INTRODUCTION

It is estimated that 5% to 10% of the child population in schoolage, without sensorial or neurological identified deficits, face motor difficulties than expected to develop typical activities to their age group and cognitive level. These children exhibit signs compatible with the criteria for Developmental Coordination Disorder (DCD) diagnosis.

The Movement Assessment Battery for Children (MABC) and the second edition (MABC-2) have been used worldwide to help diagnose DCD. The MABC and MABC-2 are applied to detect mild to moderate motor difficulties in children 3-16 years old. These assessments tools have been used in Brazilian children since 2006, and it is verified the greater interest in use of them in our population in the last years, once the lack a valid and reliable assessment tool could be explain the low number of children diagnosed with DCD in Brazil.

AIM

To analyze and synthesize research studies regarding the use of the Movement Assessment Battery for Children, first and second editions, to assess the motor performance of Brazilian children.

METHOD

Literature review based on search in electronic databases – MedLine, Lilacs (Brazilian) and Scielo (South America) – between October and December 2014, using a search terms in portuguese: MABC, MABC-2, developmental coordination disorder, ABC movement test, alone or in combination, according to the following criteria:

(a) articles published in Portuguese, English or Spanish;
(b) observational and experimental studies;
(c) papers reporting data on the use of the MABC or MABC-2 with Brazilian children.

RESULTS

- From the 360 articles located in the searches, following exclusions, 23 were selected for the review.

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- Most of them were published in the last four years (N=18/78%), including two studies on the validity of the MABC-2 for the Brazilian children.

- The studies were developed by different professionals, including physical educators, occupational therapists, physical therapists, physicians, psychologists, nutritionists. Most studies have been published by physical educators (N=14/61%) and occupational therapists (N=5/22%)

- The studies report data on 6,287 Brazilian children, 5,665 for the motor test, considering both versions, and 652 for the checklist.

- The studies included children from 3 to 13 years old.

- Most publications aimed children 7 to 10 years old and their results indicate the MABC and MABC-2 are useful to identify mild motor difficulties among Brazilian children.

- No study point to the need to adapt the motor test, however, the checklist seems to need some adjustments to be used in Brazil, which was appointed by two studies.

Most adjustments were related to adaptation of items to Brazilian school reality.

DISCUSSION

- The growing number of studies published in the last four years indicates greater interest of different professionals to identify and measure mild and moderate motor difficulties in Brazilian children. Studies have been published due to increased awareness about Developmental Coordination Disorder (DCD) and its consequences on the children’s development and daily life.

- Most production by physical educators may be associated to the fact that the original authors of MABC are physical educators. Also children with DCD usually do not have adequate performance in physical education classes and avoid sports and physical activities. Given the great amount of children that need of occupational therapists may be related to the need to investigate children with motor difficulties because of the limitations faced by them in daily activities at home and at school.

- The fact that most studies were focused on MABC-2 age band two is consistent with the age in which the school tasks become more demanding making the repercussions of the motor impairment more evident.

- The motor test’s utility, confirmed in studies, encourages investment in its validation for the Brazilian children.

- The fact that no adjustment was appointed in studies for the use of motor performance test, both MABC as the MABC-2, appears to be associated with the fact that it contain common task the child’s environment, without the need to adapt instrument items to our population.

- Although there are two recent studies on the validity of the motor test and the checklist for children from the southern Brazil, with results suggesting that while the MABC-2 Checklist may need minor modification, the motor test and its original normative data could be used with these children, further validity studies are needed, as Brazil is a continental country.

CONCLUSIONS

The MABC, both editions, can be considered a versatile tool as it has few items constituting a motor assessment relatively quick, and can be used by several professional categories. No studies have identified the need for changes in motor performance test, however, about the use of checklist that aspect still needs further research.

It is important to continue investing in researches to contribute to the establishment of the validity of the instrument to Brazilian children especially in its latest edition, seeking to enlarge the sample, so that it is representative of all regions of the country.

Also it is interesting that studies be undertaken to compare the motor performance of Brazilian children in MABC with the British normative sample are conducted. This type of analysis is important to check adequacy of cutting points and identify differences in performance on children in individual items.

REFERENCES


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