

Uspešnost učenja plavanja po konceptu Halliwick pri otrocih z zmanjšanimi zmožnostmi

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Uvod: Plavanje je eden izmed primarnih načinov gibanja, ki pa zahteva dobro usklajeno delovanje vsega telesa in hkrati ob tem ponuja več pozitivnih učinkov na telo. Osebe, ki imajo zmanjšane zmožnosti pri gibanju ali učenju, imajo pri učenju gibanja v vodi in plavanja pričakovano več težav kot zdravi vrstniki otrok ali odraslih oseb. Tem osebam je namenjeno učenje plavanja in samostojnega gibanja v vodi po konceptu Halliwick, katerega uporaba je razširjena po vsem svetu (1–3). Ocenjevanje plavalčevih sposobnosti je sestavni del Halliwickovega koncepta učenja plavanja. Ocenjevanju je namenjen sistem štirih značk, za natančnejše ocenjevanje plavalnih sposobnosti pa se uporablja test Swimming With Independent Measurement (SWIM) (4). Namen: Podatkov o učinkovitosti učenja plavanja po konceptu Halliwick v dostopni literaturi nismo našli, zato smo želeli s testom SWIM preveriti, kakšen je napredek otrok pri plavalnih veščinah, ki so v program vključeni med enim šolskim letom. Zanimal nas je splošen napredek in to, pri katerih veščinah so otroci najbolj napredovali. Zanimalo nas je tudi, ali je bil napredek odvisen od starosti in osnovne diagnoze plavalca ter od pogostnosti vadbe. **Metode:** V študijo smo vključili rezultate ocenjevanja plavalnih veščin otrok, ki so bili v program učenja plavanja po konceptu Halliwick vključeni v obdobju od oktobra 2011 do junija 2012 na Univerzitetnem Rehabilitacijskem Inštitutu Republike Slovenije – Soča (URI – Soča). Iz dokumentacije smo zbrali podatke o številu otrok, spolu, starosti, diagnozi, začetni in končni oceni plavalnih veščin s testom SWIM (4) ter o številu ur, ki so jih opravili v tem obdobju. Pri ocenjevanju s testom SWIM je mogoče doseči 77 točk, kar pomeni, da je plavalec popolnoma samostojen in varen v vodi. **Rezultati:** V program učenja plavanja, ki poteka v skupini, je bilo vključenih 15 otrok z različnimi diagnozami in posledičnimi težavami na področju gibanja in/ali učenja. Deset otrok je redno prihajalo na vadbo in opravilo tudi začetno in zaključno ocenjevanje s testom SWIM. Pet otrok iz skupine je bilo v šolskem letu 2011/12 v program vključenih prvič, drugi pa so se programa udeleževali že v prejšnjih sezonah. Ocenjeni otroci so bili v povprečju stari 6,1 leta (od 3,3 do 14,2 leta). Povprečni rezultat testiranja s testom SWIM je pri prvem testiranju znašal 32 točk (SO 14,6), pri drugem pa 44 točk (SO 12,3). Skupina je v povprečju napredovala za 7 točk. Otroci, ki so bili v program vključeni prvič, so v povprečju napredovali za 12 točk, drugi, ki so se učili plavanja že v prejšnjih sezonah, pa za 5 točk. V povprečju so se otroci udeležili plavalne ure 18-krat (SO 4,14). Skupina petih otrok, ki je bila vključena prvič, je na vadbo prišla povprečno 16-krat (SO 2,88), drugi pa 22,5-krat (SO 3,86). Največji napredek so dosegli pri izstopu iz vode in vzdolžnem vrtenju, dobro so napredovali tudi pri vzdrževanju ravnotežja, prečnem in sestavljenem vrtenju ter razvoju plavalnih veščin. **Zaključki:** Otroci v skupini so napredovali pri usvajanju vseh posameznih veščin, vendar najbolj pri učenju vstopa in izstopa iz bazena, pri obvladovanju ravnotežja, prečnem vrtenju naprej in nazaj ter vzdolžnem vrtenju. Učenje vstopa v bazen je deloma vezano na psihično prilagoditev na vodo, deloma pa na zmožnosti na področju gibanja. Podobno je učenje izstopa iz bazena večinoma vezano na sposobnosti gibanja, zato se ga otroci, ki imajo na tem področju dobre sposobnosti, lahko hitro naučijo.

Ključne besede: zmanjšane zmožnosti, Halliwick, plavanje, ocenjevanje, SWIM.

Effectiveness of Halliwick concept based program of teaching swimming in children with disabilities

Background: Swimming is one of the primary modes of movement. It requires well-coordinated activity of the entire body and has several positive effects on the later. Compared to their healthy peers, learning to move in water and to swim represents a much bigger challenge for persons with reduced learning capacity and/or motor difficulties. The Halliwick concept was designed to facilitate the learning of swimming and moving in water in persons with disabilities and is today a world-wide accepted method (1-3). Assessment of swimming ability is an integral part of the Halliwick concept. The system of Halliwick badges is used, which has recently been supplemented by the Swimming With Independent Measurement (SWIM) (4). **Purpose:** To our knowledge no empirical data on the effectiveness of learning swimming through the Halliwick concept has been published so far. The aim was to determine the swimming skills progress in children who were involved in the program during one school year using SWIM. We were interested both in the general progress and in which skills the children have advanced the most. We were also interested in the relation of the progress to the child's age, his/her primary diagnosis and the swimming exercise frequency. **Methods:** The study includes the results of swimming skills assessment for children who were included in the Halliwick concept program at the University Institute for Rehabilitation of the Republic of Slovenia – Soča (URI - Soča) in the period from October 2011 to June 2012. We collected data on children gender, age, diagnosis, initial and final swimming skills according to SWIM test and the number of training hours in the given period. A total of 77 points can be achieved in the test, meaning that the swimmer is totally independent and safe in water. **Results:** In total 15 children diagnosed with various conditions, which affect their motor and learning capabilities, were included into the group swimming program. Out of these 10 children attended the training on a regular basis and performed the initial and final swimming skills assessment through SWIM tests. Five children were included into the Halliwick concept program group for the first time in the school year 2011/12, while the rest had already attended the program in previous years. The average group age was 6.1 years (from 3.3. to 14.2 years). The average SWIM test score in the initial evaluation was 32 points (SD 14.6), while in the final evaluation the average score was 44 points (SD 12.3). In average the group progress was 7 points. The children who were involved in the program for the first time improved on average by 12 points. The children who had already attended the program in previous years improved on average by 5 points in the last year. On average the children attended 18 swimming lessons (SD 4.14). The children who were involved in the program for the first time, attended 16 swimming lessons (SD 2.88) on average, while the rest attended 22.5 lessons (SD 3.86) on average. The most progress was achieved in exit from water and in longitudinal rotation. Substantial progress was also achieved in balance management, transverse and composite rotation and development of swimming skills. **Conclusion:** The children in the test group made progress in all swimming skills. However, the most progress was achieved in entry and exit from the pool, in the balance management, back and forth lateral rotation and longitudinal rotation. Learning entering the pool is partly linked to the mental adjustment to water and partly to mobility. Similarly, learning exiting the pool is mostly linked to mobility; therefore children with good motor capabilities acquire the skill more quickly.

Keywords: impairment, swimming, Halliwick, evaluation, SWIM.

Literatura/References:

1. McMillan J, McMillan P (2006). Halliwick Association of Swimming Therapy: Foundation Course Handbook. 14th ed. London: Halliwick Association of Swimming Therapy.
2. Martin J (1981). The Halliwick Method. *Physiotherapy* 67 (10): 288–91.
3. McMillan P (2002). The Halliwick Story. London: Halliwick Association of Swimming Therapy. www.halliwick.org.uk/html/history.htm <25. 2. 2013>.
4. Peacock K (1993). Swimming with independent measurement: manual for evaluation. London: Halliwick Association of Swimming Therapy.