

addressing the sense of school belonging. Not only is it connected to it, but it also mediates the paths from the personal characteristics, which is especially important for the direct negative path from gender. Addressing empathy (especially empathic concern, which has the highest connection to school belonging) is advisable when trying to influence the sense of belonging at school.

Keywords: *School belonging, empathy, adolescents, individual characteristics, positive youth development.*

USING VIRTUAL REALITY TO ASSESS READING FLUENCY IN CHILDREN

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Abstract

Here we provide a proof-of-concept for the use of virtual reality (VR) goggles to assess reading behavior in beginning readers. Children performed a VR version of a lexical decision task that allowed us to record eye-movements. External validity was assessed by comparing the VR measures (lexical decision RT and accuracy, gaze durations and refixation probabilities) to a gold standard reading fluency test – the One-Minute Reading test. We found that the VR measures correlated strongly with the classic fluency measure. We argue that VR-based techniques provide a valid and child friendly way to study reading behavior in a school environment. Importantly, they enable not only the collection of a richer dataset than standard behavioral assessments but also the possibility to tightly control the environment.

Keywords: *Reading fluency, virtual reality, lexical decision task, eye-tracking, beginning readers.*

LEARNING HABITS: DOES THE DIGITAL GENERATION HAVE DIGITAL STRESS AND HOW DOES IT AFFECT THE LEARNING OF MATHEMATICS?

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Abstract

Mathematics is one of the most important subjects that students learn at all levels of education. Understanding and competence in mathematics allows to integrate better into the labour market, perform complex calculations and model significant processes. It is mathematics that has been proven to be the most sensitive to compulsory distance learning as a result of the Covid-19 pandemic. Due to the state of emergency in Latvia, all schools were periodically closed for a total of 9 months, when the learning process could only take place in the e-environment. In this context, the study was motivated by the question "Does digital stress exist for the digital generation and how does it affect the learning of mathematics?" The aim of the study is to determine the initiators of digital stress by using the Stressor-strain-outcome framework and the consequences that students face when learning math remotely. Using the Partial Least Squares Structural Equation Modelling with SmartPLS, a survey data of 185 students were analyzed. Anxiety, lack of instantaneous feedback, risks of self-directed learning and social isolation were found to contribute to digital stress, which in turn has a negative impact on interest and performance in learning mathematics. The study helped to delve into students' feelings and needs, as well as to develop recommendations to reduce the effects of the pandemic, to manage learning processes more effectively, to gain students' respect and to promote better learning in mathematics.

Keywords: *Digital generation, digital stress, math learning, learning habits, AI4Math.*
