DEVELOPMENT OF ORIENTATION AND MOBILITY SKILL ASSESSMENT TOOL (OMSAT/YOBDA) FOR VISUALLY IMPAIRED STUDENTS

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Abstract

One of the most important problems caused by visual deficiency is limited mobility. There exist two dimensions in mobility: firstly understanding of body position, orientation skills comprised of awareness of whereabouts, secondly, skills for moving safely to anywhere without facing a thread. It is observed that, no systematic instruction activities exist in schools to teach vital orientation and mobility skills. In our country, there are no standard assessment tools to determine performance levels of the students’ orientation and mobility skills. Therefore, the project supported by TUBİTAK: “Development of Orientation and Mobility Skill Assessment Tool (OMSAT/YOBDA) for Visually Impaired Students” proceeded to application in May/2014. The primary goal of the project is to develop a standardized Orientation and Mobility Skill Assessment Tool (OMSAT/YOBDA) for assessing skill levels of visually impaired students.

Project team is comprised of a project executive, a domain expert lecturer, a lecturer in occupational therapy department, a lecturer in department of assessment and evaluation in education. Five research assistants who work in Gazi University and two postgraduate students who work as teachers of visually impaired students in the ministry of education.

There will be 3 main work packages in this study. First one is to develop a standard OMSAT; second one is to determine norm values for the tool and the last one is to generalize the usage of the tool. In the stage of construction of OMSAT/YOBDA, the items of tool are written and an item pool is composed then offered for consideration to nongovernmental organizations and teachers of visually impaired students. The appropriateness to the assessment goal and clarity of the items is analyzed by the experts.

In pursuit of the pilot application with 14 visually impaired students in Ankara, items analysis is examined based on the data collected through a pilot application with 82 visually impaired students who identified as totally blind to determine the validity and reliability of OMSAT/YOBDA. Confirmatory factor analysis is used to verify the construct validity of each subscale. Item mean and item distinctiveness are determined for item analysis. The reliability of each subscale regarding internal consistency is determined by reliability
coefficient. The final form of OMSAT/YOBDA is determined by looking at pilot testing results how well the instrument functions. The final form of OMSAT/YOBDA is comprised of six section and student information form. First section includes questions to identify the visually impaired students’ previous experience regarding orientation and mobility skills. Second and third section seek to determine respectively prerequisite skills and concepts for orientation and mobility skills. Fourth section includes students’ fundamental mobility skills. Fifth section includes items regarding orientation skills. Sixth section includes items regarding indoors/outdoors mobility skills. In the second, third, fourth and fifth section total score is examined. Other sections are evaluated separately.

For OMSAT/YOBDA’s norm studies, while constructing normative sampling, application process control is considered and schools for visually impaired students and schools with inclusive classes with visually impaired students are selected in Turkey. OMSAT/YOBDA is applied in 14 schools for visually impaired students and to visually impaired students studied at inclusive classes in addition, other schools close to the schools for visually impaired students are inserted in the application. The validity and reliability analysis is examined based on the norm sampling datas and norm values are being examined.

This project will be the first and most comprehensive study about this issue. Project will have ended in 01.05.2016. At the end of the project, OMSAT/YOBDA will also be provided to the Ministry of Education as a report. It is considered that the project will be useful for the other studies in the domain.

**Keywords:** Visual impairment, orientation and mobility skills, orientation and mobility skill assessment tool.