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PRATICE CRAWL – MENTAL DISTABILITIES: ADULT CHOICE OF
DRIVE TECHNOLOGY ADAPTED COMPETITORS

Introduction
Of the two schools most stressed about the act of propelling the crawl, crawl in practice, which is the most efficient swimming, the two modes of propulsion favorites are “The outstretched arm” next to the called swimmer paddling and “The arm bent S-shaped” under the so-called swimmer impeller (N. Lanotte, S. Lem, 2012) The debate is not yet settled (Potdevin F; Pelayo P. 2006).

Any swimmer has a strategy for managing its own resources considering the cost / benefit of each stroke technique report, with the aim of improving strength (Arellano, R. (1992), its movement and hence its performance (Joshua, 1992) in retarded placed in individual practice crawl competition, open to different technical conditions, what is the movement that is most often practiced, according to “the outstretched arm” or “folded S-shaped arm “under the swimmer?

Methods
We record video (Chollet, D - 2003), during two Regional championships in France adapted swim organized by the French Federation of Adapted Sport tests crawl in Division 1 Division 2 and Division 3 according to the latest regulations for implementation first time. We study the test of 50 meters crawl performed by each competitor. These competitors are also facing a technicality in the conduct of technical actions that should be most effective for each of them. We then analyze the sports performance of each continuous. We question the choice: “The outstretched arm” or “arm bent S-shaped” under the swimmer, by interviews (Y.Meynaud; Duclos D.1996) professional supervisors or volunteers before tests their competitors and we competitors are questioning after their trials.

Results
The video shows the three kinds of coordination among swimmers (Chollet, 1997; Costill, Maglischo and Richardson , 1992; Pelayo et al, 1999.):
- Coordination "opposition" where the propulsive action of the two arms are realized in the form of relay . The moment arm a has completed its thrust and the other opposing arm starts its tensile.
- The most coordination discontinuous, that is caught in a dead time of an arm (usually in front support phase) during the propulsive phase of the other arm.
- The third coordination "overlap" has a simultaneity of the end of the push of a start of the arm with the other traction. There is therefore superposition (overlap) of the partial activities of two arms propellant.
It appears on the videos that all competitors have a coordination phase of "opposition" or "discontinuous" or "overlap" in the swimming arms outstretched.

It appears on the video that all competitors swim the “arms outstretched” The point of view of professional or volunteer supervisors: no of them are not asked for the choice of method of propulsion is best for their competitors as they say swimming techniques they teach in their club are the same as for all disabled or not competitors. the views of professionals and volunteer supervisors requires further in-depth study.

The point of view of competitors: For competitors the method of propulsion “outstretched arm” seems to them the most effective. Method “arm S” Their demand coordination of movement more difficult to obtain in the context of mental disability.

Discussion
Using the method of “arms outstretched” timing of movements is easier to obtain in the case of development of a simple movement to the competitor deficient adult mind. He can repeat the gesture “outstretched arms” over the entire length as a strategy to optimize its performance (Temprado 1991; Famose 1993; Sarrazin, 1997).

References

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