

# The Efficacy of a Gamification Platform on the Professional Development of Different Generations of Critical Care Nurses

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## Introduction

- Nurses are the largest providers of healthcare
- Public reputation for excellence
- Hospital environment is complex with less resources
- Difficult to maintain clinical competency
- Fiscal responsibility

## Background

Factors influencing competency

- Internal: Generational learning preferences, Dynamic practice environment
- External: Accreditation requirements, Safety/quality issues, & Healthcare boom

## Problem

- This project will evaluate the efficacy of Qstream as an effective option for the professional development of critical care nurses.
- The age of the nurse will be the variable of focus to examine acceptance of this new technology.

## Purpose

This quantitative, cross-sectional, retrospective study is being conducted to evaluate the effects of a gamification platform by comparing the scores of nurses from different generations.



## Research Question

Does the age of the critical care nurse affect the Qscores in a gamification platform?

P: Bedside critical care nurses

I: Qstream educational platform

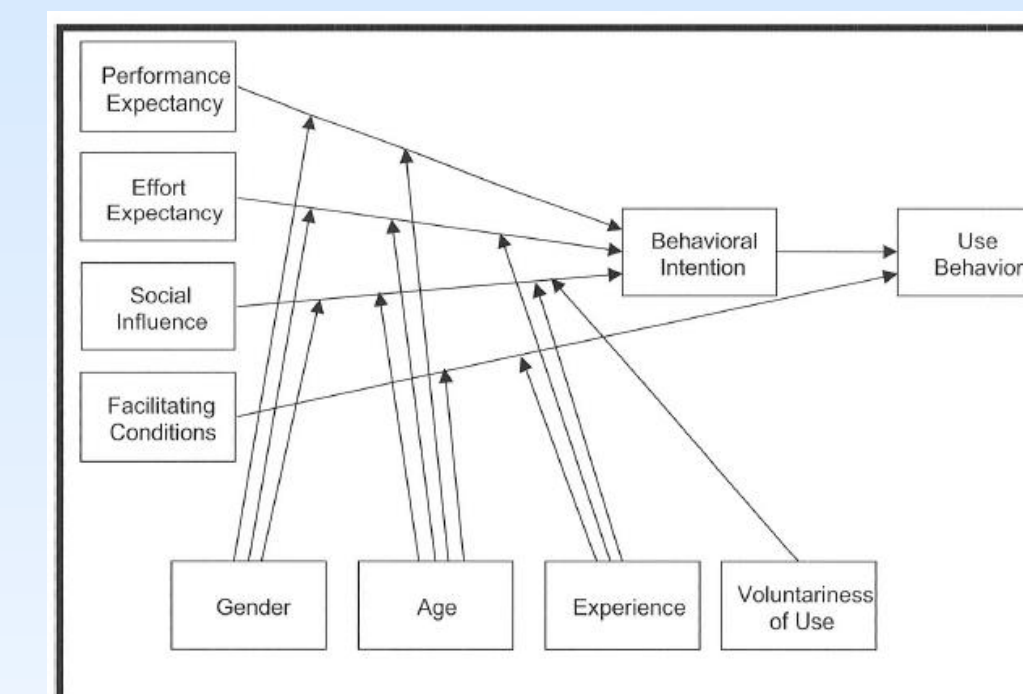
C: Age of the nurses grouped by generations

O: Qscores: Scoring system generated by the Qstream platform (reflects proficiency and efficiency)

T: Three months from launch of module (retrospective data from August 2018)

## Theoretical Framework

Unified Theory of Acceptance and Use of Technology (UTAUT)



## Procedure

- A Qstream module was administered as routine education
- Demographics of nurses were abstracted from existing databases
- Qscores were compared with generational groups and evaluated in SPSS

## Hypothesis

Ho: There is no difference in variance between age of nurses and Qscores

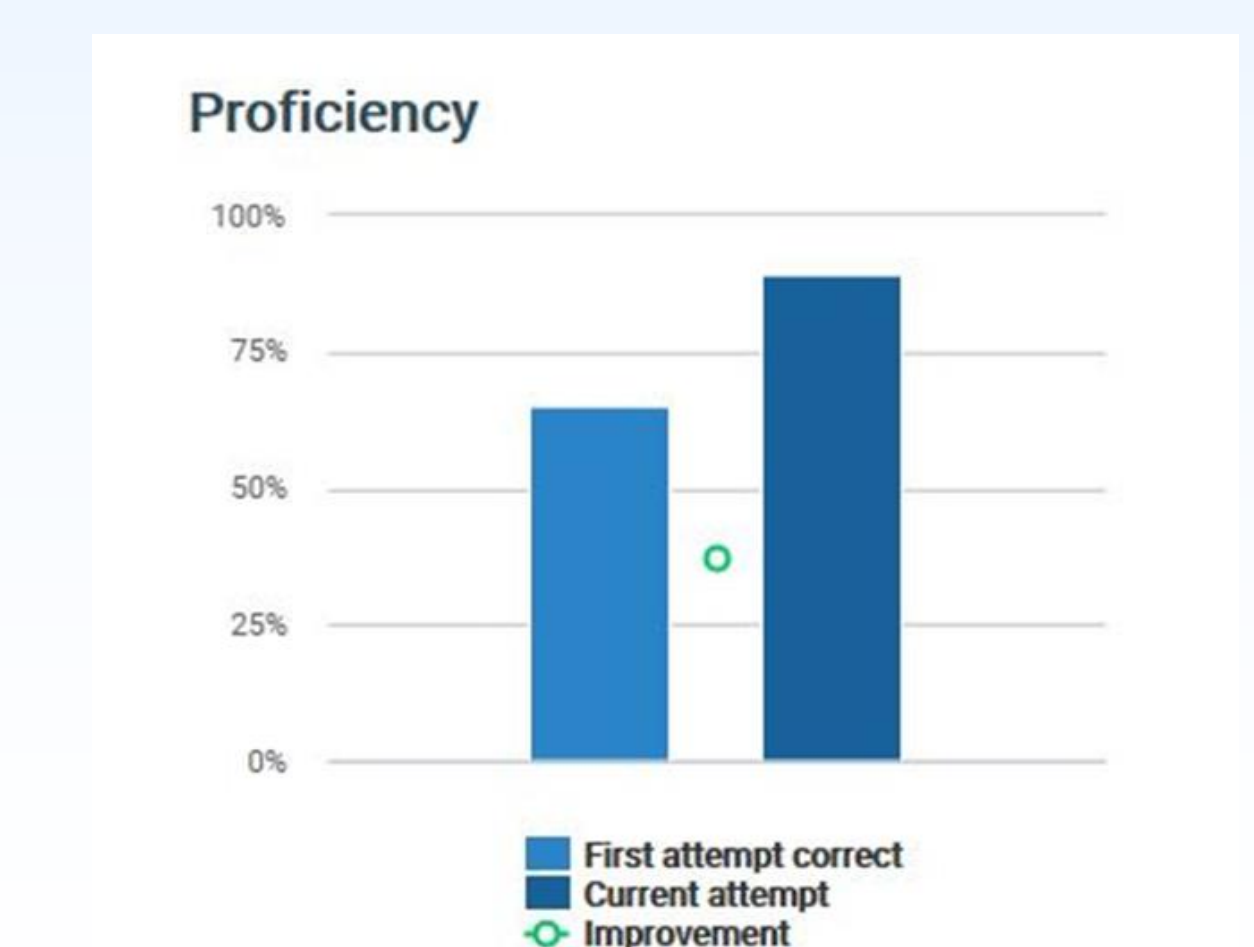
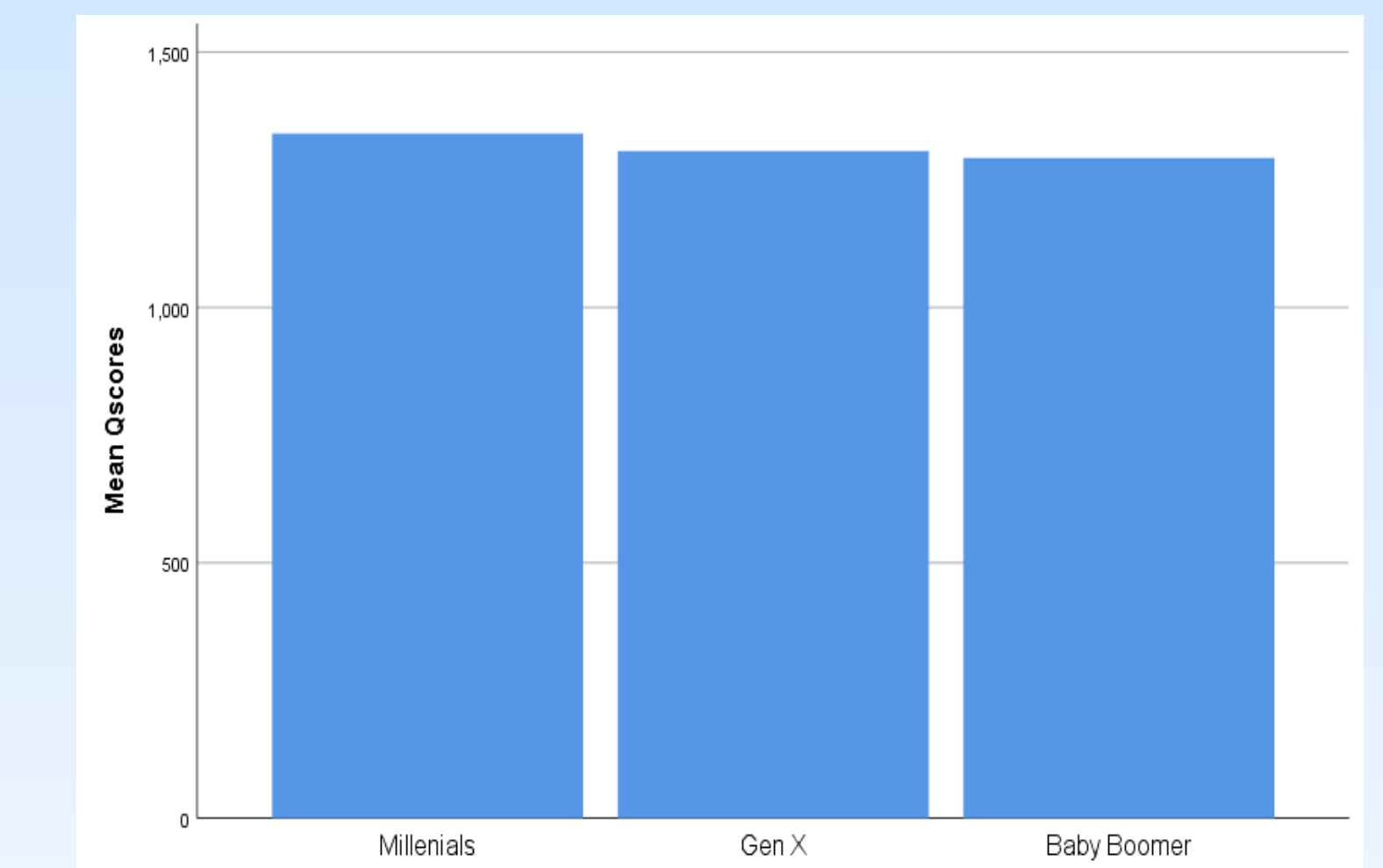
Ha: There is a difference in variance between the age of nurses and Qscores

## Statistical Analysis

Table 2  
ANOVA Analysis of Qscores

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	43760	2	21880	.621	.539
Within Groups	4049693	115	35215		
Total	4093453	117			

## Results



## Major Findings

- The age of the nurse did not significantly affect their Qscores
- Qstream is appropriate for all ages of nurses
- Documented outcome of 20% increase in knowledge
- Financial savings of \$46,900
- Age did not affect the acceptance of technology
- UTAUT did not apply