

Πρόγραμμα Μεταπτυχιακών Σπουδών Εξειδίκευσης
Του Τμήματος Ελληνικής Φιλολογίας του Δημοκριτείου Πανεπιστημίου Θράκης
σε συνεργασία με το
ΕΚΕΦΕ Δημόκριτος – Ινστιτούτο Πληροφορικής και Επικοινωνιών
με τίτλο: «Εξειδίκευση στις Τ.Π.Ε. και Ειδική Αγωγή – Ψυχοπαιδαγωγική της ένταξης»

**ΑΝΙΧΝΕΥΣΗ ΚΙΝΗΤΙΚΩΝ ΔΥΣΚΟΛΙΩΝ ΜΕΣΩ ΤΗΣ ΑΞΙΟΛΟΓΗΣΗΣ ΤΗΣ
ΣΥΝΑΡΜΟΓΗΣ ΤΩΝ ΑΝΩ ΑΚΡΩΝ**

**DETECTION OF MOVEMENT DIFFICULTIES THROUGH ASSESSMENT OF
THE UPPER LIMB COORDINATION**

της

Ορσοπούλου Αλεξάνρας Ελευθερίας

Μεταπτυχιακή διατριβή που υποβάλλεται
στην τριμελή επιτροπή για την απόκτηση του μεταπτυχιακού τίτλου του
Προγράμματος Μεταπτυχιακών Σπουδών Εξειδίκευσης
του Τ.Ε.Φ – Δ.Π.Θ. σε συνεργασία με το Ε.Κ.Ε.Φ.Ε. Δημόκριτος – Ινστιτούτο
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ένταξης»

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ΑΝΙΧΝΕΥΣΗ ΚΙΝΗΤΙΚΩΝ ΔΥΣΚΟΛΙΩΝ ΜΕΣΩ ΤΗΣ ΑΞΙΟΛΟΓΗΣΗΣ ΤΗΣ ΣΥΝΑΡΜΟΓΗΣ ΤΩΝ ΑΝΩ ΑΚΡΩΝ

ΠΕΡΙΛΗΨΗ

Σκοπός της παρούσας έρευνας ήταν να διερευνηθεί εάν οι ενότητες της επιδεξιότητας των χεριών και συναρμογής των άνω άκρων της δέσμης κινητικής αξιολόγησης Bruininks-Oseretsky Test of Motor Proficiency, Second Edition BOT-2) (Bruininks & Bruininks, 2005) μπορούν να αξιοποιηθούν για την ανίχνευση κινητικών δυσκολιών σε παιδιά προσχολικής και πρώτης σχολικής ηλικίας. Στην έρευνα συμμετείχαν 53 παιδιά (26 αγόρια και 27 κορίτσια), ηλικίας 51-87 μηνών (ΜΟ=67,72 μήνες), τα οποία φοιτούσαν σε ιδιωτικό σχολείο του Νομού Αττικής, στην περιοχή του Παλαιού Φαλήρου. Αρχικά τα παιδιά κατανεμήθηκαν σε επίπεδα κινητικής επιδεξιότητας (ΚΕ) (πολύ χαμηλή, χαμηλή, μέτρια, υψηλή και πολύ υψηλή), με βάση την αξιολόγηση του καθηγητή Φυσικής Αγωγής για τους συμμετέχοντες Α΄ Δημοτικού και της εκπαιδευτικού της τάξης για τα παιδιά προσχολικής ηλικίας. Έπειτα, όλα τα παιδιά αξιολογήθηκαν με τη δέσμη BOT-2 (Bruininks & Bruininks, 2005) και συγκεκριμένα στις ενότητες Επιδεξιότητα χεριών και Συναρμογή άνω άκρων. Στη συνέχεια, εξετάστηκε η σύνδεση των αποτελεσμάτων των ενοτήτων με τα χαρακτηριστικά του δείγματος όπως το φύλο, η ηλικία, και η ΚΕ. Από τις αναλύσεις συνδιακύμανσης που εφαρμόστηκαν φάνηκε ότι η ηλικία συνδέθηκε στατιστικά σημαντικά με τις επιδόσεις των παιδιών, ενώ το φύλο όχι. Επίσης, διαπιστώθηκαν στατιστικά σημαντικές διαφορές μεταξύ των κατηγοριών ΚΕ τόσο στη συνολική βαθμολογία των ενοτήτων όσο και στις επιμέρους δοκιμασίες. Ειδικότερα, η ομάδα με την υψηλή ΚΕ σημείωσε την υψηλότερη συνολική βαθμολογία τόσο στην επιδεξιότητα χεριών ($30,63 \pm 4,54$) όσο και στη συναρμογή άνω άκρων ($32,31 \pm 4,60$), από την ομάδα με μέτρια ΚΕ (Επιδεξιότητα χεριών= $23,07 \pm 5,94$, Συναρμογή των άνω άκρων= $21,93 \pm 7,45$) και χαμηλή ΚΕ (Επιδεξιότητα χεριών= $20,14 \pm 4,84$, Συναρμογή των άνω άκρων= $15,86 \pm 8,23$) η οποία σημείωσε τη χαμηλότερη συνολική βαθμολογία. Όσον αφορά τις επιμέρους δοκιμασίες στην ενότητα της επιδεξιότητας χεριών σημαντικά στατιστικές διαφορές εντοπιστήκαν μόνο στη δοκιμασία μεταφορά κερμάτων μεταξύ των παιδιών με υψηλή και χαμηλή ΚΕ. Αντίθετα, στη συναρμογή άνω άκρων

στατιστικά σημαντικές διαφορές μεταξύ όλων των κατηγοριών ΚΕ υπήρξαν στις δοκιμασίες υποδοχής μπάλας με τα δύο χέρια, ρίψη και υποδοχή μπάλας με το ένα χέρι, ντρίμπλα με το ένα χέρι και στη ρίψη μπάλας σε στόχο. Από τα παραπάνω, συμπεραίνεται ότι οι ενότητες επιδεξιότητα χεριών και συναρμογή άνω άκρων του BOT-2 (Bruininks & Bruininks, 2005), μπορούν να εφαρμοστούν στο σύνολό τους, ώστε να εντοπιστούν ενδεχόμενες κινητικές δυσκολίες σε παιδιά προσχολικής και πρώτης σχολικής ηλικίας και να σχεδιαστεί η κατάλληλη γι' αυτά παρέμβαση, ωστόσο αυτό δεν ισχύει για κάποιες επιμέρους δοκιμασίες.

Λέξεις κλειδιά: ανίχνευση, BOT-2, επιδεξιότητα χεριών, συναρμογή άνω άκρων, κινητικές δυσκολίες.

DETECTION OF MOVEMENT DIFFICULTIES THROUGH ASSESSMENT OF THE UPPER LIMB COORDINATION

ABSTRACT

The purpose of the present study was to investigate whether the BOT-2 (Bruininks & Bruininks 2005) subtests of Manual Dexterity and Upper Limb Coordination can be used to detect motor difficulties in preschool and first-school age children. Fifty three children participated in the study (26 boys and 27 girls), aged 51-87 months old (MO = 67.72 months) from Athens attending a private school, in the area of Palaio Faliro. Firstly, the children were sorted into Motor competence (MC) groups (very low, low, medium, high and very high), as assessed by the Physical Education teacher for the students of A Primary and Classroom teachers for pre-school children. Then, all children were evaluated with the Manual Dexterity and the Upper Limb Coordination subtest of the BOT-2 (Bruininks & Bruininks, 2005). Next, we examined the association between the scores of the participants and their characteristics such as sex, age, and MC. From the covariance analyses that were applied, it was revealed that age was statistically significantly associated with children's performance, while gender was not. Also, statistically significant differences were found between the performance of children with different MC level both in the total subtest scores and in several individual items. In particular, the group with the high MC presented the highest total score for both Manual Dexterity (30.63 ± 4.54) and Upper Limb Coordination subtest (32.31 ± 4.60), compared to the group of moderate MC (Manual Dexterity = 23.07 ± 5.94 , Upper Limb Coordination = 21.93 ± 7.45) and low MC (Manual Dexterity = 20.14 ± 4.84 , Upper Limb Coordination = 15.86 ± 8.23). Regarding individual items, in manual dexterity subtest, statistically significant MC differences were identified only on "transferring coins" item. In the upper limb coordination subtest, statistically significant differences were found in items such as catching a ball with both hands, throwing and holding a ball with one hand, dribbling with one hand and throwing a ball at a target. The findings of the present study showed that the Manual Dexterity and

Upper Limb Coordination subtest scores of BOT-2 (Bruininks & Bruininks, 2005) can be applied to detect movement difficulties in preschool and first-school age children, however, this is not the case for some individual items.

Keywords: detection, BOT-2, manual dexterity, upper limb coordination, movement difficulties

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