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The Gestures Style of Pedagogical Agent in the E- Book and its Impact on Developing Digital Safety Skills and Reducing Mental Wandering among Primary stage students

A thesis submitted for the degree of Master of Education from the Department of Curricula and Teaching Methods, specializing in Educational Technology

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Research Abstract

Research Title: *The Effect of Pedagogical Agent Gesture Style in E-books on Developing Digital Safety Skills and Reducing Mind-Wandering among Primary School Students*

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Abstract

This Research aimed to examine the effect of the gesture display style of the pedagogical agent in an e-book on developing digital safety skills and reducing mind-wandering among primary school students. To achieve this goal, the researcher employed a quasi-experimental factorial design (2×1) with two experimental groups. The researcher designed two experimental treatments: the first used iconic gestures of the pedagogical agent in the e-book, and the second used pointing gestures. The researcher also developed measurement instruments: a cognitive skills test, a performance observation checklist for digital safety skills, a digital safety scale, and a mind-wandering scale. Following a pre-test to ensure the equivalence of both groups, the experiment was conducted on a sample of 70 fifth-grade students. After implementing the treatment, the post-tests were administered. The findings revealed no statistically significant differences between the two groups in the cognitive test and performance observation. However, a significant difference in favor of the first group was found in the digital safety scale, while no significant differences appeared in the mind-wandering scale. The researcher presented several recommendations and proposed future research based on the results.

Keywords: Gestures – Pedagogical Agent – E-book – Digital Safety – Mind-Wandering