

Brought to you by [INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA](#)

Scopus

[Back](#)

# Preliminary Study on the Development of Decision-based 3D Game for Anxiety Disorder (D3GAD) Screening

Proceedings - 2025 10th International Conference on Information and Communication Technology for the Muslim World, ICT4M 2025 • Conference Paper • 2025 •

DOI: 10.1109/ICT4M68001.2025.11363556

Samsuri, Suhaila<sup>a</sup> ; Zaini, Al-Alif Mohd.<sup>b</sup> ; Mohiuddin Khandaker, Zakaria<sup>b</sup> ; Rosli, Syamil<sup>b</sup>

<sup>a</sup>International Islamic University, Department of Information Technology, Selangor, Malaysia

[Show all information](#)

0

Citations

[View PDF](#)[Full text](#) [Export](#) [Save to list](#) [Document](#)[Impact](#)[Cited by \(0\)](#)[References \(23\)](#)[Similar documents](#)

## Abstract

Traditional anxiety screening methods face challenges including stigma, low engagement, and cultural irrelevance among Malaysian university students. This preliminary study investigated the feasibility of Decision-based 3D Game for Anxiety Disorder (D3GAD) screening through expert consultation. Semi-structured interviews with academic experts, clinical psychologists, and student representatives assessed gaming medium suitability, cultural design requirements, and GAD-7 integration appropriateness. Thematic analysis revealed expert consensus validating digital gaming approaches over traditional methods and confirming GAD-7 feasibility within gaming environments. Key findings identified Malaysian cultural adaptation requirements and anxiety-sensitive design principles. The study's primary contribution is an adapted SERES framework for anxiety screening

applications, incorporating psychometric validation protocols, ethical boundaries, and cultural considerations. These findings establish a foundation for future prototype development, demonstrating the feasibility of culturally appropriate game-based anxiety screening tools for Malaysian university populations. © 2025 IEEE.

Author keywords

Anxiety screening; cultural adaptation; decision-based games; GAD-7; Malaysian university students; preliminary study

Indexed keywords

Engineering controlled terms

Human computer interaction; Screening; Software prototyping

Engineering uncontrolled terms

3D games; Anxiety screening; Cultural adaptation; Decision-based; Decision-based game; GAD-7; Malaysian university student; Malaysians; Preliminary study; University students

Engineering main heading

Students

Funding details

Details about financial support for research, including funding sources and grant numbers as provided in academic publications.

| Funding sponsor                  | Funding number | Acronym |
|----------------------------------|----------------|---------|
| Sultan Ahmad Shah Medical Centre |                |         |

Funding text

This work was supported by the Sultan Ahmad Shah Medical Centre (SASMEC) grant. The authors extend appreciation to the interview participants and user acceptance testing volunteers who contributed valuable feedback for system validation.

Corresponding authors