

# Mobile Games Going VR:

## How do game mode, brand familiarity, and game skill level influence game engagement?

### INTRODUCTION

- In-game advertising refers to advertising embedded in the game so that users can see the advertising as part of the gaming objects or elements while they are playing the game (Terlutter & Capella, 2013)
- Previous studies have examined the advertising effectiveness of playing games in the VR mode versus the non-VR mode (De Gauquier 2019; Roettl & Terlutter 2018).
- Few studies have examined the joint effects of game mode, brand familiarity, and game skill level on game engagement.

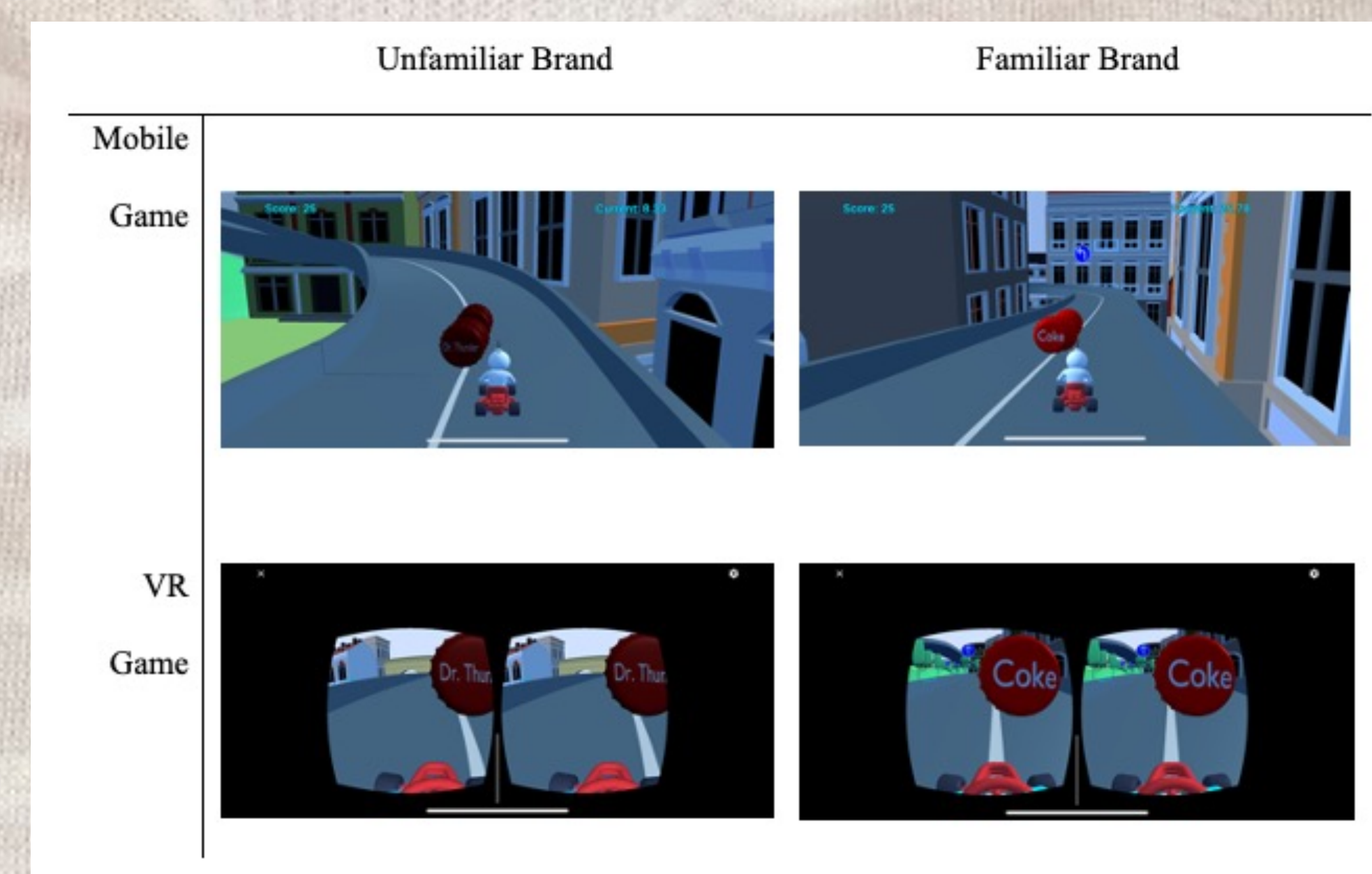
### RESEARCH QUESTIONS

- RQ1: How does game mode influence game engagement?
- RQ2: How does brand familiarity influence user engagement?
- RQ3: What are the joint effects of game mode and brand familiarity on game engagement?
- RQ4: How does game skill level moderate the relationship between game mode and game engagement?
- RQ5: How does game skill level moderate the relationship between brand familiarity and game engagement?
- RQ6: What are the joint effects of game mode, brand familiarity, and game skill level on game engagement?

### STUDY DESIGN

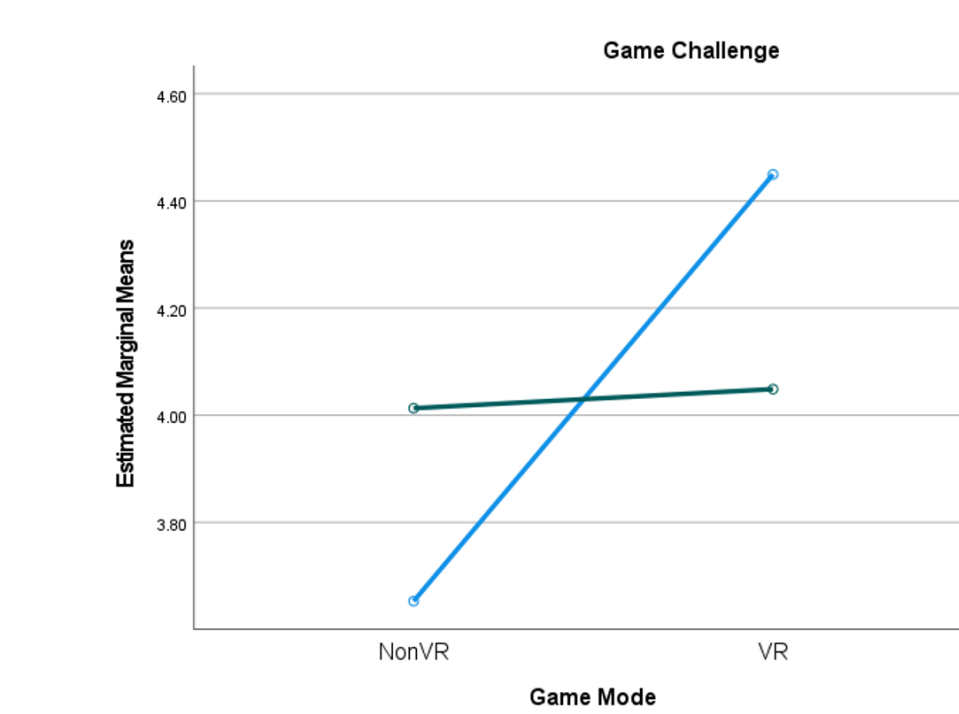
- A 2 (Game Mode: Mobile vs. VR) x 2 (Ad Familiarity: Unfamiliar Brand vs. Familiar Brand) between subject experiment (N = 149) was conducted in a lab setting.
- Age (M = 22.66, SD = 4.61, Range: 19 - 47)
- Gender (Female: 53%; Male: 47%)
- Race (Whites: 54.8%; Black: 31.5%; Asian: 4%; Hispanic: 4.7%; Other: 1.3%)
- Education (Some College: 49.7%; Bachelor's: 18.8%; High School: 12/8%; Master's: 5.4%; Doctoral: 1.3%; Professional: .7%)
- Game Skill Level (Cronbach's  $\alpha = .94$ , M = 3.27, SD = 1.58)
- Game Challenge (Cronbach's  $\alpha = .72$ , M = 4.03, SD = 1.13)
- Game Satisfaction (Cronbach's  $\alpha = .93$ , M = 4.26, SD = 1.45)
- Cognitive Absorption (Cronbach's  $\alpha = .93$ , M = 4.44, SD = 1.20)

### STIMULI

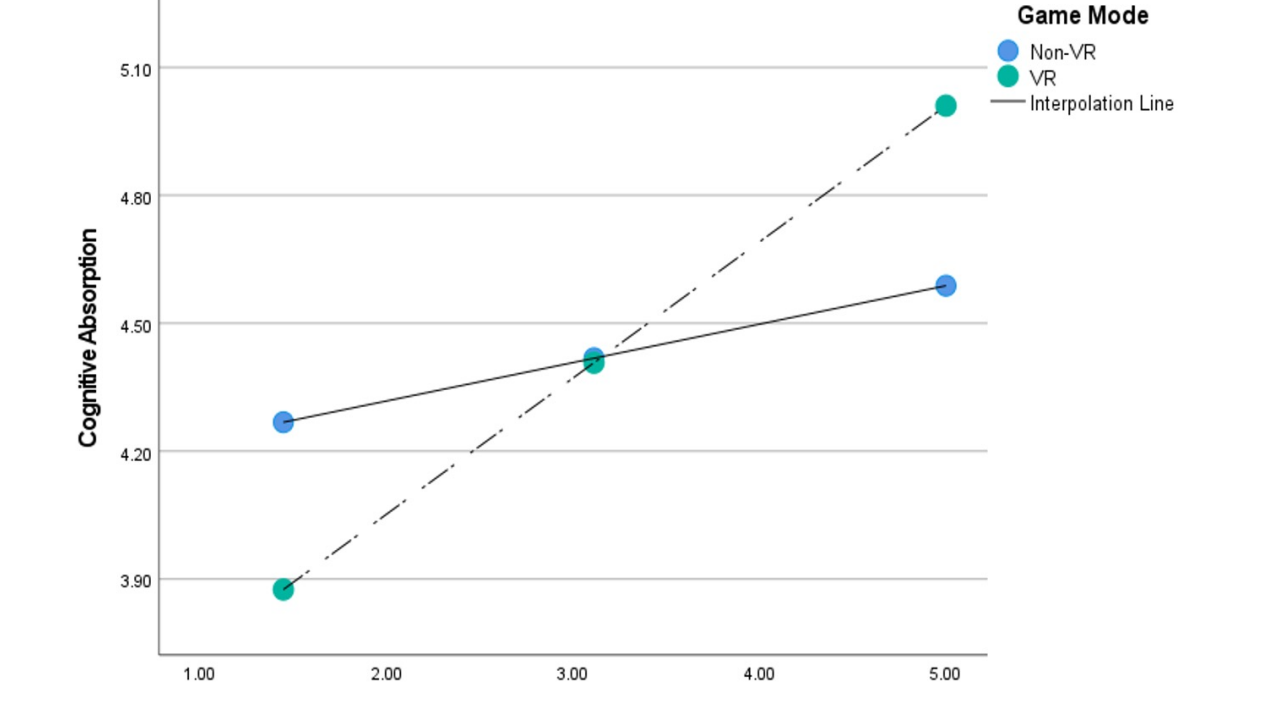


### RESULTS

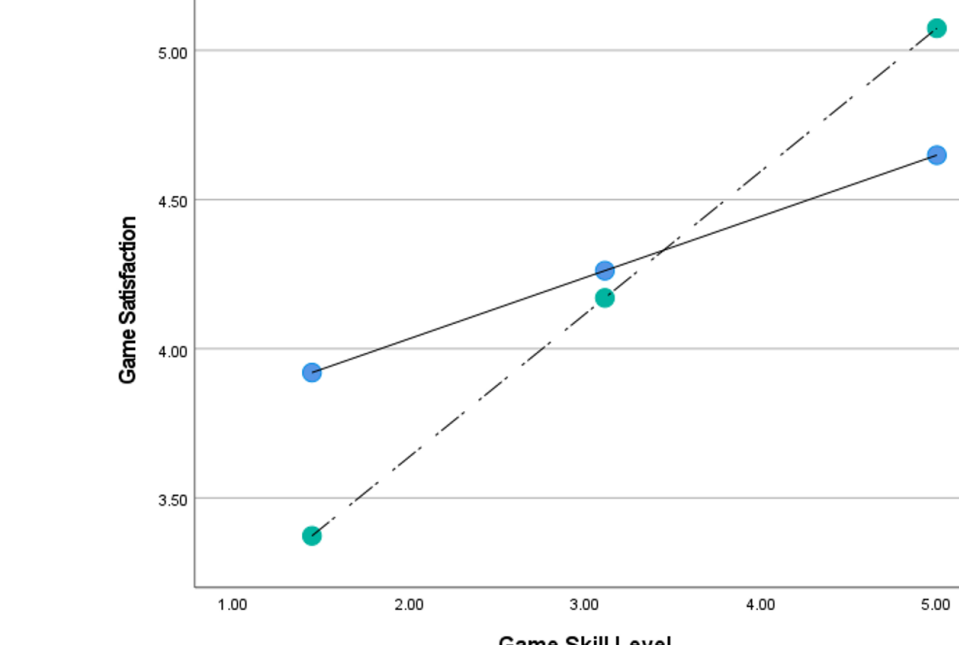
A two-way interaction between game mode and brand familiarity on game challenge



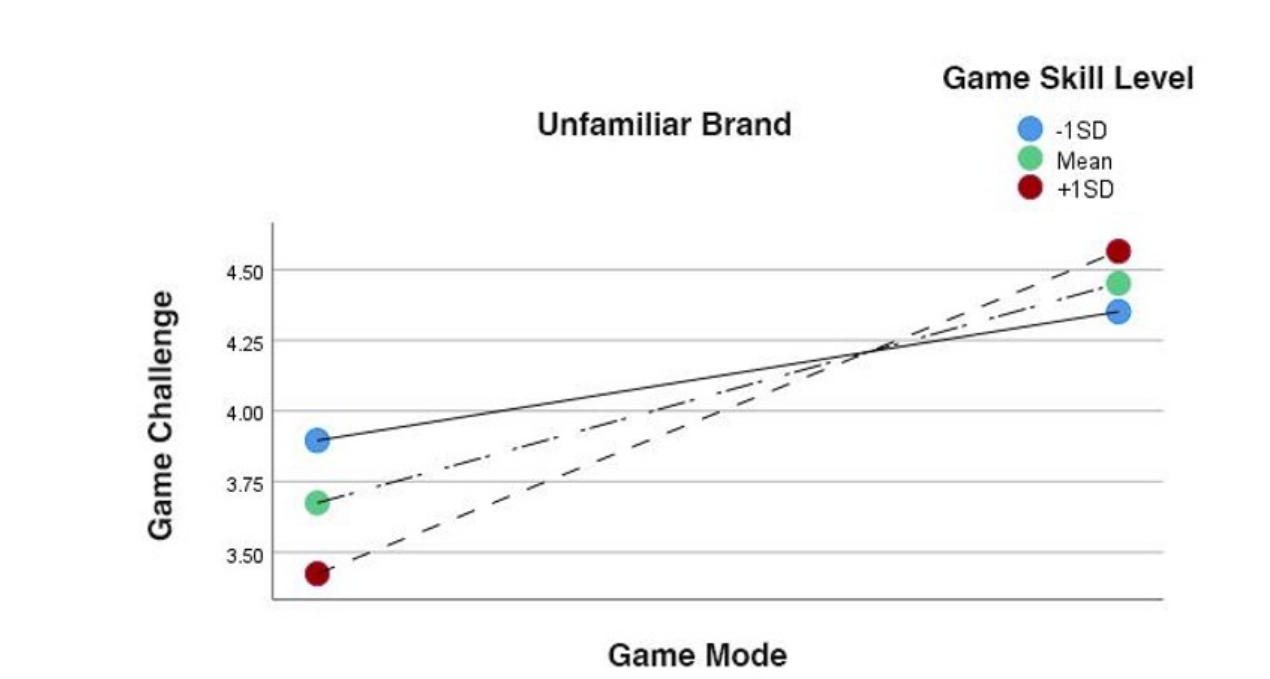
Game skill level moderated the relationship between game mode and cognitive absorption



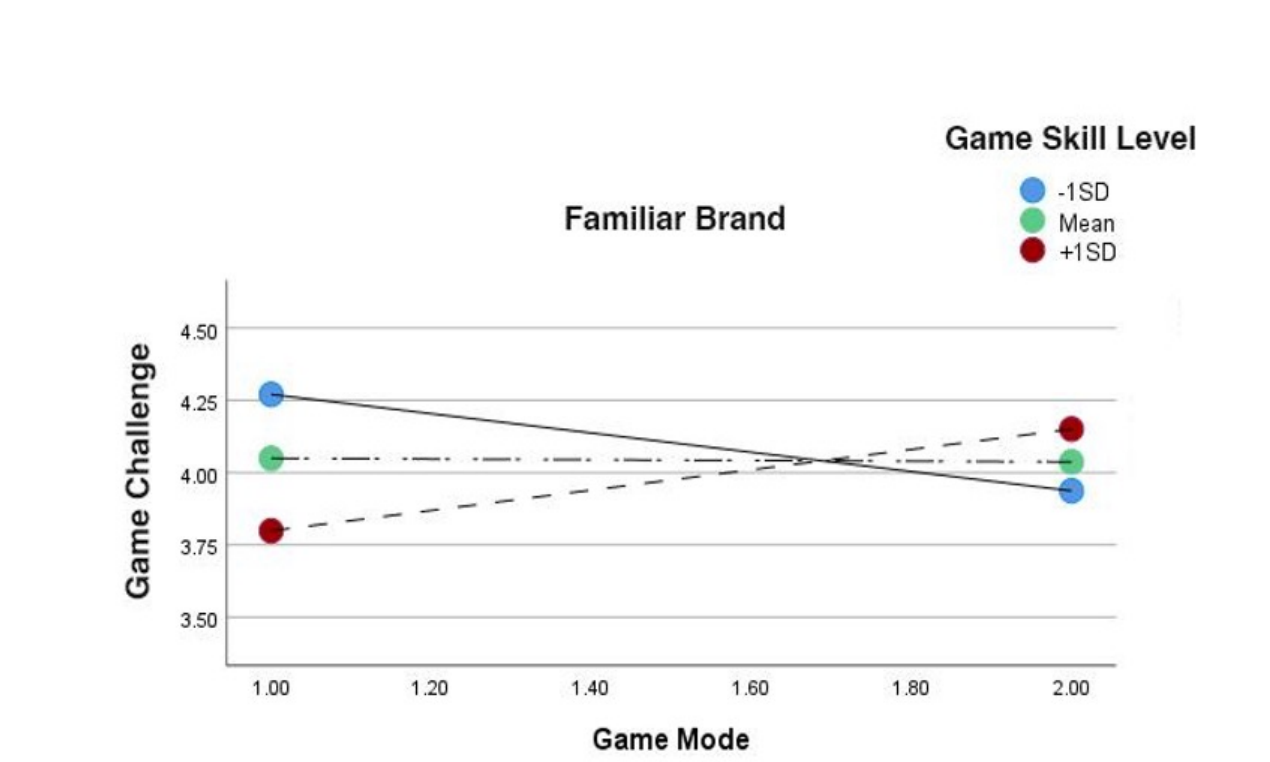
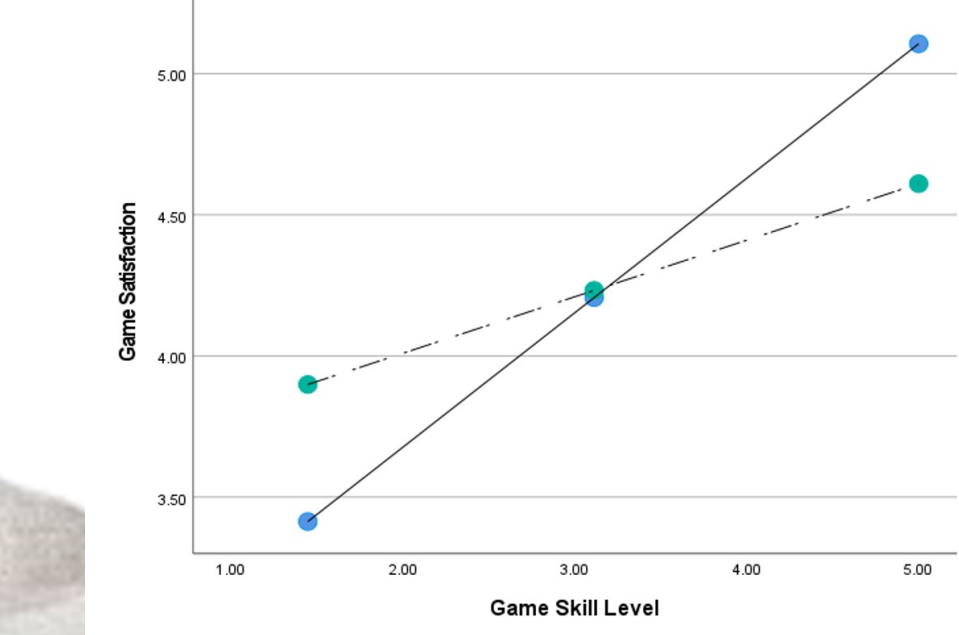
Game skill level moderated the relationship between game mode and game satisfaction



A three-way interaction of game mode, brand familiarity, and game skill level on game challenge



Game skill level moderated the relationship between brand familiarity and game satisfaction



### DISCUSSION

- People who played the VR game found the game more challenging to play compared with people who played the mobile game.
- For the unknown brand, people who played the game in the VR mode found the game more challenging to play compared to those who played the game in the mobile mode.
- For the well-known brand, whether playing the game in the VR mode or the mobile mode did not influence the level of game challenge.
- Game skill level moderated the relationship between game mode and game engagement.
- Game skill level moderated the relationship between brand familiarity and game engagement
- A three-way interaction of game mode, brand familiarity, and game skill level was also found on game challenge.