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# Fostering Growth Mindset Principles in the Prevention of Type 2 Diabetes Through a Narrative Game

Raffali, Ana<sup>a</sup>; Asraf, Ratnawati Mohd<sup>b</sup> [Save all to author list](#)<sup>a</sup> MST5 Asia, Malacca, Malaysia<sup>b</sup> International Islamic University Malaysia, Kuala Lumpur, Malaysia[Full text options](#) [Export](#) [Abstract](#)[Author keywords](#)[SciVal Topics](#)[Funding details](#)**Abstract**

The number of overweight school-age children facing the risk of Type 2 diabetes from obesity is rising at an alarming rate worldwide. Studies have shown that adopting a healthy lifestyle by following a nourishing diet and engaging in frequent physical activity is vital in tackling the problem. However, knowing about it does not equate to knowing how to do it. Hence, through design research, we employed a cross-disciplinary approach in creating an educational simulation to inform and provide the how-to on making health-related choices for teenagers. This study was aimed at constructing an interactive visual novel by intertwining growth mindset principles with the game's narrative using the integrative behaviour prediction model as the framework. Upon completion of the prototype, we asked four students to test the game, and their feedback was analysed for emerging themes. Discovery learning, the thrill of the game, and empowerment by information each coincide with the three

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essential design elements of successful educational experiences: simulation, game, and pedagogy. The findings suggest that the potential for growth mindset principles to be used to reinforce healthy decision-making among teenagers through a narrative game is highly promising, while at the same time providing the learners with a meaningful and engaging experience. © Authors.

#### Author keywords

educational simulation; growth mindset ; healthy lifestyle; narrative game; Type-2 Diabetes

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