

## **Motor Development Index (MDI) Based on Combination of Human Development Index (HDI) and Sport Development Index (SDI) as a Success Parameter of Motor Development among Preschool Children: An Observational Study**

### **Abstract**

The principle of development is the occurrence of changes that involve the functioning of the nervous system and muscles as well as the change itself concerning the quality of motion that can be measured by tests of motor skills. Changes of the quality in motor movement among children is determined by the factor of teachers/counsellors, infrastructure facilities, and the existence of environmental factors. In measuring successful motor development among preschool children, this paper proposes the Motor Development Index (MDI) to be used as one of the parameter indicator. MDI is a composite index that includes (1) child enrolment rate (2) availability of public service venues (3) gross and fine motor skills (4) availability of builders/instructors as well as (5) sources of financing. The results showed that MDI in motor development among preschool children is still very low, with the value of only 0.387. However, the proposed MDI measurement is better than Sports Development Index (SDI) of value 0.345. In the future, the MDI measure is proposed to be parameters of motor development success among preschool children as MDI components allows presenting a more comprehensive measure.