

Physical Therapy Department for Growth and Development Disorder in children and Its Surgery

Doctoral Degree
2012

Author	:	Amira Hussin Hussin Mohamed.
Title	:	Influence of Classroom Furniture on Posture of School Age Children.
Dept.	:	Physical Therapy Department for Growth and Developmental Disorder in Children and its Surgery.
Supervisors	1.	Amira Mohamed Al-Tohamy.
	2.	Nagui Sobhi Nassif.
Degree	:	Doctoral.
Year	:	2012.
Abstract	:	
The purpose of this study was to determine if the classroom furniture would be matched with International standards for school age children's dimensions and to evaluate the impacts of school furniture on the posture of school age children. Methodology: Two hundred normal children from both sexes participated in this study. Their age ranged from 7-9 years old. Their body mass index ranged from 18.5 to 24.9 kg/ m². The used school furniture workstations were all of wooden flat desks and benches. The recorded photographs were taken from sagittal view while the child was in standing and sitting positions they were analyzed by AutoCAD program. The posture assessment was measured from standing position. The user furniture and school furniture (desk and bench) dimensions were measured from sitting position. The school furniture dimensions and user furniture dimensions were used to define the range in which each furniture dimensions was considered appropriate according to ergonomics principles. Results: It is revealed statistically significant relationships between furniture dimensions and posture analysis variables. It also confirmed significant impacts of the furniture dimensions on the posture variables. Conclusion: From the obtained results of this study, it can be concluded that the Egyptian classroom furniture did not match with the international standards and student's dimensions. Also, it can be concluded that there was significant impacts of school furniture on the posture of these students.		
Key words	1.	Classroom furniture.
	2.	School age children.
	3.	Anthropometry.
	4.	Posture.
	5.	Children.
	6.	Biomechanics.
Arabic Title Page	:	تأثير الأثاث المدرسي على القوام عند أطفال المدارس.
Library register number	:	2929-2930.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT FOR GROWTH AND DEVELOPMENT
DISORDER IN CHILDREN AND ITS SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Mohamed El Sayed Mohamed Khalil.
Title	:	Treadmill Training Versus Arm Ergometry on Ventilatory Function in Children With Asthma.
Dept.	:	Physical Therapy Department for Growth and Developmental Disorder in Children and its Surgery.
Supervisors	1.	El Ham El Sayed Salem.
	2.	Gamal Abd El Naser Yamama.
Degree	:	Doctoral.
Year	:	2012.
Abstract	:	
The purpose of this study was to evaluate the effect of treadmill training versus arm ergometry on ventilatory functions in children with asthma. Children with asthma are prone to developing respiratory infections which include bronchitis and pneumonia because of their sensitive lungs recovering from a cold or the flu takes longer. Asthma leads to missed school and multiple visits to the emergency. Fifty four children with asthma aged from 10 to 14 years participated in this study. They were classified randomly into 2 groups of equal number. Discovery diagnostic spirometer was used to measure the ventilatory functions. Forced Vital Capacity (FVC), Forced Expiratory Volume (FEV1), Maximum voluntary ventilation (MVV) and Peak Expiratory Flow Rate (PEFR) were measured before and after three Successive months of application of the selected programs. The measured variables were significantly improved, showing that treadmill training and arm ergometry could improve the ventilatory functions in children with asthma.		
Key words	1.	Asthma.
	2.	Ventilatory functions.
	3.	Treadmill.
	4.	Arm Ergometry.
	5.	Children.
Arabic Title Page	:	تدريبات سير المشي المتحرك مقابل تدريبات العجلة الثابتة للذراعين على وظائف التهوية الرئوية في الأطفال المصابين بالربو.
Library register number	:	2891-2892.

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Author	:	Reham Abd el Momem Abd el Monem Abou el Kheir.
Title	:	Evaluation of Gross Motor Development in Preterm Infants Through the First Year of Life.
Dept.	:	Physical Therapy Department for Growth and Developmental Disorder in Children and its Surgery.
Supervisors	1.	Amira Mohamed El Tohamy.
Degree	:	Doctoral.
Year	:	2012.
Abstract	:	
<i>The purpose of this study was to provide qualitative and quantitative analysis of gross motor development in preterm infants through the first year of life. Low risk preterm infants are subjected to factors as prematurity & extra uterine growth, which lead to a higher risk of developing motor delay in comparison with full term infants. This study was designed: 1) to evaluate gross motor development in low risk preterm, and 2) to determine whether there was difference in motor development between low risk preterm and full term infants. Two hundred and twenty infants were evaluated. They were classified into three groups according to age; each group contained two unequal sub groups. Newborn (Group A): contained twenty preterm (Gestational Age $\leq 28 \pm 7$ days to $\geq 36 \pm 6$ days) & Forty full term (Gestational Age $\leq 37 \pm 7$ days to $\geq 40 \pm 7$ days). Six-month old (Group B) & twelve- month old (Group C) each contained thirty preterm and fifty full terms. Infants were evaluated by Alberta Infant Motor Scale (AIMS), Motor & Social Development Scale (MSD) & Auto CAD analysis. All the measured parameters showed significant difference in Gross motor development. GA measured angles were Shoulder, elbow, Knee & ankle angle joints in side lying, trunk inclination & hip joint angle in sitting and hip, knee & ankle joint in standing. All measured angles showed significant difference except knee and ankle angle joint in standing showed no-significant difference. In conclusion, preterm infants had non-optimal motor development throughout the first year of life with maximum difference at six-month of age.</i>		
Key words	1.	Preterm infant.
	2.	Alberta Infant Motor Scale.
	3.	Motor Social Development.
	4.	Motion analysis
	5.	Children.
	6.	Infant.
Arabic Title Page	:	تقييم النمو الحركي للأطفال المبتسرين خلال السنة الأولى من العمر.
Library register number	:	2985-2986.

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Author	:	Reham Saeed Mahmoud Al-Sakhawi.
Title	:	Effect of camera mouse system training program on balance in spastic diplegic children.
Dept.	:	Physical Therapy Department for Growth and Developmental Disorder in Children and its Surgery.
Supervisors	1.	Faten Hassan Abd El-Aziem.
	2.	Mohamed El-Sayed Alawady.
	3.	
Degree	:	Doctoral.
Year	:	2012.
Abstract	:	
Purpose: The present study was conducted to investigate the effect of Camera Mouse system training program on balance in spastic diplegic children. Subjects and Methods: Thirty spastic diplegic cerebral palsied children of both sexes ranging in age developmentally from twelve to eighteen months were assigned into two groups of equal number (A and B). Group A received selective physical therapy program in the form of balance exercises. Group B received same exercises as group A in addition to Camera Mouse System. Balance Master System was used to evaluate static and dynamic balance of all children in both groups before treatment, after three successive months of treatment and another three months. Results: the results recorded before treatment showed no significant difference between two groups, also results revealed significant difference of all measured variables of static and dynamic balance after six months of treatment in children of group B compared to group A. Conclusion: Camera Mouse system training program could be used to improve balance during standing and walking in spastic diplegic cerebral palsied children.		
Key words	1.	Spastic Diplegia.
	2.	Balance.
	3.	Balance Master System.
	4.	Camera Mouse System.
	5.	Children.
Arabic Title Page	:	تأثير برنامج تدريب جهاز الكاميرا ماوس على التوازن لدى الاطفال المصابين بالشلل المخي المتصلبي المزودج.
Library register number	:	2811-2812.

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Author	:	Shymaa Mahmoud Maaty.
Title	:	Efficacy of cognitive training on visual motor integration in Down's syndrome children.
Dept.	:	Physical Therapy Department for Growth and Developmental Disorder in Children and its Surgery.
Supervisors	1.	Faten Hassan Abdle-Azim.
	2.	Ehab Ragaa Abdel Raoof.
Degree	:	Doctoral.
Year	:	2012.
Abstract	:	Background: the purpose of this study was to investigate the effect of cognitive training on visual motor integration in Down's syndrome children .Subjects and Methods: forty Downs syndrome children were included in this study. They were divided randomly into two equal groups; the study group and the control group. The mean values of age of both study and control groups were 7.3 ± 0.48 and 7.6 ± 0.52 respectively. The fine motor skills of participated children were assessed by using grasping and visual motor integration subtests of the PDMS-2. Attention and concentration were evaluated by a computer program in RehaCom System. Assessment was done before and after application of treatment program for six months for two times per week. All participated children in this study received the same visual motor integration training program which included a specially designed exercises program. in addition; children in the study group received attention and concentration program training by RehaCom system, The length of the entire session for both groups lasted one hour for two times per week, over a period of six successive months. Results: Comparison of visual motor integration, grasping and fine motor quotient items of PDMS2 pre and post treatment in each group revealed that a significant improvement was found in the control group children while in the study group a highly significant improvement was found when comparing their mean values of all variables. The results of attention and concentration training program by Rehacom system indicated a significant improvement of all participated children in the study group in all measuring variables. In the control group; a non-significant improvement was found in all variables except in the level of attention and concentration program. Conclusion: attention and concentration training program improved visual motor integration abilities, and cognition in children with Down syndrome which if added to a specially designed exercises program for visual motor integration abilities will help in their cognitive upgrading.
Key words	1.	Down syndrome.
	2.	Visual motor integration.
	3.	Cognitive training.
	4.	Children.
Arabic Title Page	:	تأثير التدريب المعرفي على التكامل الحركي المرني عند الأطفال المصابين بمتلازمة داون.
Library register number	:	3053-3054.