained from the 10<sup>th</sup> to the 20<sup>th</sup> workshop. ( $p =$  from 0,6155 to 1).

**Chart no. 1.** Mean values of the shown skill in establishing relationships given in % from the quantification list of **IMTAP** during the twenty music therapy workshops



From the chart and the table we see the increase of the percentage of the shown skill in establishing relationships from the first music therapy workshop to the twentieth music therapy workshop.

**Table no. 3.** Mean values of the state of no interaction during the music therapy workshops given in % from the quantification list of **IMTAP** during the twenty music therapy workshops

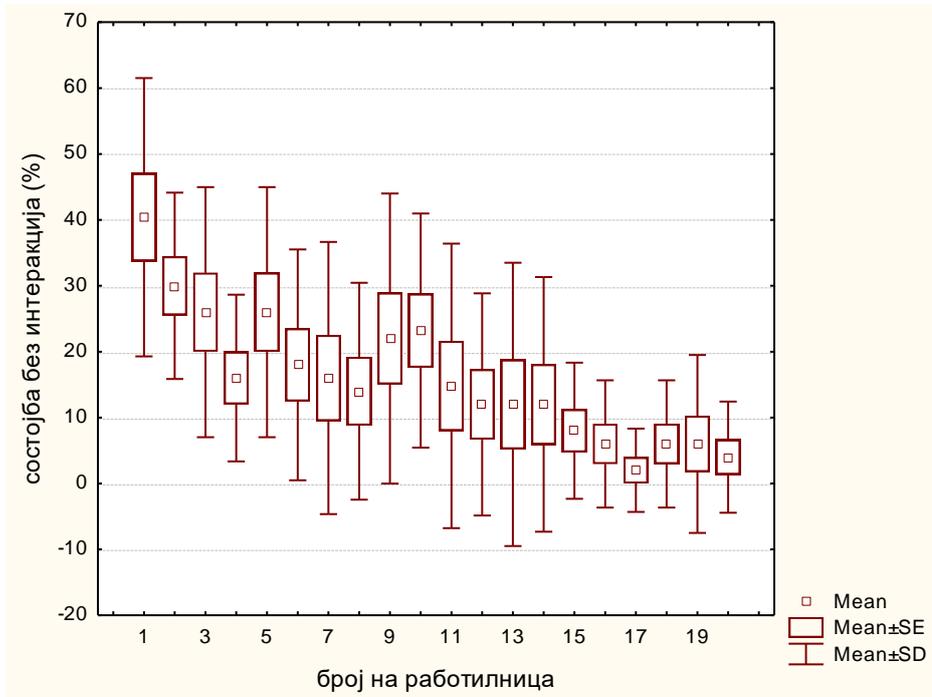
Number of the music therapy workshop	mean	N	SD	min	max
1	40,4	10	21,12	0	80
2	30,0	10	14,14	20	60
3	26,0	10	18,97	0	60
4	16,0	10	12,65	0	40
5	26,0	10	18,97	0	60
6	18,0	10	17,51	0	40
7	16,0	10	20,65	0	60
8	14,0	10	16,46	0	40
9	22,0	10	22,01	0	60
10	23,2	10	17,77	0	40
11	14,8	10	21,58	0	60
12	12,0	10	16,86	0	40
13	12,0	10	21,49	0	60
14	12,0	10	19,32	0	40
15	8,0	10	10,33	0	20
16	6,0	10	9,66	0	20
17	2,0	10	6,32	0	20
18	6,0	10	9,66	0	20
19	6,0	10	13,49	0	40
20	4,0	10	8,43	0	20

The analysis of the variance showed that there are statistically significant differences between the mean values in the state of no interaction during the music therapy workshops given in % from the quantified list of the **IMTAP** during the twenty music workshops (ANOVA:  $F = 3,517$   $p = 0,00005$ ) – (Table no. 3 and Chart no. 2)

Tukey HSD Test shows the differences in the mean values of the state of no interaction during the music therapy workshops between all of the held music therapy workshops separately.

Between the 1<sup>st</sup> and the 8<sup>th</sup> music therapy workshop there are significant differences for  $p = 0,0476$ . According to the Tukey HSD Test, between the 1<sup>st</sup> workshop and the workshops number 12 to number 20, the values of the differences compared to the mean values of the state of no interaction during the music therapy workshops, given in %, are in the limits from  $p = 0,0185$  to  $p = 0,00007$  (including workshop number 17).

**Chart no. 2.** Mean values of the state of no interaction during the music therapy workshops given in % from the quantification list of **IMTAP** during the twenty music therapy workshops



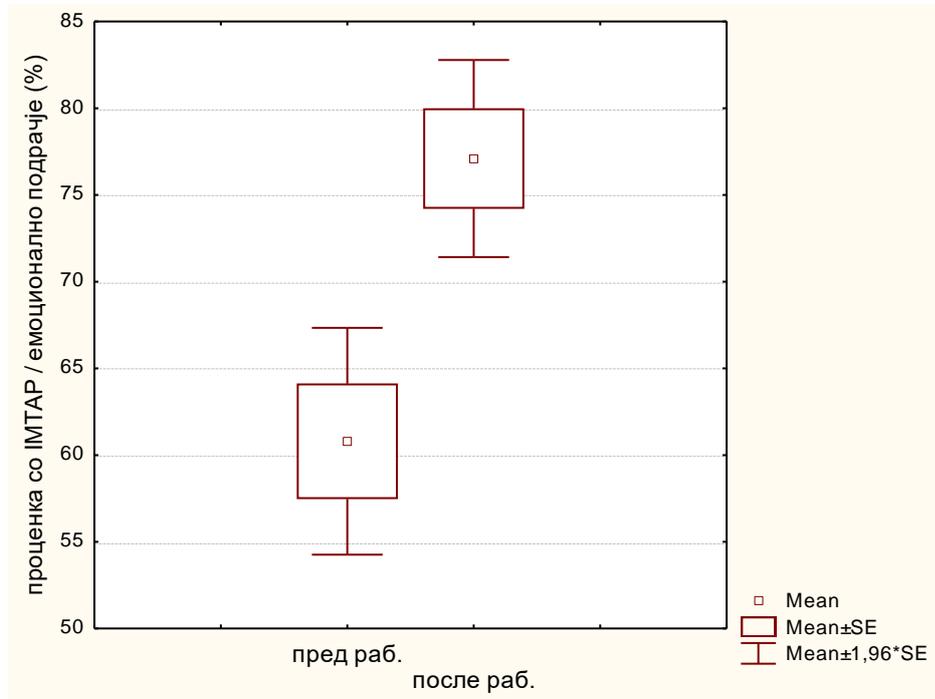
From the chart and the table we can see the decrease of the percentage of the state of no interaction during the music therapy workshops from the first music therapy workshop to the twentieth music therapy workshop.

The analysis with the Student t test for addicted samples showed that there is a statistically significant difference between the mean values of the results from the **IMTAP** assessment (given in %) before and after the start of the music therapy workshops with children gifted in music and children gifted in fine arts in the emotional area. (Students t test:  $t = -7,057$   $p = 0,00059$ )

**Table no. 4.** Mean values of the results from the **IMTAP** assessment (given in %) before starting and after finishing the music therapy workshops with children gifted for music and children gifted for fine arts in the emotional area.

emotional area	mean	SD	min.	max.
before m. th. workshops	60,80	10,55	43	71
after m. th. workshops	77,10	9,17	55	89

**Chart no. 3.** Mean values of the results from the **IMTAP** assessment (given in %) before starting and after finishing the music therapy workshops with children gifted for music and children gifted for fine arts in the emotional area.



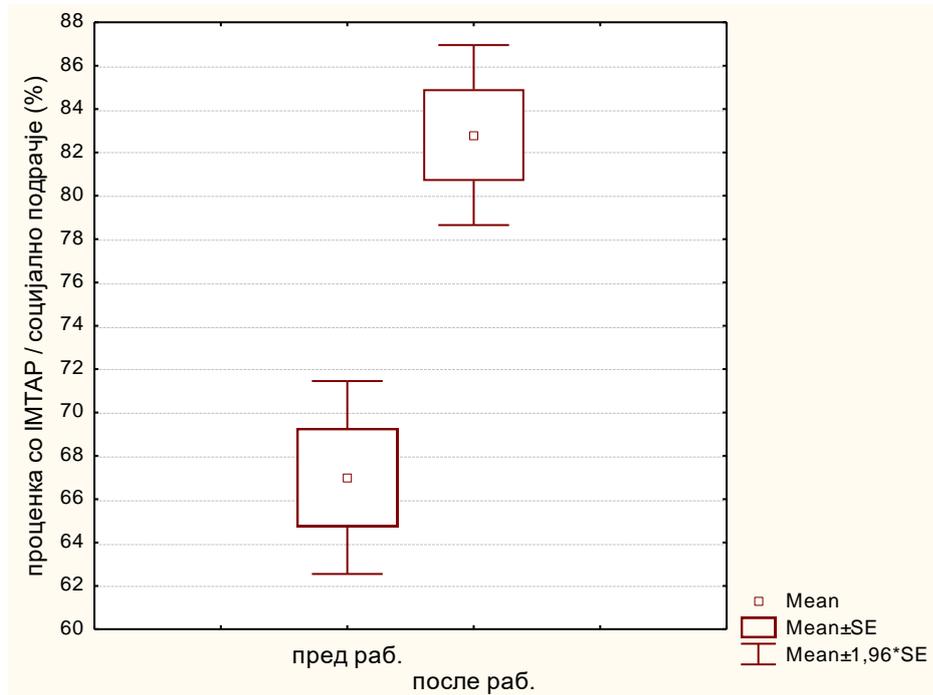
The analysis with the Student t test for addicted samples showed that there is a statistically significant difference between the mean values of the results from the **IMTAP** assessment (given in %) before starting and after finishing the workshops with children gifted for music and children gifted for fine arts in the social area.

(Students' t test:  $t = - 11,578$   $p = 0,000001$ ). Here the difference is bigger than the one in the emotional area.

**Table no. 5.** Mean values of the results from the **IMTAP** assessment (given in %) before starting and after finishing the music therapy workshops with children gifted in music and children gifted in fine arts in the social area.

social area	mean	SD	min.	max.
before m. th. workshops	67,00	7,18	53	79
after m. th. workshops	82,8	6,69	69	92

**Chart no. 4.** Mean values of the results from the **IMTAP** assessment (given in %) before starting and after finishing the music therapy workshops with children gifted in music and children gifted in fine arts in the social area.



## References

### Books

- Baxter, H. T. /Berghofer, J./McEwan, L./Nelson, J./Peters, K./Roberts, P.** (2007), *The Individualized music Therapy Assessment Profile*, Jessica Kingsley Publishers, London.
- Bruscia, K.** (1998), *Defining Music Therapy*, 2<sup>nd</sup> edition. Gilsum NH: Barcelona Publishers.
- Copley, J.** (2008), *The Psychology of Music: Effects on Behavior, Learning, Intelligence, Epilepsy & Mozart Effects*, Psychology of Classical Music.
- Emmons-Godwin, P. & Anderson-McKendry, L.** (2005), *Understanding Sensory Dysfunction*, Jessica Kingsley Publishers, London.
- Gordon, E.** (2003), *Improvisation in the Music Classroom*, G.I.A. Publications, Inc. Chicago.
- Gordon, E. Edwin,** (1998), *Introduction to Research and the Psychology of Music*, GIA Publications, Inc. Chicago.
- Gordon, E.** (1986), *Primary Measures of Music Audiation and the Intermediate Measures of Music Audiation*, G.I.A. Publication, Inc. Chicago.
- Gordon, E.** (1989), *Advanced Measures of Music Audiation*, G.I.A. Publication, Inc. Chicago.
- Koren, I.** (1989), *How to recognize and identify gifted students*, School newspaper, Zagreb.
- Mandel, H. P. / Fricdland, J. G. / Marcus, S. I.** (1996), *Achievement Motivation profile (AMP)*, WPS, Los Angeles, California.
- McFerran, K.** (2010), *Adolescents, Music and Music Therapy*, Jessica Kingsley

Tanevski, T. (2021). The need of an individualized music therapy assessment profile in the educational process for a pedagogical and psychological assessment of the personality of a gifted child. *Vospitanie- Journal of Educational Sciences Theory and Practice*, Vol. 16, No. 2, 2021

Publishers, London.

**Nordoff, P. / Robbins, C.** (1977), *Creative Music Therapy: Individualised treatment for the handicapped child*. New York, NY: The John Day Company.

**Obradović-Čudina, M.** (1990), *Giftedness: understanding, identifying, developing*, School Book, Zagreb.

**Radoš-Marković, K.** (1996), *Psychology of musical ability*, Institute for textbooks and teaching aids, Beograd.

**Seashore, C. E.** (1967), *Psychology of Music*, Dover Publications, INC, New York.

**Tanevski, T.** (2011), *Methodology in Music Therapy*, Children's Center Dzundzule, Skopje.

**Twyford, K. / Watson, T.** (2008), *Integrated team working, Music Therapy as part of transdisciplinary*

**Wigram, T.** (2004), *Improvisation: Methods and Techniques for Music Therapy Clinicians, Educators, and Students*. Jessica Kingsley Publishers, London.

**Winner, E.** (2005), *Gifted children, Myths and Realities*, Ostvarenje, Lekenik.

### Scientific journals

**Aldridge, D.** (1996), *Music Therapy and its Implications for Child -Development*, *Curare*, 9:357-362.

**Catterall, J.S.** (2002), *The arts and the transfer of learning*. In R.Deasy (Ed.), *Critical links: Learning in the arts and student academic and social development*. Washington, DC: Arts Education Partnership.

**Deasy, R.** (Ed). (2002). *Critical links: Learning in the arts and student academic and social development*. Washington, DC: Arts Education Partnership.

**Lovecky, V. D.** (1992), *Exploring social and emotional aspects of giftedness in children*. *Roeper Review* 15(1) pp.18-25.

**Sak, U.** (2004), *A Synthesis of Research on Psychological Types of Gifted Adolescents*, *Journal of Secondary Gifted Education* 15(2) pp70-79.

**Silverman, L. K.** (1993), *Social development, leadership and gender*. In L.K. Silverman (Ed.), *Counseling the gifted and talented (pp.291-327)*. Denver: Love.

**Silverman, L. K.** (1995), *To be gifted or feminine: The forced choice of adolescence*. *Journal of Secondary Gifted Education*, 6, 141-156.