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Motive Story and Recreational Games by Using Purpose Tools for the Development of Sensory-Motive Awareness and Reduction of the More Activity for the Mentally Handicapped

Enas Mohamed Mohamed Mohamed Ghanem

Department of Recreation and Organization and Management,
Faculty of Physical Education for Girls, Zagazig University, Egypt

Abstract: The researcher has a study to recognize the extent of utilization the proposed program which includes (motive story and recreational games by using prejudice tools aiming to develop sensory-motive awareness and reduce excessive activity notched of the mentally handicapped. The Research sample was selected from children with simple intellectual disabilities and, which its intelligence indicator ranges in between 50-70 degree of the age group of 4-5 years. The researcher used the measure of hyperactivity, sensor motor total sensory-motive awareness scale and the scientific transactions. The researcher reached that the games, using Purpose tools has a positive impact in development of sensory-motive awareness and reduction of the more activity for the mentally handicapped.

Key words: Motive Story % Recreational Games % Sensory-Motive Awareness % More Activity Mentally Handicapped

INTRODUCTION

The researcher noted some excess and excessive movements which are performed by the mentally disabled children without a specific objective, In addition to their non-social response with each other and the lack of communication between this group and the society around them, due to the lack of research on the study of this age group (4-5 Years), so the researcher has designed a program for motive story and recreational games by using prejudice tools for the development of sensory-motive awareness and reduction notched of the mentally handicapped as her attempt to enrich this area of research, linkage to the human society and the environment.

Objectives of the Research: This research aims to recognize the extent of utilization the proposed program which includes (motive story and recreational games by using prejudice tools aiming to develop sensory-motive awareness and reduce excessive activity notched of the mentally handicapped.

MATERIALS AND METHODS

Research Sample: Research sample was selected from children with simple intellectual disabilities and which its intelligence indicator ranges in between 50-70 degree of the age group of 4-5 years at Al-malaakAl-Sagher (small angel)school, Haram, Giza from the department of special needs at least 6 years. The sample has included the number of 20 children. five children (boys and girls) have been chosen randomly for exploratory study from the basic research sample.

Used Standards under the Research: The researcher used the measure of hyperactivity, sensor motor total sensory-motive awareness measurement and the scientific transactions were indicating high degrees of validity and reliability.

The Temporal Distribution of Program Performance: Based on the above specified time content of the proposed program by the researcher, which contains 12 different targets unit weekly at the range 3 months with three times a week (Sunday - Tuesday - Thursday) for a period of 40 minutes and thus the units have reached the number of 36 recreational units.

RESULTS AND DISCUSSION

It is seen from Table 1 the absence of statistical significant differences in significance level of 0.05 among

Corresponding Author: Enas Mohamed Mohamed Mohamed Ghanem, Department of Recreation and Organization and Management, Faculty of Physical Education for Girls, Zagazig University, Egypt.

Table 1: Significant differences between the average pre measurements of control and experimental groups in the variables under research. N = 10

			The Control Group		The experimental group		
S.N.	Variables	Measurement unit	Arithmetic Average	Standard deviation	Arithmetic Average	Standard deviation	Average Value
Excessive	Hyperactivity	Degree	19.35	2.31	18.36	2.99	0.829
Activity	Attention Deficit	Degree	18.96	1.44	19.29	1.51	0.500
	Eruptive	Degree	16.34	1.33	15.44	1.29	1.536
Measure of	Physical self	Degree	4.73	0.61	4.87	0.59	0.522
sensory-motive	Scope (Field) & Trends	Degree	2.56	0.62	2.76	0.71	0.671
awareness	Rhythm (rationality) 1	Degree	1.21	0.31	1.17	0.29	0.298
	Rhythm (rationality) 2	Degree	1.73	0.45	1.90	0.47	0.826
	Rhythm (rationality) 3	Degree	1.21	0.24	1.11	0.27	0.875
	Rhythm and muscle control	Degree	2.25	0.48	2.23	0.51	0.090
	forward skating	Degree	1.13	0.25	0.99	0.26	1.227
	Skating to the side	Degree	1.25	0.38	1.30	0.41	0.283
	Skating back and forth	Degree	1.36	0.28	1.40	0.32	0.297
	Accurate muscle control	Degree	1.10	0.31	1.12	0.29	0.149
	Awareness of Figures 1	Degree	0.76	0.19	0.74	0.21	0.223
	Awareness of Figures 2	Degree	1.43	0.47	1.49	0.51	0.274
	Auditory discrimination	Degree	1.40	0.35	1.29	0.32	0.733
	Compatibility between the eye and the hand	Degree	1.37	0.39	1.43	0.42	0.331
	Compatibility between the eye and foot	Degree	1.36	0.31	1.26	0.28	0.757

* The value of tabulated "T " at level 0.05 = 2.262

Table 2: Significant differences between the pre and post measurements of the control group in variables under research. N = 10

			Pre Measuring		Post Measuring				
S.N.	Variables	Measuring Unit	Arithmetic Average	Standard deviation	Arithmetic Average	Standard deviation	Differences Average	Differences deviation	Value of "T"
Excessive	Hyperactivity	Degree	19.35	2.31	24.32	3.11	4.97	0.940	* 5.29
Activity	Attention Deficit	Degree	18.96	1.44	21.35	1.88	2.39	0.572	* 4.18
	Eruptive	Degree	16.34	1.33	19.64	1.65	3.30	0.488	* 6.76
Measure of	Physical self	Degree	4.73	0.61	5.23	0.98	0.50	0.285	1.76
sensory-motive	Scope (Field) & Trends	Degree	2.56	0.62	3.98	0.92	1.42	0.259	* 5.48
awareness	Rhythm (rationality) 1	Degree	1.21	0.31	2.01	0.44	0.80	0.128	* 6.27
	Rhythm (rationality) 2	Degree	1.73	0.45	2.56	0.59	0.83	0.178	* 4.66
	Rhythm (rationality) 3	Degree	1.21	0.24	2.07	0.46	0.86	0.134	* 6.39
	Rhythm and muscle control	Degree	2.25	0.48	3.21	0.68	0.96	0.210	* 4.57
	forward skating	Degree	1.13	0.25	1.78	0.38	0.65	0.115	* 5.64
	Skating to the side	Degree	1.25	0.38	2.33	0.51	1.08	0.155	* 6.95
	Skating back and forth	Degree	1.36	0.28	2.11	0.41	0.75	0.123	* 6.08
	Accurate muscle control	Degree	1.10	0.31	1.67	0.39	0.57	0.124	* 4.59
	Awareness of Figures 1	Degree	0.76	0.19	1.13	0.28	0.37	0.083	* 4.48
	Awareness of Figures 2	Degree	1.43	0.47	2.06	0.55	0.63	0.175	* 3.60
	Auditory discrimination	Degree	1.40	0.35	2.09	0.46	0.69	0.138	* 4.99
	Compatibility between the eye and the hand	Degree	1.37	0.39	2.16	0.54	0.70	0.163	* 4.84
	Compatibility between the eye and foot	Degree	1.36	0.31	2.37	0.49	1.01	0.147	* 6.87

* The value of tabulated “T” at level 0.05 = 2.262

Table 3: Significant differences between the pre and post measurements of the experimental group in variables under research N = 10

			Pre Measuring		Post Measuring				
S.N	Variables	Measuring Unit	Arithmetic Average	Standard deviation	Arithmetic Average	Standard deviation	Differences Average	Differences deviation	Value of "T"
Excessive	Hyperactivity	Degree	18.36	2.99	29.35	3.91	10.99	1.220	* 9.01
Activity	Attention Deficit	Degree	19.29	1.51	27.69	2.17	8.40	0.668	* 12.57
	Eruptive	Degree	15.44	1.29	29.22	2.07	13.78	0.622	* 22.16
Measure of	Physical self	Degree	4.87	0.59	6.36	1.23	1.49	0.354	* 4.21
sensory-motive	Scope (Field) & Trends	Degree	2.76	0.71	6.81	1.06	4.05	0.328	* 12.33
awareness	Rhythm (rationality) 1	Degree	1.17	0.29	3.66	0.55	2.49	0.162	* 15.38
	Rhythm (rationality) 2	Degree	1.90	0.47	3.91	0.74	2.01	0.215	* 9.35
	Rhythm (rationality) 3	Degree	1.11	0.27	3.18	0.58	2.07	0.166	* 12.49
	Rhythm and muscle control	Degree	2.23	0.51	5.95	0.92	3.72	0.265	* 14.04
	forward skating	Degree	0.99	0.26	2.9	0.44	1.91	0.124	* 15.35
	Skating to the side	Degree	1.30	0.41	2.98	0.64	1.68	0.184	* 9.13
	Skating back and forth	Degree	1.40	0.32	2.99	0.52	1.59	0.146	* 10.90
	Accurate muscle control	Degree	1.12	0.29	3.18	0.53	2.06	0.153	* 13.50
	Awareness of Figures 1	Degree	0.74	0.21	2.08	0.35	1.34	0.102	* 13.13
	Awareness of Figures 2	Degree	1.49	0.51	3.65	0.69	2.16	0.214	* 10.09
	Auditory discrimination	Degree	1.29	0.32	2.96	0.62	1.67	0.175	* 9.54
	Compatibility between the eye and the hand	Degree	1.43	0.42	3.66	0.68	2.23	0.201	* 11.09
	Compatibility between the eye and foot	Degree	1.26	0.28	3.17	0.62	1.91	0.177	* 10.79

* The value of tabulated “T” at level 0.05 =2.262

Table 4: Amount of change in the percentages of improvement between both pre & post averages in the variables under research, for both control and experimental groups

			Control Group			Experimental Group			
S.N	Variables	Measurig Unit	Pre Average	Post Average	Development percentage %	Pre Average	Post Average	Development percentage %	Differences Among Percentages
Excessive	Hyperactivity	Degree	19.35	24.32	25.68	18.36	29.35	59.85	34.18
Activity	Attention Deficit	Degree	18.96	21.35	12.61	19.29	27.69	43.55	30.94
	Eruptive	Degree	16.34	19.64	20.20	15.44	29.22	89.25	69.05
Measure of	Physical self	Degree	4.73	5.23	10.57	4.87	6.36	30.60	20.03
sensory-	Scope (Field) & Trends	Degree	2.56	3.08	55.47	2.76	6.81	146.74	91.27
motive	Rhythm (rationality) 1	Degree	1.21	2.01	66.12	1.17	3.66	212.82	146.7
awareness	Rhythm (rationality) 2	Degree	1.73	2.56	47.98	1.90	3.91	105.79	57.81
	Rhythm (rationality) 3	Degree	1.21	2.07	71.07	1.11	3.18	186.49	115.42
	Rhythm and muscle control	Degree	2.25	3.21	42.67	2.23	5.95	166.82	124.15
	forward skating	Degree	1.13	1.78	57.52	0.99	2.9	192.93	135.41
	Skating to the side	Degree	1.25	2.33	86.40	1.30	2.98	129.23	42.83
	Skating back and forth	Degree	1.36	2.11	55.15	1.40	2.99	113.57	58.42
	Accurate muscle control	Degree	1.10	1.67	51.82	1.12	3.18	183.93	132.11
	Awareness of Figures 1	Degree	0.76	1.13	48.68	0.74	2.08	181.08	132.4
	Awareness of Figures 2	Degree	1.43	2.06	44.06	1.49	3.65	144.97	100.91
	Auditory discrimination	Degree	1.40	2.09	49.29	1.29	2.96	129.46	80.17
	Compatibility between the eye and the hand	Degree	1.37	2.16	57.66	1.43	3.66	155.94	98.28
	Compatibility between the eye and foot	Degree	1.36	2.37	74.26	1.26	3.17	151.59	77.33

Table 5: Significant differences between the average of post measurements of control and experimental groups in the variables under research N = 10

			The Control Group		The experimental group		
S.N	Variables	Measurement unit	Arithmetic Average	Standard deviation	Arithmetic Average	Standard deviation	Value of "T"
Excessive	Hyperactivity	Degree	24.32	3.11	29.35	2.91	* 3.18
Activity	Attention Deficit	Degree	21.35	1.88	27.69	2.17	*6.98
	Eruptive	Degree	19.64	1.65	29.22	2.07	*11.44
Measure of	Physical self	Degree	5.23	0.98	6.36	1.23	*2.27
sensory-motive	Scope (Field) & Trends	Degree	3.98	0.92	6.81	1.06	*6.38
awareness	Rhythm (rationality) 1	Degree	2.01	0.44	3.66	0.55	*7.41
	Rhythm (rationality) 2	Degree	2.56	0.59	3.91	0.74	*4.51
	Rhythm (rationality) 3	Degree	2.07	0.46	3.18	0.58	*4.74
	Rhythm and muscle control	Degree	3.21	0.68	5.95	0.92	*7.57
	forward skating	Degree	1.78	0.38	2.9	0.44	*6.09
	Skating to the side	Degree	2.33	0.51	2.98	0.64	*2.51
	Skating back and forth	Degree	2.11	0.41	2.99	0.52	*4.20
	Accurate muscle control	Degree	1.67	0.39	3.18	0.53	*7.26
	Awareness of Figures 1	Degree	1.13	0.28	2.08	0.35	*6.70
	Awareness of Figures 2	Degree	2.06	0.55	3.65	0.69	* 5.70
	Auditory discrimination	Degree	2.09	0.46	2.96	0.62	* 3.56
	Compatibility between the eye and the hand	Degree	2.16	0.54	3.66	0.68	* 5.46
	Compatibility between the eye and foot	Degree	2.37	0.49	3.17	0.62	* 3.20

* The value of tabulated “T” at level 0.05 = 2.262

pre measurements of the control and experimental groups in the measurement of excessive activity measurement and sensory-motive awareness, which calculated value of "T" ranged between 0.09 and 1.53.

It is shown in Table 2 the existence of significant differences at significance level of 0.05 between both pre and post measurements of the control group, in variables of hyperactivity measurement and in some measurements of the sensory-motive awareness for the post measurement where the value of calculated "T" ranged between 1.76 and6.95.

It is shown in Table 3 the existence of significant differences in the significance level of 0.05 between both pre and post measurements of the experimental group concerning hyperactivity measurement and measure of sensory-motive awareness, for the post measurement, where the value of calculated "T" ranged between 4.21and 22.16.

It is shown from Table 4 the existence of improvement percentages between both pre and post averages in the excessive activity measurement and sensory-motive awareness measurement for experimental and control groups where improvement percentages of control group ranged between 10.57 and 212.82 and also the amount of differences between both control and experimental groups in improvement percentages of each of them 20.03: 146.7.

It is shown from Table 5 the existence of statistical significant differences at significance level of 0.05 among pre measurements of the control and experimental groups in excessive activity measurement and sensory-motive awarenessfor the fever of experimental group which calculated value of "T" ranged between 2.27 and 13.05.

DISCUSSION

It is shown from Table 1 the absence of statistical significant differences at significance level of 0.05 between the pre measurements of control and experimental groups in the measurement of hyperactivity (excessive activity) and the measure of sensory-motive awareness, which shows equality of the two groups of control and experimental research groups in all variables under discussion and research and this is helped the researcher to make sure the experimental control before the implementation of the procedures of proposed recreational program on the experimental group and comparing what is obtained from the results after the end of the application with the results of the traditional program of the ministry, which is implemented on the control group and hence to return any potential differences between the post measurements to the

proposed recreational program, for equivalence of both control and experimental groups during the pre measurements.

It is shown from Table 2 the existence of statistical significant differences at 0.05 between both pre and post measurements of control group in axes of excessive activity and in some tests of the measurement of sensory-motive awareness for the fever of post measurement. The researcher returns the differences during excessive activity measurement that the traditional program affects positively in reducing excessive activity with mentally disabled children, as the program theme by experts try to contribute as much as possible in giving children healthy behavior through the exercise of unacceptable activities which discharge kinetic energies of children and guide their behavior in the correct direction. Results of Table 2 illustrated that the amount of statistical differences was minor when compared to the proposed recreational program, where the researcher returns this to the presence of gaps which the conventional program cannot fill, concerning how to implement the requirements of the program as effectively as possible through the use of more attractive and interesting technique to view the content of the program on mentally handicapped children.

The researcher believes that the presence of statistical significant differences in some sensory-motive awareness variables is because the content of the traditional program also contributes directly to the development of many cognitive aspects of balance; rhythm and muscle control, as well as the skating and recognizing shapes and audio excellence, in addition to that consensus (compatibility) in its different forms. But the researcher sees that the level of significance of sensory motive awareness is almost weak, where the tabulated and the calculated values of "T" approached and hence, the high level of cognitive sense (sensory motive awareness) is simple when compared to the proposed recreational program, as we find no statistical significant differences in the self physical variable between both pre and post measurements due to the apparent lack of acquisition of physical behavior through the content of the program. This is consistent with what indicated by Helmy and Farhat [1] that children with intellectual disabilities are often unable to fulfill basic needs and thus weaken their sensory and motive competence and ability to social adaptation and the practice of various aspects of motive activity help greatly to integrate them in society and their interaction with him.

It is shown from Table 3 the existence of significant differences at level 0.05 between pre and post measurements of experimental group in the aspect of hyperactivity, for the post measurement. the researcher attributes this to using the children to recreational games with proper tools for that and this may contribute to the upgrading of functional and organic level to the different body systems, as well as the development of voluntary personality and features of mentally handicapped children with the children whom they do not suffer any kind of disability, therefore, there is an essential demand to put some exercises to commensurate with the capabilities and possibilities of those children. This is consistent with the results of Farouk [2], which aims to build a list to note the child's behavior, a program of activities of the kinetics for the treatment of some aspects of the disorder deficit attention associated with the activity of motor excess in children of first episode of the basic learning.

As for the of sensory motive awareness, there are also clear statistical significant differences between pre and post measurements of the experimental group in favor of telemetric, because the mode of exercise for recreational games using the proper tools had an active role in the development of sensory awareness for mentally handicapped as a result of providing more active of various kinetic positions offered by the practice games. This is in accordance with what indicated by Abdel-Hamid [3] to the importance of programs of developing perceptual motor in the early stage of life, because the child begins to seek for himself and the world around him through roaming and motor experiences and motor skills he learns are based largely on sensory motor activities.

Al-Kholi and Abdel-Fattah [4] and Al-Sadiq and El-Sherbini [5] demonstrated that games with purpose tools urge children to participate in physical activities, which may help the mentally handicapped children having fun and being attracted towards participation in physical activities and allow them to gain motor skills as well as dealing with a group skills, respect and appreciating others. Also, the developments of perceptual motive sensory of mentally handicapped children make them draw their movements and limit random movements' behavior and impulsion the attention of others.

It is clear from Table 4 the existence of improvement rates between the mean pre and post measurements in the hyperactivity measurement and the measurement of sense perception of control and experimental groups. Rates of improvement of the control group ranged between 86.40 and 10.57. Rates of improvement of the experimental group ranged between 30.60 and 212.82.

Differences between control and experimental groups in improvement rates of each of them ranged between 20:03 and 146.7. The researcher attributes the increase in the amount of improvement for the experimental group to the recreational proposal program content, which included many of the kinetic stories and primary games using the purpose tools that have contributed to the development of sensory awareness and reduced excess activity of mentally retarded children and reduce the random movements and rash behavior to that class of children. Zahran and Rashid [6] indicate that the effective use of the senses in the learning process and guidance is an essential basis because what children learn by senses remains in their brain for a longer period.

It is shown from Table 5 the existence of significant differences at 0.05 between the post measurements of control and experimental groups, for the experimental group in the measurement of hyperactivity. The researcher attributes these differences to the presence of positive effect of the recreational games using the purpose tools on the mentally handicapped to reduce their hyperactivity. Playing games regularly may help to develop cognitive skills they have, which is considered the most important thing to become principal of a healthy lifestyle and their availability to adapt physically. Games should contain set of competitive, popular and recreational in a collective form, with and without tools to increase self-confidence and to get rid of nervous tension and to develop the mentally disabled children's characters through developing a sense of individual success in the performance and competitiveness in the most active sports and the development of motor skills for the ability to control the different muscles of the body and repair skeleton deviations and give the disabled children to gain play and dealing with peers skills, besides to developing healthy habits and activity and satisfying the their primary needs to deal and interact with people around them. This lead to gain experiences of success and failure and increase the sense of social acceptance through participation in the success of the group, developing adaptation with themselves and with the society around them and this confirms the need of mentally handicapped children to recreational kinetic games. Al-Kholi and Abdel-Fattah [4] emphasized on the importance of games, using tools for children in this age to excite them through curiosity and to repair the child's personality that have been affected by a lot of frustration and continued failure. Also games develop mental senses, especially the perception. Because of the failure of the mentally disabled child in the study, success and excellence in practicing activity would satisfy his need to feel successful. This agrees with many previous [7-9] that children who suffer from mental disability, the proposed programs help in developing sensory-motive awareness and improving the behavior of harmonic behavior. The proposed programs for kinetic activities have a positive impact on reducing some aspects of attention associated with excessive motor activity in that group of children.

CONCLUSION

In light of the research and purpose and based on the procedures and treatments and statistical interpretation of the results and scope of the research community, the researcher reached the following conclusions:

- The existence of significant differences between pre and post measurements of the control group in sensory-motive awareness for the telemetric in reducing the hyperactivity of the mentally handicapped.
- The presence of significant differences between pre and post measurements of the experimental group in sensory-motive awareness and reducing the hyperactivity of the mentally handicapped for post-measurement.
- Increasing the rate of change in the rates of improvement between pre and post measurements for the control and experimental groups in sensory-motive awareness and reducing the hyperactivity of the mentally handicapped for the experimental group.
- The presence of significant differences between pre and post measurements for control and experimental groups in sensory-motive awareness and reducing the hyperactivity of the mentally handicapped for the experimental group.

Recommendations: In light of the demonstrated results of this research within the limits of the sample conducted by the experience of the researcher recommends the following:

- Proposing kinetic motor activities programs for mentally disabled children to equip them with dynamic sense and developing the sense of place and raise motivation towards school activities.
- Paying attention to the development of perceptual motor variables and the measure of hyperactivity in children because of their impact on raising the level of attention in children.

- Repeating opportunities for children with special needs to interact with their peers who have the same capacity through favorable mobile activities and a variety of small toys.
- The need for tools and equipment needed for different motor activity because of their significant influence on the development of physical fitness among children with intellectual disabilities, as well as applying various programs of the mentally handicapped in order to develop sensory-motive awareness and reducing the hyperactivity of the mentally handicapped.
- Setting up media programs to raise awareness of the importance of practicing motor activities in all schools and administrations of this group of children.

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