Adaptation of a Computerized Pointing Device for Children and Youth with Intellectual and Developmental Disabilities: Performance and Satisfaction Outcome Measures

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Adapting assistive technologies (AT) for children and youth with intellectual and developmental disabilities (IDD) is a complex process with the occupational therapist using a variety of valid and reliable assessments in order to select the optimal AT device. In the context of special education schools two main questions arise: What influences the use or non-use of the AT device? Who should be involved when testing satisfaction with the adapted AT device? **Aim:** To assess the relationship between the performance of children and youths with IDD who use an adapted pointing device and the computer teachers’ satisfaction.
with their performance. **Method:** Thirty Arab boys and girls with moderate IDD, aged 6-21 years, who learn in a special education school participated in the study. The participants went through a process of adapting a pointing device that was conducted by an expert occupational therapist. After one week of training with the device, the following assessments were conducted: The Assessment of Computer Task Performance was administered by the two expert occupational therapists to evaluate the performance (time and success) of the participants carrying out specific computer tasks using the adapted pointing device. The Quebec User Evaluation of Satisfaction with Assistive Technology was used to evaluate the teacher’s satisfaction with the adapted pointing device. **Results:** The participants’ success scores of computer performance correlated significantly with the teacher’s satisfaction with the adapted pointing device, regardless of the time needed to complete the task. The teacher expressed a high degree of satisfaction with the characteristics of the pointing devices used to carry out the tasks, but was less satisfied with the ease of use of the device. **Conclusions:** The degree of satisfaction of an AT device is an important measure for predicting the degree of its successful adoption. The computer teacher plays an important role in the successful use of the adapted AT device. The ACTP is an adequate assessment tool for the outcomes of the adaptation process. However, it is recommended that new assessment tools be developed to test other AT devices, different populations and the significant players in the adaptation process.