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Tone quality preferences and musical aptitudes in learning how to play a wind instrument. Polish educational study on the implementation of E.E. Gordon's Learning Theory. Research report

The subject of the thesis provoked (re)consideration of the problem of multiple tasks which teachers of music education should be faced with. In my opinion, it opens a certain stream of thoughts concentrated around crucial problems of contemporary Polish formal and informal education. Thanks to the present state of the art it became possible to analyse a new problem which is the nature of preferences of timbre of instrumental sound and music abilities as co-existing predictors of students' achievements in the field of learning to play wind instruments. **The topic is based on the Theory of Learning Music by Edwin Elias Gordon**, whose Polish adaptation the author of the thesis decided to follow in the sphere of (music) formal and informal instrumental music education. The fruit of such actions not only could be an attempt to fill in a gap in pedagogy and psychology of music(al) domain. The sheer disclosure of such gaps should prove to be relevant for future researchers and their studies.

The topic of the research is as follows: "Instrumental timbres preferences and level of musical capabilities VS. students' achievements in the process of learning to play wind instruments according to Edwin Elias Gordon's Theory of Learning Music" (Trzos 2009). In the work the author undertook important problems of child's music education. This education is put into practice in public and music schools in Poland. Moreover, a lot of children learn in informal centres such as instrumental clubs, leisure groups and/or taking private lessons. The research studies which have been carried out in this sphere haven't solved, so far, the important problems for my subject. My research interests concentrate around learning wind instruments.

The content of the thesis aims at answering the following question: What is the connection between preferences of musical instruments' tones and musical capabilities and achievements in learning wind instruments? The whole monographie (Trzos 2009) consists of six chapters. The first two chapters try to show the present state of the art of the main theme of the thesis, the third chapter describes research methodology and the remaining three chapters (empirical part) analyze the results of my study. Thus, first two chapters present the results of the analysis of the literature concerning the subject matter. The content of the chapters focus on essential issues in/of contemporary pedagogy. Third chapter characterizes all methods and techniques of the research methodology.

#### Methods

As his methodology tool the author of the thesis chose two tests: E.E. Gordon's Music(al) Aptitudes Profile (MAP) and Instrumental Timbre Preference(s) Test (ITPT). The research study was conducted in Polish music school, clubs and music groups as well as during private lessons. Gordon pinpoints the fact that MAP Test (or any other responsible for the developing or stable musical aptitudes nature) should be carried out together with *Instrumental Timbre Preference Test* (Gordon 1984, pages 18-25). Predispositions diagnosis aims at selecting gifted students and encouraging them to learn music using a proper instrument. It may not only enhance their contact with an instrument, but also affect their success in learning music. Specially designed Gordonian *Instrumental Timbre Preference Test* (ITPT E.E. Gordon's) appears to be a very useful tool in the above mentioned context (Trzos 2011).

The subjects of the research were children who learned to play wind instruments in the institutions (or forms) mentioned above; 166 students (and their teachers) were tested of the Wielkopolska, Kujawsko-Pomorskie and Łódź regions in Poland (2003-2006). This research was carried out on Polish students at the age of 10-17 who have just started learning music using a wind instrument (aerophones). As far as the method is concerned, the *quasi-pedagogical experiment* with additional diagnostic questionnaire were applied. The research was conducted on the group of students who have just started their first year of playing a wind instrument in Polish public musical schools (groups Child. A; Child. P<sub>1</sub>) and in amateur and private school contexts (group Child. P<sub>2</sub>). Students who had their instrument determined with the use of Gordonian *Instrumental Timbre Preference Test (ITPT)* and its results formulated Child. A group. It should be remembered that every subject was tested via ITPT, but the test

results in case of the remaining Child. P<sub>1</sub>. Child P<sub>2</sub> groups did not influence the choice of an instrument. Additionally, musical aptitudes were analysed with the use of Gordonian *Musical Aptitude Profile* (MAP E.E. Gordon's).

As it turned out musical abilities do not always influence the level of achievements, therefore child's musical aptitude should be considered to have its roots in other aspects as well. Neither can we say that some students are simply not skilled, gifted or talented only due to the fact that they received worse grades. As research shows it is worth asking students about their preferences, because is most cases they are able to do so before the actual teaching process begins.

### Results

In this work the author (Trzos 2009) describes the results of students' self-evaluation concerning their musical preferences, musical activity and motivation to learn in the light of annual observation by their teachers. As the results of research surveys indicate high motivation to learn was revealed in the students who were taught to play the instrument compatible with their preferences, namely the sound of the preferred instrument. Not always was self-evaluation compatible with the results of E.E. Gordon's test (46%) which may indicate a vast diversity of criterions that students may be guided by evaluating the attractiveness of wind instruments learning to play. The sound is a very important factor which, according to E.E. Gordon, considerably increases the attractiveness of a musical instrument, as well as motivation to play.

The current knowledge of the educational musical range reveals the problem of the opinion about the nature of frequently and freely defined 'penchants' of students about the sound of musical instruments and what is important, the connections of these penchants with students' self-assessment/ self-evaluation in this area and their motivation to learn music. The research results were described concerning the important connections based on ITPT by E.E Gordon between students' preferences and the results of their self-evaluation. The author reveals the most important issues of the problem of organizing the teaching of playing musical instruments in the Polish process of music education.

The research findings concern, in particular, the ways of measurement and assessment of achievements in the study of instrumental playing and the characteristics of selected aspects of the teaching process in formal and informal music education

in Poland. The attention was paid on finding objective conclusions about connections which were observed between the place musical education took place and the achievements connected with playing wind instruments. Formal and informal research findings analysis was focused on such aspects as: measurement and assessment of achievements in the process of learning to play the chosen wind instrument, individual education, selection of materials, program syllabi, and pedagogical preparation of the (music) teachers. As indicated by studies these issues research are extremely important and should be treated as major determinants in students' organization of music education. The research results also indicate that this matter needs further investigation. Not only is it worth to instil this pedagogical thought in music school but also in public schools, and in all places where both formal and informal music education takes place. The subject matter of this dissertation focuses around many other contexts – the multitude of changes, the evaluation and the heterogeneousness of discourse.

Hence, the reflections and references concern educational context of music education in my thesis and it may still bring up-to-date postulates of this matter and at the same time the judgements may be dangerously evident and colloquial as well. Taking into account the educational perspective of the main reasons of the *Theory of Learning Music by. E.E. Gordon* the author of the thesis tries to seek possibilities of a versatile intake of the knowledge, competence and expertise of Polish music education.

### Results (A, B, C, D): tables and figures (Trzos 2009, 2011):

### A. THE LEVEL OF MUSICAL APTITUDES AND INSTRUMENTAL TIMBRE PREFERENCES

**Table 1.** Distribution of paramount instrumental timbre preference concerning the sex.

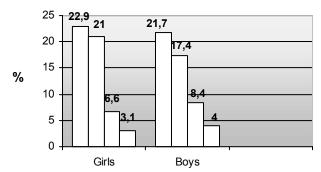
	High prefere	ence of spe	ecific instrument	tal timbre.	General pr		Σ
	One wind in	strument/	Two or mor instrume		preferer	nce	
Sex	N	%	N	%	N	%	
Girls	41 24,7		35 21,0		11	6,6	87
boys	36	21,7	29	17,4	14	8,4	79
Σ	77 46,4		64	38,5	25	15,0	166

**Table 2.** Students with very high instrumental timbre preference of an instrument determined for learning.

	Students with	Students with very high instrumental timbre preference of an instrument determined for									
C			le	arning.							
Groups	High preference	of spec	ific instrumental tii	mbre.				N=166			
	One wind		Two or more			C 1 C1 .					
	instrument	%	wind instruments	%	%	General profile preference					
			mstruments		70	proterence	%				
							%0				
	25	15,0	31	18,7							
Group A					33,7	0	0	56			
		N=	56			U					
	30	18,1	15	9,0							
Group P1					27.1		7,8				
Group i i		N=	45		27,1	13		58			
	22	13,2	18	10,8							
Group P2		1		1	24,1	40	7,2	52			
		N=	40			12					
Σ		N=1	141		85,9	N= 25	15,0	N=166			
2						IN- 25					

Table 3. Students with lowest instrumental timbre preference of an instrument determined for learning.

			The lowest pre	ference	timbre			
Groups	The lo	west pr	reference timbre			General profile		N=166
	One wind instrument	7 Two or more wind instruments		%		preference		
					%		%	
	24	14,4	29	17,4			1 0	56
Group A					31,9	3	1,8	50
Group 71		N	=53					
	32	19,2	18	10,8				
Group P1			50		30,1		4,8	
311 mp		N	=50			8		_
	22	12.0	25	1.5				58
	23	13,8	25	15	28,9	4	2,4	52
Group P2		N	=48			•		
Σ		N=	=143		86,1	N= 23	13,8	N=166



- ☐ Students with very high instrumental timbre preference of an instrument determined for learning.
- ☐ Students w ho at the same time demonstrate other timbre preference for other w ind instruments than for the instrument determined for learning.
- ☐ General preference, without indicating the highest and the low est.
- ☐ The timbre of an instrument determined for learning is definitely not preferred.

**Figure 1.** The results of E.E. Gordon's ITPT test concerning the sex of the students under study. **Source:** the Author's own educational research

**Table 4**. Mean and scatter of tone musical aptitudes (*Sound Imagination*) results of E.E. Gordon's MAP test.

	Group A					Grou	up P <sub>1</sub>		Group P <sub>2</sub>			
	$\overline{x}$	S <sub>x</sub>	$S_x^2$	V <sub>x</sub>	$\overline{x}$	S <sub>x</sub>	$S_x^2$	V <sub>x</sub>	$\overline{x}$	S <sub>x</sub>	$S_x^2$	V <sub>x</sub>
Melody	30,05	4,99	24,94	17	29,19	3,79	14,40	13	29,21	4,90	24,61	17
Harmony	25,75	4,13	17,04	16	27,23	4,60	21,12	17	25,62	5,63	31,66	22
Tonal Imaginery	55,8	7,89	62,23	14	56,48	6,42	41,24	11	54,25	9,27	86	17

**Table 5.** Mean and scatter of rhythmic musical aptitudeds (*Rhythm Imagination*) results of E.E. Gordon's MAP test.

		Group A				Grou	up P <sub>1</sub>		Group P <sub>2</sub>			
	$\overline{x}$	S <sub>x</sub>	$S_x^2$	V <sub>x</sub>	$\overline{x}$	S <sub>x</sub>	$S_x^2$	V <sub>x</sub>	$\overline{x}$	$S_x$	$S_x^2$	V <sub>x</sub>
Tempo	34,75	3,72	13,87	11	33,30	3,79	14,38	11	32,42	4,30	18,51	13
Metrum	31,73	4,81	23,17	15	30,46	4,02	16,14	13	29	5,18	26,81	18
Rhythm imagination	66,48	7,93	62,93	12	63,75	6,90	47,62	11	61,42	8,23	67,78	13

**Table 6.** The analysis of correlation of musical aptitudes of the subjects in different groups.

Musical aptitudes of E.E. Gordon's	G	Froup A	G	roup P1	G	roup P2
MAP test	Correlation	Significance	Correlation	Significance	Correlation	Significance
Melody	0,47	Yes	0,36	Yes	0,37	Yes
Harmony	, ,		- 9		.,	
Tempo	0,72	Yes	0,56	Yes	0,5	Yes
Metrum	0,72	105	0,50	105	0,5	1 05
Sound Imagination	0,65	Yes	0,49	Yes	0,5	Yes
Rhythm Imagination	0,00	103	0,17	103	0,0	109

# B. POLISH STUDENTS ACHIEVEMENTS IN LEARNING HOW TO PLAY A WIND INSTRUMENT – THE ANALYSIS OF MUSICAL TASKS COMPLETION (Trzos 2009, 2011)

Those tasks, also called a miniature.

Miniature 1 – prepared with the help of their teachers.

Miniature 2 – prepared individually without the help of the teacher

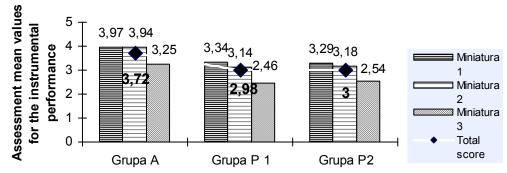
Miniature 3 – for *a'vista* pereformance

Five independent competent judges carried the analysis and assessment of a test -k.

Estimate two types of rating scales (continuous and additive) were applied for criteria based on the proposal of E.E. Gordon (Gordon 2002).

**Table 7.** Mean and scatter of results of an assessment of different aspects of miniature performance.

aspect		Gro	up A			Grou	ıp P <sub>1</sub>			Grou	ıp P <sub>2</sub>	
шэрссг	$\overline{x}$	S <sub>x</sub>	$S_x^2$	V <sub>x</sub>	$\overline{x}$	$S_x$	$S_x^2$	$\mathbf{V}_{\mathbf{x}}$	$\overline{x}$	$S_x$	$S_x^2$	V <sub>x</sub>
Total score	3,72	0,38	0,62	10	2,98	0,83	0,91	28	3,00	0,45	0,67	15
Tone aspect	3,98	0,31	0,56	8	3,26	0,85	0,92	26	3,24	0,49	0,70	15
Rhythmic aspect	3,68	0,44	0,66	12	2,95	0,96	0,98	33	3,01	0,45	0,67	15
Expression performance aspect	3,50	0,50	0,71	14	2,72	0,76	0,87	28	2,75	0,54	0,73	20
1 miniatura	3,97	0,29	0,54	7	3,34	0,73	0,85	22	3,29	0,38	0,62	12
2 miniatura	3,94	0,40	0,63	10	3,14	1,39	1,18	44	3,18	0,51	0,71	16
3 miniatura	3,25	0,86	0,93	26	2,46	1,19	1,09	48	2,54	0,76	0,87	30



**Figure 2.** Assessment mean values for the instrumental performance of three musical tasks – test: Miniature: 1, 2, 3.

Source: the Author's own educational research

**Table 8.** Scatter of results of achievements in learning how to play instrumental of people instructed via instrument in accordance with preference (group A) and not in accordance with preference (group  $P_1$ ).

		Achievements											
	Lo	OW	Mo	ean	Hi	gh	ν_						
Groups	N	%	N	%	N	%	Δ						
A	4	7	38	68	14	25	56						
P <sub>1</sub>	16	28	40	69	2	3	58						
Σ	20		78		16		114						

**Table 9.** The relationship between music achievements and tone musical aptitudes (results Sound Imagination MAP E.E. Gordon' test)

				Achievements										
	Distribution		Lo	OW	Me	ean	Hi	gh	Σ					
			N	%	N	%	N	%	<u> </u>					
	MAP	Low	7	25	16	57	5	18	28					
pu		Mean	17	15	75	68	19	17	111					
Sound	Imagination	High	6	22	17	63	4	15	27					
	Imag	Σ	28		108		30		166					

**Table 10**. The correlation between students achievements in learning how to play a wind instrument and tone aptitudes tested on the basis of values of E.E. Gordon's MAP *Sound Imagination*, taking into consideration the conformity of preference with the determined instrument for learning and place of instruction\*.

Groups	Correlation - r	t	Significance
A	-0,04	0,3	No
$P_1$	-0,35	2,72	Yes
P <sub>2</sub>	0,19	1,37	No

<sup>\*</sup> **Pearson correlation was applied**. Significance was tested on the basis of t formula – taking main level of statistical significance into consideration  $\alpha = 0.05$ .

**Table 11.** The correlation between students achievements in learning how to play a wind instrument and tone aptitudes tested on the basis of values of E.E. Gordon's MAP *Sound Imagination* 

Aspect		A			P <sub>1</sub>			P <sub>2</sub>			Σ	
Aspect	Correlation	t	Significance	Correlation	t	Significance	Correlation	t	Significance	Correlation	t	Significance
Tone aspect	-0,04	0,3	No	-0,36	2,9	Yes	0,14	0,99	No	-0,1	1,3	No
Rhythmic aspect	-0,04	0,3	No	-0,28	2,28	Yes	0,18	1,3	No	-0,08	1,04	No
Expression performance aspect	-0,05	0,37	No	-0,36	2,9	Yes	0,22	1,59	No	-0,02	0,26	No
1 miniatura	-0,08	0,59	No	-0,34	2,89	Yes	0,13	0,93	No	0,11	1,43	No
2 miniatura	-0,15	1,11	No	-0,23	1,77	No	0,04	0,29	No	-0,08	0,91	No
3 miniatura	0,06	0,45	No	-0,37	2,98	Yes	0,25	1,82	No	-0,01	0,01	No

**Table 12.** The relationship between music achievements and rhythmic musical aptitudes (results Rhythm Imagination MAP E.E. Gordon' test)

			Achievements										
Di	Distribution		Lo	OW	Me	ean	Hi	Σ					
			N	%	N	%	N	%					
	=	Low	5	25	12	60	3	15	20				
hm effo	ano	Mean	20	17	76	67	18	16	114				
Rhythm	agill	High	5	16	20	62	7	22	32				
1		Σ	30		108		28		166				

**Table 13.** The correlation between students achievements in learning how to play a wind instrument and rhythmic musical aptitudes tested on the basis of values of E.E. Gordon's MAP *Rhythm Imagination*, taking into consideration the conformity of preference with the determined instrument for learning and place of instruction\*.

Groups	Correlation	t	Significance
A	0,01	0,07	No
$P_1$	-0,12	0,91	No
P <sub>2</sub>	0,27	1,99	Yes

<sup>\*</sup> Pearson correlation was applied. Significance was tested on the basis of t formula – taking main level of statistical significance into consideration  $\alpha = 0.05$ .

**Table 14.** The correlation between students achievements in learning how to play a wind instrument and rhythmic musical aptitudes tested on the basis of values of E.E. Gordon's MAP *Imagination*,

Aspect		A			<b>P</b> <sub>1</sub>			P <sub>2</sub>			Σ	
1	Correlation	t	Significance	Correlation	t	Significance	Correlation	t	Significance	Correlation	T	Significance
Tone Aspect	0,01	0,07	No	-0,13	0,83	No	0,25	1,82	No	0,09	1,17	No
Rhythmic aspect	0,07	0,52	No	-0,05	0,38	No	0,18	1,3	No	0,08	1,04	No
Expression performance aspect	-0,05	0,37	No	-0,14	1,06	No	0,33	2,48	Yes	0,15	1,95	No
1 miniatura	-0,04	0,3	No	-0,19	1,45	No	0,11	0,79	No	0,02	0,26	No
2 miniatura	-0,08	0,5	No	-0,06	0,45	No	0,05	0,36	No	0,08	1,04	No
3 miniatura	0,1	0,74	No	-0,11	0,83	No	0,41	3,19	Yes	0,2	2,63	Yes

## C. SUBJECTS PREDISPOSITIONS TO LEARNING TO PLAY A WIND INSTRUMENT IN THE OPINION OF THE TEACHERS (Trzos 2009, 2011).

Table 15. The correct choice of a wind instrument for learning and the age of a student.

			Age of a	student			
Groups	Correc	t choice	Incorre	ct choice	Unimp	Σ	
	N	%	N	%	N	%	
A	45	81	8	14	3	5	56
$P_1$	47	81	10	17	1	2	58
P <sub>2</sub>	32	62	15	28	5	10	52
Σ	124		33		9		166

Source: the Author's own educational research

Table 16. The correct choice of a wind instrument for learning and the level of physical development

		The l	evel of phys	sical develop	oment		
Groups	Correc	t choice	Incorrect choice		Unimp	Σ	
	N	%	N	%	N	%	
A	46	82	8	14	2	4	56
P <sub>1</sub>	51	88	6	10	1	2	58
P <sub>2</sub>	40	77	5	10	7	13	52
Σ	137		19		10		166

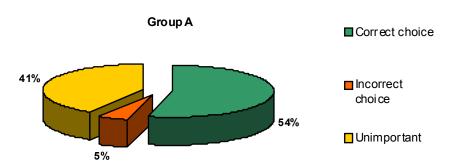
**Source:** the Author's own educational research

Table 17. The correct choice of a wind instrument for learning and student preference for instrument timbre

		Student 1	oreference f	or instrume	nt timbre		
Grupy	Correc	t choice	Incorre	ct choice	Unimp	ortant	Σ
	N	%	N	%	N	%	
A	30	54	3	5	23	41	56
$P_1$	26	45	6	10	26	45	58
P <sub>2</sub>	27	52	4	8	21	40	52
Σ	83		13		70		166

Table 18. The correct choice of a wind instrument for learning and musical aptitudes

		Musical aptitudes									
Groups	Correc	t choice	Incorrect choice		Unimp	$\sum$					
	N	%	N	%	N	%					
A	47	84	8	14	1	2	56				
P <sub>1</sub>	50	86	7	12	1	2	58				
P <sub>2</sub>	31	60	8	15	13	25	52				
Σ	128		23		15		166				



**Figure 3**. Students preference for a wind instrument timbre and the correct choice of an instrument for learning – the percentage distribution of teachers opinions for **group A students**.

Source: the Author's own educational research

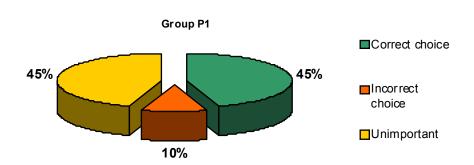
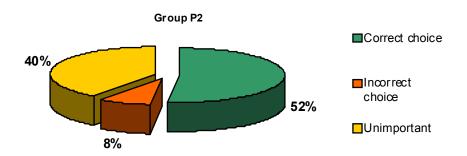


Figure 4. Students preference for a wind instrument timbre and the correct choice of an instrument for learning – the percentage distribution of teachers opinions for  $\mathbf{group} \ \mathbf{P_1}$  students.



**Figure. 5.** Students preference for a wind instrument timbre and the correct choice of an instrument for learning – the percentage distribution of teachers opinions for **group P<sub>2</sub> students**.

**Table 19.** Student-to-failure to learning relation – percentage distribution in the opinion of teachers.

Groups	Motiv	Motivation		Indifference		Discouragement		Stress	
Groups	N	%	N	%	N	%	N	%	
A	40	71	12	21	1	2	3	5	56
$P_1$	29	50	11	19	14	24	4	7	58
P <sub>2</sub>	26	50	20	38	3	6	3	6	52
Σ	95		43		18		10		166

D. CORRELATION BETWEEN THE LEVEL OF TONE AND RHYTHMIC MUSICAL APTITUDES AND THE OCCURRENCE OF INSTRUMENTAL TIMBRE PREFERENCE. Test results: MAP E.E. GORDON'S—ITPT E.E. GORDON'S (Trzos 2009, 2011)

**Table 20.** Correlation between the level of tone musical aptitudes and the occurrence of instrumental timbre preference.

		The annual or		Sound	Imagina	tion MA	P E.E. C	Gordon	
		The number of preferred	Lo	)W	Me	ean	Hi	Σ	
		instruments	N	%	N	%	N	%	<u></u>
	ce n	0	4	15	20	77	2	8	26
ntal	'referenc . Gordon	1	16	21	47	61	14	18	77
Instrumenta	Pref E. G	2	8	13	44	71	10	16	62
ıstrı	re E.]	3	0	0	0	0	1	100	1
	Timb Test	Σ	28		111		27		166

Source: the Author's own educational research

One can see low correlation between the number of preferred instrumental timbre and the level of tone musical aptitudes in the scope of tone imagination (C = 0.22). This correlation turned out to be statistically unimportant on the assumed level ( $\alpha$ =0.05)  $\alpha = 0.05$  ( $\chi^2 = 8.87$ ).

**Table 21.** Correlation between the level of rhythmic musical aptitudes and the occurrence of instrumental timbre preference.

	The number of		Rhyth	m Imagir	nation MA	AP E.E. G	Gordon	
	preferred	Low		Mean		High		Σ
	instruments	N	%	N	%	N	%	2
ce	0	7	27	17	65	2	8	26
ntal ference ordon	1	8	10	57	74	12	16	77
Instrumental nbre Preference st E.E. Gordon	2	5	8	40	65	17	27	62
str ore E.]	3	0	0	0	0	1	100	1
In Timb Test	Σ	20		114		32		166

One can see low correlation between the number of preferred instrumental timbre and the level of rhythmic musical aptitudes in the scope of tone imagination C = 0.29.

This correlation turned out to be statistically important on the assumed level  $\alpha = 0.05$  ( $\chi^2 = 15.05$ )

## D. THE RESULTS OF GORDON'S ITPT TEST AND SELF-ASSESSMENT OF THE SUBJECTS (Trzos 2009, 2011)

Self-assessment had been analysed before the actual test ITPT E.E. Gordon.

**Table 22.** The results of Gordon's ITPT Test and self-assessment of the subjects.

The results of	The results of Gordon's ITPT Test and self-assessment of the subjects. N = 166										
Student preference assessment just in acc with the outcomes of	ordance	different wi	who picked a nd instrument same category.	The choice of instrument from a different category in student self-assessment.							
N	%	N	%	N	%						
68	41	57	34	41	25						

Source: the Author's own educational research

**Table 23.** The results of Gordon's ITPT Test and self-assessment of the subjects in different groups.

Groups	Student pref assessmen accordance outcomes	nt just in e with the	The student a differe instrument b same ca	nt wind out from the	The che instrumen different ca student self-	Σ	
	N	%	N	%	N	%	
A	34	34 <b>61</b>		18	12	21	56
P <sub>1</sub>	15	26	28	48	15	26	58
P <sub>2</sub>	19	37	19	37	14	26	52
Σ	68		57		41		166

**Table 24.** The satisfaction of students from the choice of an instrument at school.

Groups	No No		I would	yes, but I like to dancing ng.	Rath	er yes	Yes, but I prefer a different instrument.		Σ		
	N	%	N	%	N	%	N	%	N	%	
A	0	0	1	2	1	2	2	4	52	92	56
P <sub>1</sub>	0	0	0	0	5	9	10	17	43	74	58
P <sub>2</sub>	0	0	0	0	0	0	13	25	39	75	52
Σ	0		1		6		25		134		166

**Table 25.** Student intrinsic motivation for learning – the analysis of free will at work on a fine tone. The teachers opinions.

Groups	High		Mean		Lo	Σ	
	N	%	N	%	N	%	<u> </u>
A	45	80	10	18	1	2	56
P <sub>1</sub>	27	47	23	40	8	13	58
P <sub>2</sub>	32	61	5	10	15	29	52
Σ	104		38		24		166

Source: the Author's own educational research

**Table 26**. Student intrinsic motivation for learning – The assessment of the degree of an independent work. The teachers opinions.

Groups	High		Mean		Low		_	
	N	%	N	%	N	%	<u></u>	
A	44	78	10	18	2	4	56	
P <sub>1</sub>	28	48	14	24	16	28	58	
P <sub>2</sub>	31	60	7	13	14	27	52	
Σ	103		31		32		166	

**Table 27.** The level of students motivation for learning to play an instrument in the annual opinions of teachers.

Groups	Very high		High		Mediocre		Low		Motivation		Σ
	N	%	N	%	N	%	N	%	N	%	
A	17	30	34	61	4	7	1	2	0	0	56
P <sub>1</sub>	10	17	20	34	19	33	4	7	5	9	58
P <sub>2</sub>	10	19	21	40	20	39	1	2	0	0	52
Σ	37		75		43		6		5		166

Teachers opinions often confirmed the results of Gordon's ITPT Test during the time of training.

### E. CONCLUSIONS:

- 1. Definitely more people from group A, namely the group instructed in accordance with instrumental timbre preference (25%) achieved top results after a year of training. Only 3% of students from the controlled group, which was instructed not in accordance with or against their instrumental timbre value preference, achieved the same level.
- 2. In accordance with the preference for quality, the choice of a wind instrument has significant influence on student achievements in learning how to play this instrument.
- 3. Group A, being taught with the use of instrument according with their preference (specific values of E.E. Gordon's ITPT test), achieved better results after a year of training.
- 4. One can see low correlation between the number of preferred instrumental timbre and the level of tone and rhythmic musical aptitudes in the scope of tone and rhythmic imagination. This correlation turned out to be statistically unimportant (tone musical aptitudes) and important (rhythmic musical aptitudes) on the assumed level  $\alpha$ =0,05..
- 5. One could easily identify high preference of the majority of people (but not everyone 15%) long before student contact with an instrument at school.
- 6. Low relationship between the level of tone and rhythmic musical aptitudes (test results) and instrumental quality preference has been identified.

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