Infants' Behaviours During Aquatic Activities

Martins, M.¹; Barbosa, T.M.²; Silva, A.J.³; Batalha, N.⁴; Marinho, D.A.⁴

- 1 Sports Science Institute of Rio Maior/CIDESD, Rio Maior, Portugal
- ² Polytechnic Institute of Bragança/CIDESD, Bragança, Portugal
- ³ University of Trás-os-Montes and Alto Douro/CIDESD, Vila Real, Portugal
- ⁴ University of Évora/CIDESD, Évora, Portugal
- ⁵ University of Beira Interior/CIDESD, Covilhã, Portugal

INTRODUCTION

In the last decades an increasing participation of infants in aquatic activities has been noticed. Although that increasing interest, the research about infant swimming is quite rare. The interest around infants' behaviours during a swimming session allows characterizing or estimating the physical demand and its responses to basic aquatic motor skills (Richards and Gibson, 2006). The aim of this study was to assess infants' behaviours during aquatic sessions.

METHODS

The sample included 14 infants with 13.7 ± 7.5 months-old and 7.71 ± 7.54 months of background in infant swim programs. Swimming sessions were conducted in an indoor swimming pool with 16 m length and 1 m depth. All sessions had a 30 min duration and were conducted by an specialized instructor. Parents accompanied the infant and helped the instructor in the performance of the proposed skills. All sessions were recorded with a video camera, placed away from the swimming pool to avoid significant changes in infant's natural behaviour. The observation was made by three experts and corroborated by the Kappa index test. The registered dimensions were decomposed into several categories. "Motor behavior" and "affective-emotional" were the two main dimensions, along with a parents' behavior characterization. "Motor behavior" decomposed in "infants' interaction", "displacements", submersion and jumps. "Affective-emotions" dimension was decomposed in "infants' look direction" and "infants' facial expression". Data were analyzed according to the percentage of occurrence frequencies in each dimension and categories.

RESULTS

About the motor dimension, the "displacements" (61 %), "interaction with other infants" (42.80 %) and "interaction with objects" (37.60 %), were the most frequently observed behaviours. On the other side, other specific tasks as "submersion or jumps" only represented 4.60 % of the session. Regarding "affective-emotional dimension", the infant "look were mainly directed to the objects" (28.80 %), followed by the "look to their parents" (14.70 %) were the main categories. "Indifference and passiveness" (10.50 %) and "laughter" (14.70 %) were also observed during the session.

DISCUSSION

One can speculate that the infants' behaviour is often influenced by the parents' experience in water activities. In the aquatic environment the infants' emotions are more camouflaged and hidden away from a "naked eye" because of the overwhelming atmosphere they are exposed to, while considering water a new and discoverable

fountainhead. However, this situation can vary according to previous experiences in aquatic lesions.

REFERENCES

1. Richards JE, Gibson T. Extended visual fixation in young infants: look distributions, heart rate changes and attention. Child Development 2006; 68: 1041-1056.