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Original article

EFFECT OF USING THE KINETIC COMPUTERIZED STORY WITH SIGN LANGUAGE ON SOCIAL INTERACTION AND SOME OF THE BASIC KINETIC SKILLS OF DEAF AND DUMB STUDENTS

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Abstract

Purpose Computerized motor story accompanied with signal languages is considered one of the most important methods directed for deaf and dumb students combining between achieving physical purpose representing in improving physical characteristics and developing them , as well as developing basic motor skills of child such as walk , running , jumping and throwing social purpose is represented in increasing social interaction for the student in terms of learning the principle of give and take .

Methods The research community included primary first graders in school of deaf and dumb at Minia city , their ages range between (7-8) years.

Results The used method Both the researchers used the experimental method because it is the appropriate one for this research nature , Both the researchers used of the experimental designs , that is the experimental design for two experimental groups by following pre-post measurements for both of them .

Conclusions skills of social interaction , basic motor skills " for deaf – dumb primary first graders greater than motor stories based upon narrating of class female teacher

Key words Computerized- Accompanied- Language

Introduction

Childhood stage is considered the most important stage in man's life , at this stage , child abilities develop , his talents mature , and susceptible to effect , guiding and formation , So , childhood care and interest in it's activities is one of influences contributing in societies children are characterized with right physical mental and emotional development , they are more Educated and cultured comparing with other societies , So workers in Educational learning process at primary stage should concern with planning and designing Educational programs that contain different types of experiences aiming at integrated development in all aspects.

Adde (Abdel Aziz 1998)Education by motion is the natural access for an Educational system based upon natural child need for learning , As long as child physique is the concrete physical frame of existence meaning the child depends , through his body on understanding his self through his practice of directed motor activity , since motor Education or Education aim at – through movement to bring out traditional school Education to more positive and efficient methods in forming and developing the child of his maximum potentials , abilities and talents.

(Ahmed 2009)Establishing cultural bases that appropriate with society culture and Environment in which the child lives , in addition to it's certain and efficient contribution in the process of social interaction for the child through his existence in a group by which he works to confront psychological and emotional experiences that interact with him to achieve psychological and social coordination and he can judge situations and difficulties in which he faces

Modern Education in our present time concerns with suitability between child nature and needs in his different development stages and society and it's requirements in it's continuous change stages , suitability mans that the child acquires experiences and skills helping him in coordinating his way in society so that he can be a positive citizen contributing in his home service these skills and experiences can't be achieved fruitfully and usefully unless they were real and actual , and it was a result of application , or viewing , or hearing or tasting or touching where it causes in himself , his mind , thinking and behavior an Effect or interaction directed according to his surrounded requirements . for the sake of this modern Education seeks to provide children with positive experiences and skills , the basic function is developing individual's mental fortune so that each experience has a clear right concept in his mind .

Add (Ashraf 1993) Deaf child has the right in Education , and it was recognized matter in all societies that allow the principle of opportunities equivalence for all normal – abnormal children , Deaf children differ from normal children , in that normal child when joining school knows his name , his age and has several language vocabularies that help him in expressing his intentions , all these make the process of Educating the deaf child a difficult task , because this child can't speak and can't hear

Add (Farag 2000) A caustic handicap results

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psychological effects that may cause great changes in personality , So , we find that individual general development is influenced with handicap , whether cognitively or affection ally , we find that these effects may increase from disabled to another , these effects are increase feeling of deficiency and helpless , feeling in security , Emotional unbalance , dominance of emotional behavior aspects , All these are shown in thoughts , compensation , projection , converse acts and justification Disabled defiance characteristics serves as a protection for him and his self threatening always from others directly as mockery or indirectly as neglect and insufficient interest.

Add (Mohamed 2001, Werner2006) From the first glance for previous characteristics and effects , we will see that sport activities will influence then directly , because most of these effects are due to society look , introversion and alienation in which disabled in put whether by his willing or against his will .

(Ibrahim 1998) confirmed that it is necessary to practice sport activities and involving disabled positively as one of efficient methods and psychological bases that must be put into consideration during dealing with disabled to limit negative psychological effects of handicap and consider limits and potentials of disabled in order not to feel disappointment as a result of failure in achieving the required performance.

(Omayyad 2000)From this , it is shown the importance of physical Education for deaf and dumps especially if it is supported with modern Educational technologies , and if it is used well , it develops and increase motor cognitive efficiency by individual – team activities , it stimulates learner's motivation to practice in varied competitions and events , and interest in group cooperation activities that increase social interaction because hearing loss leads to loosing contacts with others , they need to social maturity and it provides concrete physical base for cognitive thinking , reduces verbal students responses and makes students experiences standing long , It stimulates their self activity and helps than to perceive the goal of motor skill clearly by using their abilities on making use of sight sense in observing motor model.

Because of the importance of motor stories – as an Educational method and computer as Educational medium in achieving goals of physical Education and developing it through raising physical , skilful , cognitive and even psychological and social level , especially clear importance of pictured information and cognitions for deaf and dumps in addition to signal language as communication method m both the researchers felt the importance of finding the effectiveness of these determinants (computerized motor stories accompanied with signal language) in achieving and developing general goals of physical Education and special Education for deaf and dumps , Both the researchers felt that this study may help in clarifying the vital role in which physical Education performs in building the disabled .

Add (Samir1996, Wafaa2001) From previous mentioned , both the researchers see that the learner especially deaf and children always need to what attracts his attention , hence using varied methods and ways to attract learner's attention during learning makes him more efficient during teaching , So it is necessary to make use of both motor story and computer advantages in an integrated way through technological Educational environment based upon multimedia systems in a way achieving the desired goals in a high degree .

Aim of the research

The present research aims at showing the effect of computerized motor story accompanied with signal language on social interaction and some basic motor skills of primary deaf and dumb first graders

Procedures:

The used method

Both the researchers used the experimental method because it is the appropriate one for this research nature , Both the researchers used of the experimental designs , that is the experimental design for two experimental groups by following pre-post measurements for both of them .

Coefficients values for these variables of the sample as a whole and for the first – second experimental groups range between (1.23 : - 1.51) , it restricts between ± 3 indicating the normality of students distribution (the research sample) in these variables between first – second experimental groups in these variables , table (1) shows this .

Results

Table (1)
Differences significance between the first – second experimental groups in variables " under research " with non parameter Man – Whitney method (N = 20)

Variables Development Ratios	Measurement Unit	The first experimental group (N = 10)		The second experimental group (N = 10)		U	W	Z	Sig
		Sum rank	Mean rank	Sum rank	Mean rank				
development ratios									
Age	Year	102.00	10.20	108.00	10.80	47.00	102.00	0.23	0.82
Height	Centimeter	93.00	9.30	117.00	11.70	38.00	93.00	0.92	0.36
Weight	Kilogram	100.00	10.00	110.00	11.00	45.00	100.00	0.38	0.70
Hear	Decibel	96.50	9.65	113.50	11.35	41.50	96.50	0.65	0.51

Intelligence	Score	95.00	9.50	115.00	11.50	40.00	95.00	0.76	0.44
Social Level									
Social Level (economic)	score	103.50	10.35	106.50	10.65	48.50	103.50	0.11	0.91
Social Level (culture)	score	93.50	9.35	116.50	11.65	38.50	93.50	0.88	0.38
Total Degree	score	98.00	9.80	112.00	11.20	43.00	98.00	0.54	0.59
Scale of social interaction									
Communication	score	107.00	10.70	103.00	10.30	48.00	103.00	0.16	0.88
Anticipation	score	100.00	10.00	110.00	11.00	45.00	100.00	0.38	0.70
Perceiving role and acting it	score	108.00	10.80	102.00	10.20	47.00	102.00	0.23	0.82
Significant signs	score	113.50	11.35	96.50	9.65	41.50	96.50	0.65	0.51
Total Score	score	106.50	10.65	103.50	10.35	48.50	103.50	0.12	0.91
Basic motor skills for children									
An ability of balanced walk	number	110.50	11.05	99.50	9.95	44.50	99.50	0.43	0.67
An ability of running at different directions	number	106.50	10.65	103.50	10.35	48.50	103.50	0.12	0.90
An ability of broad jump from steadiness	number	104.50	10.45	105.50	10.55	49.50	104.50	0.04	0.97
An ability of rebound jump	number	104.50	10.45	105.50	10.55	49.50	104.50	0.04	0.97
An ability of rotation , then quick running	centimeter	114.50	11.45	95.50	9.55	40.50	95.50	0.72	0.47

It is shown from table (1) the following : There are no statistically significant differences between two research groups in variables (under research) since all values of error probability are greater than significance level of 0.05 indicating their equivalence in these variables .

Methods of data collection:

Both the researchers determined methods of data collection used in the research as follows :

Firstly: tests and measures:

1 – Intelligence test:

Both the researchers used " Man draw " test , it was prepared by American researcher " Good Enough 1920 " arabized by " (Fouad 1977), it was selected because it was applied on Egyptian environment and on the same age stage , it is economical and simple in it's application and children pounce it for their love in drawing , it also can be applied individually or collectively without restricting time , It enjoys high scientific coefficient where test validity correlation methods with achievement score was (0.94) , Reliability coefficients values of test ranged between (0.99 : 0.97) by applying test – retest application test consists of (77) vocabularies where a score is given for each part of body by which student drew , as well as dress descriptions and some other properties then vocabularies were summed , so sums of these vocabularies were total score of the student , that is total sum of test vocabularies (77) scores (7) .

2 – Scale of social level (economic - cultural) :

It is designed by " Samia " , this scale aims at recognizing social level " economic – cultural " of student's family , the scale consists of two dimensions " social level , economic " social level " cultural " , Each dimensions of the scale contains (12) vocabularies to know " number of family members – family income – it's available tools and apparatus – Education level of father and mother – cultural – welfare and sport practices of family " , the scale is corrected according to it's correction key , the scale has high scientific coefficients where the scale validity through validity of hypothesized construction with the method of internal consistency by finding correlation coefficients between the score of each dimension and total score of the scale was (0.69 , 0.71) according to order Reliability coefficient values of both scale dimensions were (0.64 , 0.67) according to order by applying reapplying the scale.

3 – Scale of social interaction:

(**Younis** 2004) designed this scale in purpose of measuring processes that link between group members with each other mentally and socially in needs, desires, methods, ends, cognitions and the like, the scale includes (50) statements , among them are positive statements in the axis direction , and some other are negative statements contrary to axis direction , these statements were distributed in (4) axes following are list dimensions .

Communication : this axis includes " displaying coherence " to raise other state , providing help and support , showing relief , signs of tension alleviation , showing satisfaction , agreement , showing acceptance understanding , obedience , number of axis statements (15) that are

positive statements : 1/2/17/38/44/47, negative statements: 11/12/18/24/29/30/39/46/50 .

Anticipation : this axis includes " decisions taking " self dependence – influencing others – expressing opinion – expressing feelings and desires , controlling the anticipated behavior – anticipating movements – axis statements are (10) that are :

positive statements : 9/10/13/26/34/35 . negative statements : 3/19/31/36 .

perceiving the role and acting it , this axis includes knowing duties and confirming them , participation in activity , the ability to act other roles , feeling with a bit of importance knowing what he can achieve , axis statements are (14) , that are :

Positive statements : 4/7/8/6/21/32/41/49 . Negative statements : 15/23/25/37/40/48 .
significant signs this axis includes language – facial expression , using hand , thinking unit , goals , thinking , through , feelings , execution , axis statements are (11) that are :
Positive statements : 14/20/27/42/43/45 . Negative statements : 5/6/22/28/33 .
The range of probable scores of the scale ranges between (50) scores as minimum to (150) as maximum. female teachers respond for each statement by evaluating students in the light of triple estimation balance as follows : positive statements : always appears estimated with (3) scores , appears occasionally estimated (2) scores , not appear estimated (1) score , the scale has high scientific coefficients where the scale validity was confirmed through structed validity and hypothesized construction validity with the method of internal consistency by finding correlation coefficients between the score of each statement and the scale total score , correlation coefficients range between (0.28 , 0.63) and all are statistically significant value of the scale reliability coefficient was (0.90) by calculating it with the method of half split .
4 – Battery of basic motor skills for children :
Both the researchers found tests of basic motor skills through:
Determining basic motor skills by reference study of scientific sources, and previous studies and researchers that deal with basic motor skills in purpose of determining these skills and considering appropriate tests to measure them .
Both the researchers prepared a form of experts opinion survey about appropriate motor skills for acoustic disabled student (deaf - dumbs) ranging from (7 - 8) years old, (Appendix 3) . Both the researchers presented this form on a set of experts of (10) working in the field of school physical Education , curricula and teaching methods (Appendix 1) , to know their opinion about basic motor skills that are appropriate for age stage " Under research " skills – that gained a percentage of 70% , were selected Experts opinions revealed determining (11) basic motor skills appropriate with the age stage (7 - 8) years , that are : (Walking – running – jump – throw – grasp – kicking – rolling the ball – balance – hoping – leap – rotating) where these skills gained a high percentage ranging from (80% : 100%) , In the light of this , both the researchers considered these skills are important for children (the research samples) , Both the researchers selected some of these skills representing in (walking – running – jump – balance – rotation) develop them for children (the sample research) .
Both the researchers , after determining motor skills that are thought for children (the research sample) they counted current tests for each skill , through knowing scientific references that dolt with tests measuring these skills and an sample similar to the research sample , Both the researchers found a battery of basic motor skills for children prepared by Kiko to measure basic motor skills desiring to develop that were arabized by Ahmed farouk , (Mahmud 2009).They were selected for it's modernity and appropriateness for the search's goal and sample . They consist of (5) tests as follows :
Test of balanced walk ability measurement unit is number.
Test of running ability at different directions measurement unit is number .
Test of broad jump from steadiness measurement unit is number.
Test of bounce jump in place measurement unit is number.
Test of rotation, then quick running ability measurement unit is centimeter.
The battery has high scientific coefficients where battery validity was confirmed by validity of tailed comparison by finding (Z) value .Between higher quartile and lower quartile for a sample of Basketball juniors ranging from (10 : 12) years , (Z) values of batteries ranged between (2.45 , 2.74) and all are statistically significant , Reliability of batteries coefficients values ranged between (0.80 , 0.96) by battery apply and reapply.
Scientific coefficients of tests and measures in the present research:
A – Validity:
To calculate validity of tests and measures " under research " both the researchers used validity of tailed comparison by applying it on a pilot sample from the research community and outside basic sample of the research of (20) students , students grades were ordered a secondly to determine the highest quartile to represent students of high grades in these tests and measures of (5) student with a percent of (25%) lower quartile to represent students of low grades in these tests and measures of (5) students with a percent of (25%) , Differences significance was calculated between two groups in tests and measures under research , (Z) values ranged between (2.42 , 2.71) and all are statistically significant ($P < 0.05$) and in the direction of higher quartile indicating the validity of these tests and measures and it's ability to differentiate between groups .
B – Reliability:
To calculate reliability of tests and measures under research , both of the researcher used the method of applying – reapplying test on sample of (10) students from the research community and non original sample with time difference between first – second application of (7) days for intelligence tests , scale of social level and level of social interaction , and (3) days for battery of basic motor skills for children , Both the researchers found correlation coefficients between two applications , correlation coefficients ranged between (0.70 : 0.95) and they are statistically significant ($P < 0.05$) indicating reliability of these tests and measures under research .

Secondly: computerized motor stories accompanied with signed language:
Both the researchers prepared a set of motor stories appropriate with the research goal as well as development characteristics of age stage (7 – 8) years , primary deaf – dumb first graders , by returning to the scientific references , as well as previous studies such, and some internet sites , the researcher found :
1 – General goal of motor stories:
motor stories aim at developing social interaction and some basic motor skills for primary deaf – dumb first graders .
2 – Behavior goals of motor stories:
After ending of presenting and applying motor stories, the student will be able on :
Acquiring the ability to know body and recognizing it's different parts.
Acquiring the ability on imagination and creation.
Performing some basic motor skills representing in balanced walk, running with all it's types , jump , rotation .
Reducing the severity of his tension through expressing situation related emotion.
Feeling happiness and enjoyment.
Establishing in activities and making dialogue and friendship with them.
Acquiring loyalty for group through playing in groups.
3 – Bases that were put into consideration for preparing motor stories:
Stories achieve it's desired goal.
Considering students needs gratification of movement and activity.
Interested in expression freedom and providing an opportunity to stimulate student imagination and motivate him towards invention and creation .
Steaming from student environment , so he can picture it's events and imitate it's heroes .
Providing appropriate place and potentials to execute stories and concerning with security factors keeping to student safety.
Interested in satisfying students dispositions of imagination, perception and creation .
4 – Content of motor stories:
Both the researchers could prepare (8) motor stories (appendix) including the following subjects :
Social interaction: including communication, anticipation , perceiving role and acting it , and significant signs .
Basic movements: including balanced walk , running at different directions , bounce jump in place , broad jump from steadiness , rotation then quick running .
Inventive and creative movements: including simple creative performance by using transitional and non transitional movement such as imitating animals, birds, transportation, trees and flowers.
Awareness with body and controlling: including recognized different body parts and relating performance of some motor activities with different body parts.
5 – Preparing preliminary image of motor stories:
In the light of general goal and behavior goals that are desired to achieve and the selected content, both the researchers prepared the preliminary image of motor stories and presenting it on experts of staff members at faculties of physical Education department of curricula and teaching methods and faculties of specific Education, department of Education technology (Appendix A) in purpose of surveying their opinions about:
The extent of appropriateness for it's desired goals.
The extent of appropriateness for students characteristics and requirements (the research sample) .
It's scientific accuracy and it's language formulation supported with signal language.
Both the researchers are Keen on meeting some experts during presenting stories on them so that they can discuss and answering their questions and following their opinions about these stories.
6 – final image of motor stories :
After reviewing and analyzing experts opinions, both the researchers calculated modifications by which experts suggested, so motor stories appeared in it's final image.
7 – General frame for implementing motor stories:
Implementation of motor stories lasted (8) weeks as much as unit weekly for each motor story , where each unit includes two lessons weekly with an average of 45 minutes for each lesson equivalent to (16) lessons during the period of experiment implementation , Organizational from of the lesson was as follows :
Administrative work (5 minutes) , in this part the researcher narrated the story on first experimental group students , class female teacher translated it with signal language for the students , As for students of experimental group , the same story was presented by computer .
Warm up (5 minutes): aiming at preparing all body muscles for work, this part id characterized with suspense and excitement and quick movement where is most warm based upon small games was used in most units .
Pre- presenting the story with application (20 minutes): in this part the story was re – narrated allowing the student to translate situations to sport movements in which he selected that accord with the story nature.
Conclusion (5 minutes): including cool down exercises to make the student returns to his normal state and contain „Relaxation Exercises"
8 - Evaluation methods:
In order to evaluate the extent of motor stories effectiveness on both social interaction and some basic motor skills for the research sample loath the researchers determined the following methods :
Scale of social interaction.
Battery of basic motor skills for children.
Pilot study:
Both the researchers conducted this study from 19/9/2011 to 28/9/2011 on a sample of (20) students from the research community and outside the original sample, it's goal was:

Recognizing the extent of stories appropriateness for students abilities and potentials.
Testing appropriateness of apparatus, instruments and place used for application.
Experimenting tools of data collection to know students understanding of these tools.
Recognizing the extent of aid workers understanding for their duties and tasks.
Recognizing problems that face implementation process.
Confirming scientific coefficients validity , reliability " for tools of data collection used in the research
This study revealed:
Stories appropriateness with students abilities and potentials.
Good understanding for aid workers and their good knowledge for their duties and tasks.
Tools of data collection used in the research are on an acceptable degree of validity and reliability .
Pre – measurements : Both the researchers conducted pre – measurements for both first – second experimental groups from 1/10/2011 to 3/10/2011 in variables of development ratios , age , height , weight , hearing measurement , intelligence , social , economic , and cultural level for the family , scale of social interaction for children , batteries of basic motor skills for children , Both the researchers put into consideration applying measurements uniformly for all students "under research".
Procedures of experiment implementation:
1 – Both the researchers met students of second experimental of groups before starting in applying the program to explain how to use computers , firstly in terms of how to operate , close and put CD ROM , how it works , explain it's uses , screens , and how to travel between it's units and keys functions , inside the program .
2 – In the beginning of program application, both the researchers started taking absence of second experimental group students. Viewing started by learners going with both researchers to computer laboratory at school in the beginning of the class, which is prepared near the place of practical application to assure not wasting time in watching the program . Viewing time was (10 minutes).
3 – After finishing viewing time , teachers move quickly to play ground , warm up starts for (5 minutes) , after finishing the story was re – narrated allowing the student to translate situations to sport movements in which he selects accorded with the story nature for (20 minutes) , after that students were given some cool – down exercises to return to their normal state " conclusion " of (5 minutes) .
Basic experiment : After finishing pre – measurement both the researchers applied motor stories based upon class female teacher narration with signal language on students for first experimental group and computerized motor stories accompanied with signal language for students of second experimental group from 8/10/2011 to 3/12/2011 , Both the researchers adhered during experiment implementation that the researcher helps class female teacher in teaching first – second experimental group through the period of experimental .
Post measurement: It was conducted for both first – second experimental groups from 4/12/2011 to 5/12/2011 in variables of scale of social interaction for children, batteries of basic motor skills for children; this was done immediately after finishing program application as a whole and with the same conditions followed in pre – measurement.

Discuss

Presenting the results, interpreting and discussing them:
The first hypothesis of the research is about the existence of statistically significant differences between mean scores of pre – post measurements for first experimental group members that used motor story based upon class female teacher in developing social interaction , basic motor skills " under research " and on behalf of post measurement , to as certain validity of this hypothesis , differences significance was calculated between mean scores of pre – post measurement with method of non parameter WILCOXN, as well as percentage of change , the following table shows the results .

Table (2)
Differences significance between mean scores of pre-post measurements for the first experimental groups in both of social interaction and basic motor skills " under research "
with non parametric wilcoxon method (N = 10)

Variables Development Ratios	Measurement Unit	pre measurements		post measurements		Z	Sig	Percentage of change%
		Mean	±S.D	Mean	±S.D			
Scale of social interaction								
Communication	score	22.8	2.9	27.90	2.96	2.91	0.004	22.37
Anticipation	score	16.2	2.78	20.10	2.64	2.71	0.007	24.07
Perceiving role and acting it	score	24.3	2.5	29.30	3.30	2.81	0.005	20.58
Significant signs	score	15.8	2.44	20.70	2.50	2.85	0.004	31.01
Total Score	score	79.1	4.51	98.00	4.00	2.81	0.005	23.89
Basic motor skills for children								
An ability of balanced walk	number	14.00	1.25	15.00	1.25	3.16	0.002	7.14

An ability of running at different directions	number	4.30	0.82	5.30	0.82	3.16	0.002	23.26
An ability of broad jump from steadiness	number	13.97	1.32	12.79	1.49	2.91	0.004	9.23
An ability of rebound jump	number	12.20	2.15	10.80	2.04	2.88	0.004	12.96
An ability of rotation , then quick running	centimeter	212.60	11.74	207.60	11.74	3.16	0.002	2.41

It is shown from table (2) that there are statistically significant differences between mean scores of pre – post measurement for first experimental group in all variables " under research " in direction of post measurement since all values of error probability are smaller than significance level (0.05) and changing rates between (2.41% : 31.01%) .

Both the researchers attribute this positive result for motor stories based upon class female teacher narration for students acquisitions in the first experimental group of the skills necessary for social interaction and it's development seriously through variation and shifting regulary between motor stories that lead in turn to achieve moderate amount of communication with other children and establish successful social relations with them in addition to continous and effective exchange of roles variation in these stories , they also provided fair amount of skills and experiences that contribute effectively in raising performance level of first experimental group students for what they contain of movements appropriate for their ages , and excitement banish ring boredom and tiredness of themselves , so making them pouncing at executing motor skills that is the subject of the study .

This accords with what (Kanaan 2008) indicated the method of motor story may be not familiar for children , so found a positive echo for them , and a new Educational learning experience attending their interest and meeting their needs that make them more effective in class , because the existence of imagination and excitement component , this accords with the results of (Wafaa 2008) that indicated to children performance for the method relied upon activity and experimentation , hence the first hypothesis of the research is achieve

The second research hypothesis concerns the existence of statistically significant differences between mean scores of pre – post measurements for members of second experimental group that used computerized motor stories accompanied with signal language in developing social interaction and basic motor skills under research on behalf of post measurement to ascertain validity of this hypothesis differences significance between mean scores of pre – post measurements with non parametric was calculated as well as change percentage Results are shown in the following table :

Table (3)

Differences significance between mean of pre – post measurements for the second experimental group in both social interaction and basic motor skills under research
with non parametric wilcoxon method (n = 10)

Variables Development Ratios	Measurement Unit	pre measurements		post measurements		Z	Sig	Percentage of change%
		Mean	±S.D	Mean	±S.D			
Scale of social interaction								
Communication	score	22.4	3.34	32.50	3.54	2.87	0.004	45.09
Anticipation	score	16.6	2.84	25.70	2.50	2.84	0.004	54.82
Perceiving role and acting it	score	23.9	2.77	32.80	2.74	2.83	0.005	37.24
Significant signs	score	15.3	2.31	24.90	1.79	2.97	0.003	62.75
Total Score	score	78.2	2.3	115.90	2.73	2.81	0.005	48.21
Basic motor skills for children								
An ability of balanced walk	number	13.9	1.1	16.60	1.43	2.85	0.004	19.42
An ability of running at different directions	number	4.3	0.67	7.90	0.57	2.91	0.004	83.72
An ability of broad jump from steadiness	number	13.99	1.33	10.35	1.13	2.82	0.005	35.17
An ability of rebound jump	number	12.4	1.71	9.10	1.52	2.92	0.004	36.26
An ability of rotation , then quick running	centimeter	209.3	9.25	197.10	7.05	2.82	0.005	6.19

From the results of table (3) in is shown that there are statistically significant differences between means of pre – post measurements for second experimental group in all variables " under research " and in the direction of post measurement , since all values of error probability is smaller than significance level 0.05 change rates ranged between (6.19% : 83.72%) .

Both the researchers attribute these results to significant effective impact of motor stories based upon computer , since motor stories allow an opportunity for the child of movement freedom and upon broader and deeper aspects of creative and logical thinking , helping him to express himself through his movement and narrate the story with his method and develop his imagination in addition to it's contribution in developing his encyclopedia , so he acquires several concepts and recognizes his surrounded environment, he is familiar on participation , team work and team

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spirit , Both the researcher attribute this result also to computer properties , since it works on creating good educational environment through involving all students sensories , simulating their motivation for learning since viewing motor stories in computer get rid completely boredom , because it makes the student feels his value , and personality without female teacher intervention during presentation process using signal language helped on establishing the image and completing what is deficient in visual perception of presented motor stories and working on increasing feedback and approximating the image in learner's mind from Education situation reality .

Discuss. This accords with what Farag Abdel (Hameed 2000), Kareman (Bedeer 2004) indicated that by motor story , preliminary and basic movements can be educated , not given in it's static traditional form , through motor story , teacher's task in executing enjoyable and useful Educational class , study of " (Rasha 2009) confirms that computerized motor story has an effective impact on both self – concept and the ability on creative thinking and some basic motor performances for primary first graders , hence research second by hypothesis is achieved .

The third hypothesis of the research was about the existence of statistically significant differences between mean scores of two post measurements for members of first experimental groups in developing social interaction and basic motor skills " under research " on behalf of the second experimental group to ascertain validity of this hypothesis , differences significance between mean scores of pre – post measurements with non parametric man – Whitney method , as well as differences in change percentages , results are shown in the following table

Table (4)

Differences between mean scores of two post measurements for members of first experimental groups in developing social interaction and basic motor skills " under research " with non parameter Man – Whitney method (N = 20)

Variables Development Ratios	Measurement Unit	The first experimental group (N = 10)		The second experimental group (N = 10)		U	W	Z	Sig	Percentage in change rates %
		Sum rank	Mean rank	Sum rank	Mean rank					
Scale of social interaction										
Communication	score	55	5.5	155	15.5	0.00	55	3.80	0.00	22.72
Anticipation	score	55	5.5	155	15.5	0.00	55	3.79	0.00	30.75
Perceiving role and acting it	score	55	5.5	155	15.5	0.00	55	3.78	0.00	16.66
Significant signs	score	55	5.5	155	15.5	0.00	55	3.80	0.00	31.74
Total Score	score	55	5.5	155	15.5	0.00	55	3.80	0.00	24.32
Basic motor skills for children										
An ability of balanced walk	number	60.5	6.05	149.5	14.95	5.5	60.5	3.43	0.00	12.28
An ability of running at different directions	number	55	5.5	155	15.5	0	55	3.90	0.00	60.46
An ability of broad jump from steadiness	number	153	15.3	57	5.7	2	57	3.63	0.00	25.94
An ability of rebound jump	number	146	14.6	64	6.4	9	64	3.15	0.00	23.30
An ability of rotation , then quick running	centimeter	139	13.9	71	7.1	16	71	2.57	0.00	3.78

From results of table (4) it is shown that there are statistically significant differences between mean scores of two post measurements for first – second experimental groups in all variables " under research " and in the direction of second experimental group since all values of error probability are smaller than significance level 0.05 Differences between change rates ranged between (3.78% : 60.46%) .

Both the researchers attribute this result that computer helped on developing information achievement and the ability to imagine and analyze movement since it provides visual images and analyze movement since it provides visual images and drawings whether they were static or dynamic accompanied with story narration representing in signal language related with these images . this image shows relationships between different body parts during performance and body relation with execution place, as well as movement forms during all performance stages , it makes child acquires desired behavioral traditions .

Story can provide indirectly the required good model of acquire , these traditions and broader his social relationships circle , and satisfy his need for belonging feel himself as autonomous self , not running in his parents circuit , not relying on them in everything , make him acquiring right social concepts and show his role between colleagues .

Computer is characterized with simple and excitement method of presentation with considering coordination in presentation , good language formulation and music support , all these made motor stories based upon computer distinctive than motor stories based upon class female teacher narration , since it because able to construct basic know lodgment of student appropriate with his perceived thoughts and information , this accords with what (Mohamed 2004) indicated that there is an Educational values in child's life in purpose of raising him properly , since it contains static and dynamic draws , it is an important method to imprint Educational , morale , cultural and social concepts in child bottom of his heart because they provide information for them in attractive dramatic model , and it is the favorites subject on their part by their nature they love expressive image , and fine color attracts them , they interact with it , by these stories and other , children learn how to order thoughts in sequence form , since they have opportunities to watch stories because of their creative outcome better then children who don't have similar opportunities , so research third hypothesis is achieved .

Conclusions. In the light of research results, both the researchers recommend the following:

1 – The necessity of interesting in developing methods and educational medium in physical Education class for deaf – dumb students.
2 – Interested in making programs and methodological plans appropriate with deaf – dumb students so that they can accord with their surrounded environment and follow it in terms of development and advancement.
3 – The necessity of researchers direction in the field of physical Education teaching methods and education technology in order to relate with each new and modern in the field of education technology and operating it in the field of physical Education class especially foe special classes including deaf and dumb .
4 – relaying on the method of motor story whether based upon female teacher narration or computerized motor story in developing some social interaction skills , basic motor skills for deaf – dumb first graders .
5 – Qualifying class female teachers on using motor story method whether based upon female teacher narration or computerized motor story and providing them with prepared models for motor stories helping them in teaching .
6 – conducting further researches and studies about other methods to develop skills of social interaction and improving some basic motor skills in fields of physical Education in general and disabled in particular

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