CORRELATION BETWEEN CHILDREN'S MOTOR ABILITIES AND CHILDREN'S SCHOOL LIFE CAPABILITY BASED ON RECOGNITION TEST

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Abstract

The main goal of the research is to establish the relation between motor skills and psychological recognition test with 5-year-old children. In order to achieve the research goal, there were tested 120 children (60 boys and 60 girls) with 15 standardised motor tests for assessing: coordination, flexibility, balance, precision and explosive power. A particular psychological test - recognition test, was used to assess children's capability for starting school. The results obtained from regressive analysis show that there is no statistically significant relation between the motoric tests and the test indicating boy's and girl's capability for school.

Key words: *pupils aged 5, motor test, psychological test, regressive analysis.*

Introduction

The children's welfare at the very early age is quite important, having a profound impact on their development and growing. The period of pre-school age proves to be particularly vulnerable in children's maturing. The knowledge about characteristics and peculiarities concerning each period of growing is of great importance for the entire educational process.

Modern teaching tendency is not fitting students to programs but it is programs that need be shaped according to the objective demands and abilities of students. According to Breckenridge and Vicent (1960), Horvat (2010) note that a person's abilities are in close dependency of family history, lifestyle, as well as the daily routine life connected with the kindergarten or institution that a child attends. The goal of the research is to examine motor abilities and a test of preparedness of school children from age 5 kindergartens in Tetovo. The main research goal is to establish the relation between the achieved psychological results and motor abilities with children before attending school.

Methods

The sample of respondents is defined as pre-school age children from two kindergartens in Tetovo. The total number of respondents is 120: 60 boys and 60 girls. The children age is 5 years (60 months +/- 3months). For the research purposes and aiming to establish the children's motor abilities, there were applied 15 motor tests for assessing the following: coordination, flexibility, balance, precision and explosive power. The mentioned were also used in the research works of Metikosh and co. (1989), Bala (1999) and Perich (1991).

Precision
1. Throwing rim stalk (TRS)
2. Shooting with a ball in horizontal aim (SBH)
3. Firing with a short stick (FSS).

Coordination
1. Rolling a Ball (RB)
2. Slalom with 2 balls (S2B)
3. Drill Back (DB)

Balance
1. Walking on a bench with its downside up (WBD)
2. Standing on a bench in width (SBW)
3. Standing on a bench in length (SBL)

Explosive power
1. Long Standing Jump (LSJ)
2. Disposal of Medical 1kg ball in distance (DMB)
3. 10m high start (10M)

Flexibility
1. Forward bend on a bench (FBB)
2. Lateral leg stretching from layback position (LSLP)
3. Forward bent on a ground (FBG)

The test of children capability for school was checked with a psychological measuring means, constricted by Vlahović-Štetić, Vizek-Vidović, Arambašić, and Miharija (1995), and in our research we only used the subtest: Test of recognition (TR).

Test task: to identify facts and concepts of daily routine life that children face. It is aimed to check if the child is familiar with their common society, which will mean their better handling at school.

Evaluation: The test contains 14 questions, where each question consists of 4 drawings and only one of the offered is correct.

Test application: to assess child's pre-school knowledge

Test duration: 7 minutes.

The data obtained for boys and girls was processed by linear regressive analysis with applicable software IBM SPSS Statistics 20.

Results and conclusion

According to the obtained results presented in Table 1, where as a criterion variable for the boys is used the third test for psychological capability for school engaging- Test of Recognition (TR), and the predictor system is represented by the 15 motor tests. It can be noted that the multiple correlation coefficient, which is 0.40, and the determination coefficient of value 0.16, are not statistically significant at the level of 0.05 (p<.86).

Table 1. Regressive analysis with the boys

Variables	Beta in	Partial Cor.	t	p-level
TRS	-0,12	-0,08	-0,49	0,63
SBH	-0,18	-0,11	-0,72	0,47
FSS	0,21	0,11	0,71	0,48
RB	-0,37	-0,16	-1,02	0,32
S2B	-0,20	-0,10	-0,63	0,53
DB	0,31	0,23	1,50	0,14
WBD	0,05	0,03	0,19	0,85
SBW	0,13	0,10	0,62	0,54
SBL	-0,18	-0,12	-0,76	0,45
LSJ	-0,06	-0,04	-0,23	0,82
DMB	-0,08	-0,08	-0,48	0,63
10M	0,14	0,12	0,75	0,46
FBB	0,21	0,08	0,52	0,60
LSLP	-0,12	-0,06	-0,40	0,69
FBG	-0,22	-0,10	-0,63	0,53
RO= ,40	DELTA= ,16	F(15,44)=,54		p<,86

Therefore the applied system of 15 predictor motor tests has not statistically significant influence on that psychological test with female respondents.

Table 2. Regressive analysis with the girls

Variables	Beta in	Partial Cor.	t	p-level
TRS	-0,22	-0,14	-0,91	0,37
SBH	0,40	0,22	1,49	0,14
FSS	0,29	0,15	0,99	0,33
RB	-0,58	-0,32	-2,23	0,03
S2B	0,15	0,09	0,57	0,57
DB	0,51	0,41	2,94	0,01
WBD	0,02	0,01	0,10	0,92
SBW	-0,38	-0,25	-1,68	0,10
SBL	0,11	0,07	0,47	0,64
LSJ	0,03	0,02	0,13	0,90
DMB	-0,24	-0,23	-1,53	0,13
10M	0,20	0,17	1,13	0,26
FBB	0,39	0,22	1,46	0,15
LSLP	0,36	0,23	1,55	0,13
FBG	-0,61	-0,32	-2,25	0,03
RO= ,65	DELTA= ,40	F(15,44)=1,86		p<,07

The results obtained in the study completely coincide with Horvat research (). The conclusion suggested by the result is that the motor tests applied to the children of both gender, and which establish their motor abilities, are not significantly related to the test of recognition – applied as a psychological test for assessing children's capability for school life. Therefore, the applied system of 15 predictor motor tests has not statistically significant impact on that particular psychological test with the male respondents.

According to the results in Table 2 concerning the girls, where as a criterion variable is applied the third test of psychological capability for school – Test Recognition (TR), and the predictor system is represented by the 15 motor tests, there can be noted that the coefficient of multiple correlation, which is 0.65, and the coefficient of determination, valuing 0.40, are not statistically significant at the level of 0.05 (p<.07).

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KORELACIJA IZMEĐU MOTORIČKIH SPOSOBNOSTI DJECE I SPOSOBNOSTI ŠKOLSKOG ŽIVOTA DJECE ZASNOVANO NA TESTU PREPOZNAVANJA

Sažetak

Glavni cilj istraživanja je utvrditi odnos između motoričkih sposobnosti i psihološkog testa za prepoznavanje kod petogodišnje djece. Da bi se postigao cilj istraživanja, bilo je testirano 120 djece (60 dječaka i 60 djevojčica) s 15 standardiziranih motoričkih testova za procjenu: koordinacije, fleksibilnosti, ravnoteže, preciznosti i eksplozivne snage. Poseban Psihološki test - Test prepoznavanja, korišten je za procjenu sposobnosti djece za početak škole. Rezultati dobiveni iz regresijske analize pokazuju da ne postoji statistički značajna povezanost između motoričkih testove i vrsta testa koja ukazuje na sposobnosti dječaka i djevojčica za školu.

Ključne riječi: *učenici u dobi od 5 godina, motorička ispitivanja, psihološki test, regresijska analiza*