

# Comparative Analysis of Nursing Students' Perceptions of Three Gaming Strategies to Enhance Student Learning in Nursing

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## Introduction

- ❖ Challenges present for nursing faculty to effectively improve student retention of knowledge, maintain student engagement, and increase active participation within the classroom setting.
- ❖ Gaming in education is one strategy that has been credited with the ability to improve student outcomes in the classroom.<sup>2,4</sup>
- ❖ There is limited research in relation to student perceptions of gaming strategies, as well as specific game types that may be best for nursing curriculum.<sup>1</sup>

## Definition of Terms

- ❖ **Jeopardy:** a reverse question and answer platform that encourages teamwork and collaboration among participants while assessing comprehension.
- ❖ **Kahoot:** a question-and-answer learning platform that allows instructors to use interactive quizzes.
- ❖ **Socrative:** platform that is an interactive, game-based learning tool. The platform allows for various question types to be used including, true/false, multiple choice, and short answer.
- ❖ **Level 4:** Sophomore nursing student
- ❖ **Level 6:** Junior nursing student
- ❖ **Level 8:** Senior nursing student

## Purpose

- ❖ Compare nursing student perceptions of three different gaming strategies, Jeopardy, Kahoot, and Socrative.
- ❖ Evaluate the effectiveness for enhancing student engagement and retention of knowledge as measured by student perceptions.



## Methods

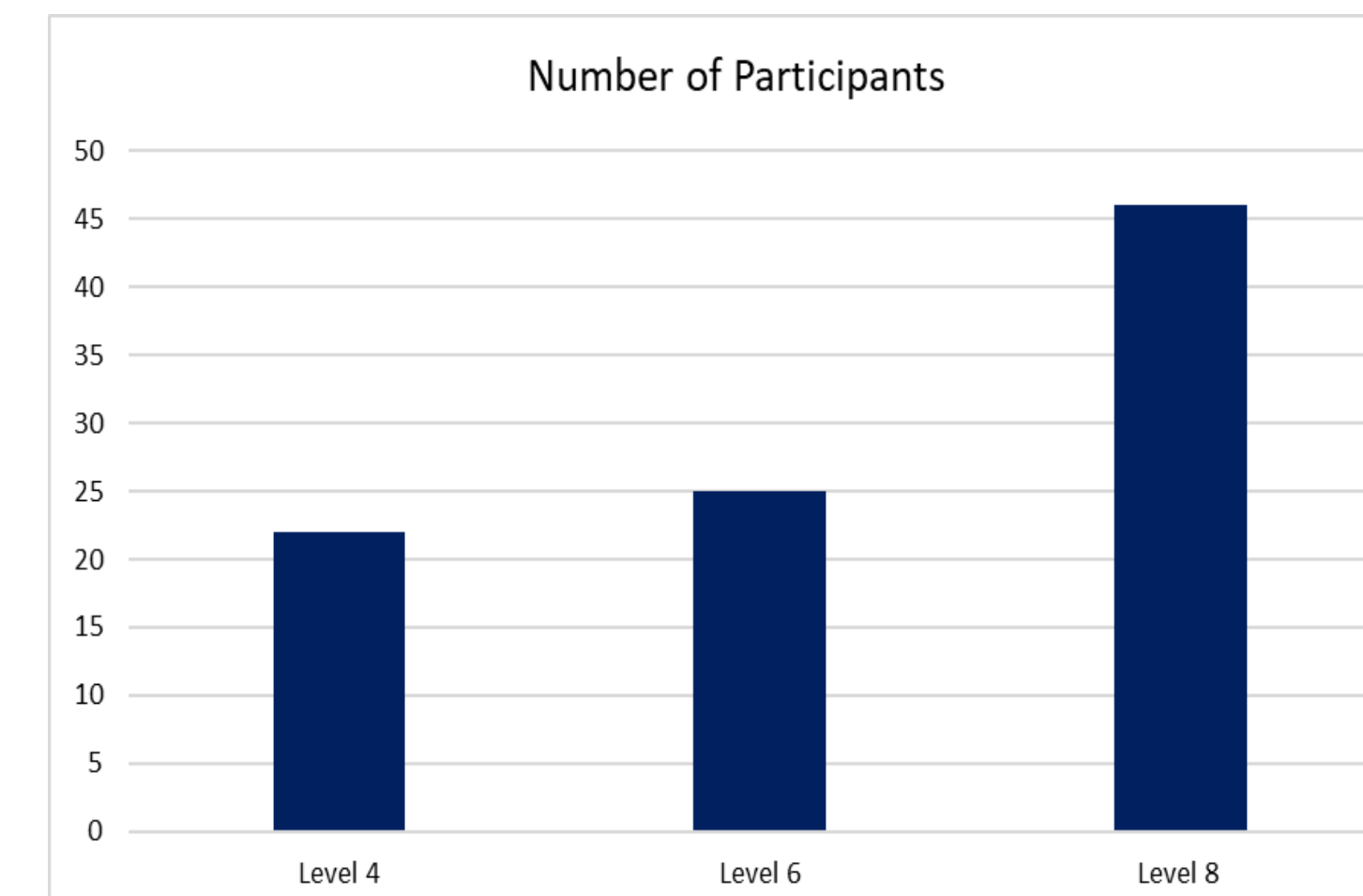
- ❖ The convenience sample consisted of nursing students enrolled in a generic baccalaureate degree program in the Southeast.
- ❖ Each participant completed a 6-item Likert style survey related to their perceptions for each of the games.
- ❖ The variables were substituted to a repeated-measures ANOVA using SPSS statistical software version 20) to determine whether student attitudes toward Jeopardy, Kahoot, and Socrative were significantly different.

## Results

- ❖ The attitude measure showed excellent reliability for all game types (Cronbach's  $\alpha$  ranged from .89 to .94).
- ❖ Pairwise comparisons indicated that students preferred Kahoot more than Jeopardy ( $p = .002$ ), and more than Socrative ( $p < .001$ ).
- ❖ The difference between Jeopardy and Socrative was also significant ( $p < .001$ ).

## Discussion

- ❖ The study supports the literature in that game-based education promotes a positive learning experience among nursing students.
- ❖ Among the surveyed games, Kahoot was the preferred game across all level participants and was perceived as the most beneficial game based educational tool to assess learning.
- ❖ Limitations to this study include a convenience sample of students from Levels 4, 6, and 8, and lack of control for faculty variables in game facilitation.



## Comparison of Means, Standard error, and Confidence Intervals

Game	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Jeopardy	4.188	.072	4.046	4.330
Kahoot	4.418	.060	4.298	4.538
Socrative	3.837	.098	3.642	4.031

## Implications

- ❖ Better inform educators and healthcare leaders when considering gaming as an alternative education approach to motivating and engaging student learning.
- ❖ Future research on students' perceptions of the effectiveness and usefulness of gaming should provide greater focus on examining and comparing the use of specific games under similar context and understanding differences between age categories and gaming especially traditional/nontraditional students.

Scan the QR code for a copy of the poster and references.

