Journal of Advances in Education and Philosophy

ISSN 2523-2665 (Print)
ISSN 2523-2223 (Online)

A Publication by "Scholars Middle East Publishers", Dubai, United Arab Emirates

Learning Readiness skills: Paired Associate Learning and Digit Span among Shantytown and Government School Children

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Article History
Received: 03.08.2018
Accepted: 13.08.2018
Published: 30.08.2018

Abstract: To assess learning readiness skills on digit span paired and associate learning test among Government and Shantytown School Children. Sample consisted of 50 children: (n= 25) government school and (n= 25) was taken from shantytown school of Lahore with age range of 5 to 9 years. The subtests of Wechsler Memory Scale (Paired Associate Learning Test and Digit Span) were used to assess the learning readiness skills of children. The result of the findings indicates that there was significant difference between government and shantytown school children. Government school children perform better than the shantytown children. It should be necessary for parents to concentrate and improve basic skills of children and then got admission in school. When they have some exposure of basic skills then child can easily communicate and able to learn.

Keywords: Learning readiness skills, Shantytown, Paired associate learning test, Digit span.

INTRODUCTION

This study was conducted to identify Learning Readiness Skills among children of shantytown and Government school.

The prevalence rate of population of Pakistan is 160,943,000 and children whose goes to school were 19,012,000. Only 26% of children have basic learning readiness skills. In achieving the Education for All goal (EFA) Pakistan is lagging behind many countries. UNESCO rates in Pakistan are at a lower EFA development Index (EDI) because of low; enrolment at primary school, adult literacy, gender equity and equality, equalities in education and quality of education and more than 6 million children are out of school [1]. According to Human development Report, Pakistan is placed at 136th position because its 49.9% population comes under the definition of education and dropout rate is alarmingly high at the primary level. Learning Readiness skills are basic skills that every child has like reading writing, communication, attention, cognition and concentration. These skills are start when child is go to school [2]. Learning readiness is synonym of school readiness, school readiness is a expected success of child in kindergarten which is based development of child, early childhood education and their experiences [3]. There are different types of Learning readiness skills which are necessary for children when they enter in the school and it is also a physical, motor, socio-emotional, behavioral, linguistic, problem solving , reasoning and cognition that indicating preparedness to receive formal educational instruction and it should be necessary to identify the foundational skills, like knowledge of content and concepts that children need when they enter school in order to achieve academic success in early elementary school and beyond [4]. In this study researcher want to identify the attention, concentration, verbal ability, memory, and coping skills of children [5-7]. Because children of shantytowns are slums area and neglected part of cities and their housing and living conditions are appalling poor Un-habitat [8]. They have no facility clean water, poor sanitation system and lack of education. Their children have no exposure of formal education, they don't know how to read and write, how to hold a pencil.

According to National Center for Children in Poverty states that school readiness are basic skills, knowledge of content and concepts that children need for their academic success [4] Learning readiness is a multidimensional concept [9]. Children who enter in school with basic skills of reading, writing, knowledge of math and vocabulary have more academic success than their peers [10]. Hair, Halle, Terry-Humen and Calkins [11], their study suggest that if there is lacks in vocabulary skills evident at elementary school entry explained at least half of the racial gap in high school achievement scores [12]. Research has identified that attention as an important component for children to give attention on studies and it is necessary for their

academic success. To learn from teachers and to complete instructional activities attention is necessary for a child. It is necessary for learning, children must identify the most important people, things, and in which situations they should pay attention, hold their attention to those things, and shift their attention with flexibility. Research suggests that preschool years also shows a span of unique brain modification and experience new things from the environment [5-7]. If we find skills in early years of life, which conclude later achievement that open the door of better understanding of learning and its implementation [13]. Research shows that children from poor family have been found to show poor school learning skills compared to children in other types of programs [14-17]. Children in poverty are behind in the areas of school readiness than their more wealthy peers. With young children using behavior-based assessments and when we observe the behavior of children on challenging or easy tasks which shows that individual differences in preschool children, it depends on their interest and attention [18] all of these are important index of motivation. Emotions can also effect the processes associated with learning and performance [19]. Positive affect of emotions can support concentration, to recall and problem solving negative affect increases the burden of cognition, damage working memory and use less strategy use [20-22]. Researches indicate that gender differences were also found in verbal ability which shows that girls have advance knowledge and they perform higher than the boys [23]. Researches also shows that children from low income their cognitive skills, communication skills, attention and to recall the things were lower as compared to their high income peers. It should necessary to observe these skills of child when they enter in school [24, 25].

In Pakistan there is low awareness about learning readiness skills, more than 50% of primary age children have no opportunity of readiness skills. People belong from low socio-economic status face challenges in their studies. There is lack of formal government policy on readiness skills, it should be make necessary that every child learn basic skills before enter in school. Parents are unaware about basic skills of children, there is no involvement and interest in child basic skills and in Pakistan there is lack of service in learning readiness of children and government is not give proper importance and priority to school readiness. A country where not give priority to learning readiness skills than children behind in their understanding, communication, learning and growth which are essential part of their life. Children who have uneducated parent, from poor family background and poor support from family have no learning readiness skills. The percentage of learning readiness skills is lower in rural areas than urban areas. School readiness of child reverse condition of child as well as attitude of family, belief, knowledge and practices.

This research addressed following research objectives

Objective

- To assess Learning Readiness Skills of Shantytown and Government school children
- To assess the gender difference in Learning Readiness Skills of Shantytown and Government school children

METHODS AND MATERIAL

A total number of (N =50) participants were recruited from Government and Shantytown schools of Lahore with age range of 5 to 8 years. Cross Sectional research design was used in present research. Socio-demographic Performa was developed to obtain information such as age, gender, class and type of school.

In present study two scales of Wechsler Memory Scale were used: Paired associate learning test and Digit span [26]. Paired associate learning test was administered to measure verbal ability of children over the period of 1, 2 and 3 trails by using the list of difficult and easy pair of words and in each trial. There were 6 easy pair of words and four difficult pair of words. Scoring was according to response of children on easy and difficult pair of word.

The other scale was Digit span was administered to measure attention span of child. In this test child was asked to repeat the series of 6 digits in forward and then 5 digits in backward direction. The score of each digit was one and the score was marked on repeat the largest digit.

RESULTS

Statistical tests were performed by SPSS 20 (Statistical Package for Social Sciences). Independent Sample t-test was used to assess group differences and Bivariate Correlational analysis was used to assess relationship between variables.

The results of Table-1 shows the Scio demographic Characteristics of the sample (N=50), among with 27(54%) were boys and 23(46%) were girls. 25 (50%) Children were recruited from government school 25(50%) children were recruited from shantytown school. Mean age of the participants was 6 years (M= 6.74, SD= .94).

Above results shows Mean, Standard Deviation, t and p values of Government and Shantytown School Children on Paired Associate Learning Test. No significant difference were found between children of government and shantytown school children on PALTe1 and PALTe2 but there were significant difference between children of both schools. There was significant difference between government

and shantytown school children on PALTd2 and PALTe3.

Table-3 shows Mean, Standard Deviation, t and p values of Government and Shantytown School Children on Digit Span. There were no significant difference in government school children and shantytown children on forward and backward digit span

Table-4 shows Bivariate Correlation Between Age, Digit Span and Paired Associate Learning Test. Digit span forward is significantly positively correlated with digit span backward, paired association learning on easy trial 2 and 3 and paired associate learning on difficult trial 3. Digit Span backward is significantly positively correlated with PALT e1, PALTe2 and PALT e3. PALT e1 is positively correlated with PALT d1, PALTe2, PALTd2, PALTe3 and PALTd3. PALT d1 is correlated with PALTe2, PALTd2, PALTe3 and PALTd3. PALTe2 is positively correlated with PALTd2, PALTe3 and PALTd3. PALTd2 positively correlated with PALTe3, and PALTd3. PALTe3 is positively correlated with d3.

RESULTS

Table-1: Socio Demographic Characteristics of the Sample (N=50)

Variables	*f %*	*M*	*SD*
Age (years)		6.74	.94
Gender			
Boys	27 (54)		
Girls	23 (46)		
School			
Government	25 (50)		
Shantytown	25 (50)		

Table-2: Mean, Standard Deviation, t and p values of Government and Shantytown School Children on Paired Associate Learning Test (N= 50)

Test	Groups	*M*	*SD*	*t*	*p<*
PALTe1	Government	1.40	1.25	.77	.441 *(ns)*
	Shantytown	1.08	1.63		
PALTd1	Government	.48	.65	2.81	.007***
	Shantytown	.08	.27		
PALTe2	Government	2.24	1.42	1.37	.176 *(ns)*
	Shantytown	1.64	1.65		
PALTd2	Government	.62	.71	2.88	.006***
	Shantytown	.16	.37		
PALTe3	Government	2.72	1.33	1.93	.059*
	Shantytown	1.92	1.57		
PALTd3	Government	.84	.85	2.66	.01*
	Shantytown	.32	.47		

Note. *p<0.05***p<0.001 df= 48

M=Mean SD= Standard Deviation Paired Associate Learning Test, easy trial 1. Paired Associate Learning Test, difficult trial .Paired Associate Learning Test, easy trial 2.Paired Associate Learning Test, difficult trial 2.Paired Associate Learning Test, easy trial 3.Paired Associate Learning Test, difficult trial 3.

Table-3: Mean, Standard Deviation, t and p values of Government and Shantytown School Children on Digit Span (N=50)

Test	Groups	*M*	*SD*	*t*	*p<*
Ds-F	Government	3.24	.59	1.30	.197 *(ns)*
	Shantytown	2.96	.88		
Ds-B	Government	.40	.81	.92	.359 *(ns)*
	Shantytown	.20	.70		

Note. df= 48, M=Mean, SD= Standard Deviation, Ds-F= digit span forward, Ds-B= digit span backward

Table-4: Bivariate Correlation Between Age, Digit Span and Paired Associate Learning Test

Variable	2	3	4	5	6	7	8	9
1. age	-.07	.19	-.04	-.09	.04	-.11	.04	-.10
2. Digit Span forward	-	.54**	.49**	.13	.64**	.09	.61**	.29*
3. Digit span Backward	-	-	.32*	.09	.46**	.10	.41**	.15
4. PALTe1	-	-	-	.41**	.87**	.50**	.77**	.63**
5. PALTd1	-	-	-	-	.43**	.77**	.44**	.61**
6. PALTe2	-	-	-	-	-	.50**	.90**	.65**
7. PALTd2	-	-	-	-	-	-	.44**	.83**
8. PALTe3	-	-	-	-	-	-	-	.55**
9. PALTd3	-	-	-	-	-	-	-	-

*Note.**p<0.05, **p<0.01, ***p<0.001: 4= Paired Associate Learning Test, easy trial 1. 5= Paired Associate Learning Test, difficult trial 1. 6 = Paired Associate Learning Test, easy trial 2. 7= Paired Associate Learning Test, difficult trial 2. 8= Paired Associate Learning Test, easy trial 3. 9= Paired Associate Learning Test, difficult trial 3.

DISCUSSION

The results analyzed on the basis of Learning Readiness Skills among Government and Shantytown School Children. The basic skill acquisition of children starts before going to school. Children usually learn in pre-school years from their parents and environment. If children are given proper attention and schooling they can easily learn basic skills such as handling money and understanding of language. If child have no basic skills of learning than the chances of failure and dropout from at very earlier age are high. Furthermore, Children who do not get chance to attend school have no basic learning readiness skills. Communities where, there is lack of education have lack of basic skills such as holding pencil, remembering etc. and are more vulnerable to failure or dropout.

There are some areas where children lived in very deprived situation like shantytown are being taken through school education so there would a class of children of different ages, different developmental stages and different pre-school experiences and put in class with normal curriculum is being taught. The assertion of this study was these children with poor readiness skills and its consequences will be dropout and cognitive difficulties. Attention and concentration help children to learn formally and informally. Results shows that how differences in these children are to receiving education.

As we know and results shows it is not surprising that children of government and shantytown school perform better on both tests. Cooper *et al*., [27] assessed gender differences in partner instability and school readiness, results showed that boys had lower verbal ability than girls. However, in present study found no difference between boys and girls. Shantytown children did much worse on digit span and paired associate learning test, they were lacking behind in terms of ability to concentrate and learning skills. This is due to culture because both groups were poor on both these tests but shantytown were worse. On auditory verbal task the school children seen to have benefited from learning practice. There was also a difference in vocabulary test, that was more in government school than shantytown, this is due to lack of exposure in shantytown children. The present study shows that participants who have higher attention span also have higher verbal ability and verbal retention on easy trail 2 and easy trail 3. Another research showed higher learning abilities on difficult trail 3. Children who have lower level of attention span and easily distract are unable to recall easily [28]. Children who showed higher level span of attention on digits also exhibited higher verbal retention. Similarly, previous study assessed memory, attention and academic readiness skills of preschooler. Results found that children who have higher memory skills and pay more attention on academic tasks also has higher academic readiness skills [29].

The conclusion of this study was that first of all improve and concentrate on cognitive skills of children and then got admission in school whey have some exposure of basic skills the child can easily communicate and able to learn when child will socially competent then their early skills will also improved.

ACKNOWLEDGEMENT

Alhamdulillah to Allah the Almighty for putting forward me such a great strength, patience, courage and also ability to complete this project. My excessive gratefulness to my supportive and helpful supervisor, Dr. Zahid Mahmood for assessing and guiding me in completion of this research. I am very grateful to the Head of the Institutions for granting me permission to collect data and children who participated in this study, for this support and cooperation, as being prepared me all along the completion of the project.

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