User Satisfaction of a Video Game: An Educated GUESS!
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Quick Takeaway

- The GUESS (and GUESS-24) are validated scales that measure video game satisfaction along nine dimensions. Industry can use the GUESS as a way to assess what aspects of a game contribute to user satisfaction and as a tool to aid in debriefing users on their game playing experience.

What is the GUESS?

- The Game User Experience Satisfaction Scale (GUESS) is a recently validated survey that breaks down overall satisfaction into nine dimensions.

- An analysis of over 450 different video games with 1,300 participants resulted in the determination of the nine factors that contribute to video game satisfaction.

450 video games   1,300 gamers

Nine Dimensions of the GUESS

Usability/Playability   Narratives   Play Engrossment

Enjoyment   Creative Freedom   Personal Gratification

Social Connectivity   Audio Aesthetics   Visual Aesthetics

- The GUESS consists of 55 statements that are rated with a 7-point Likert scale (1 = Strongly Disagree to 7 = Strongly Agree).

GUESS & Virtual Reality

- The GUESS has been used to evaluate satisfaction across visual platforms, such as VR and non-VR for the video game Defense Grid 2.
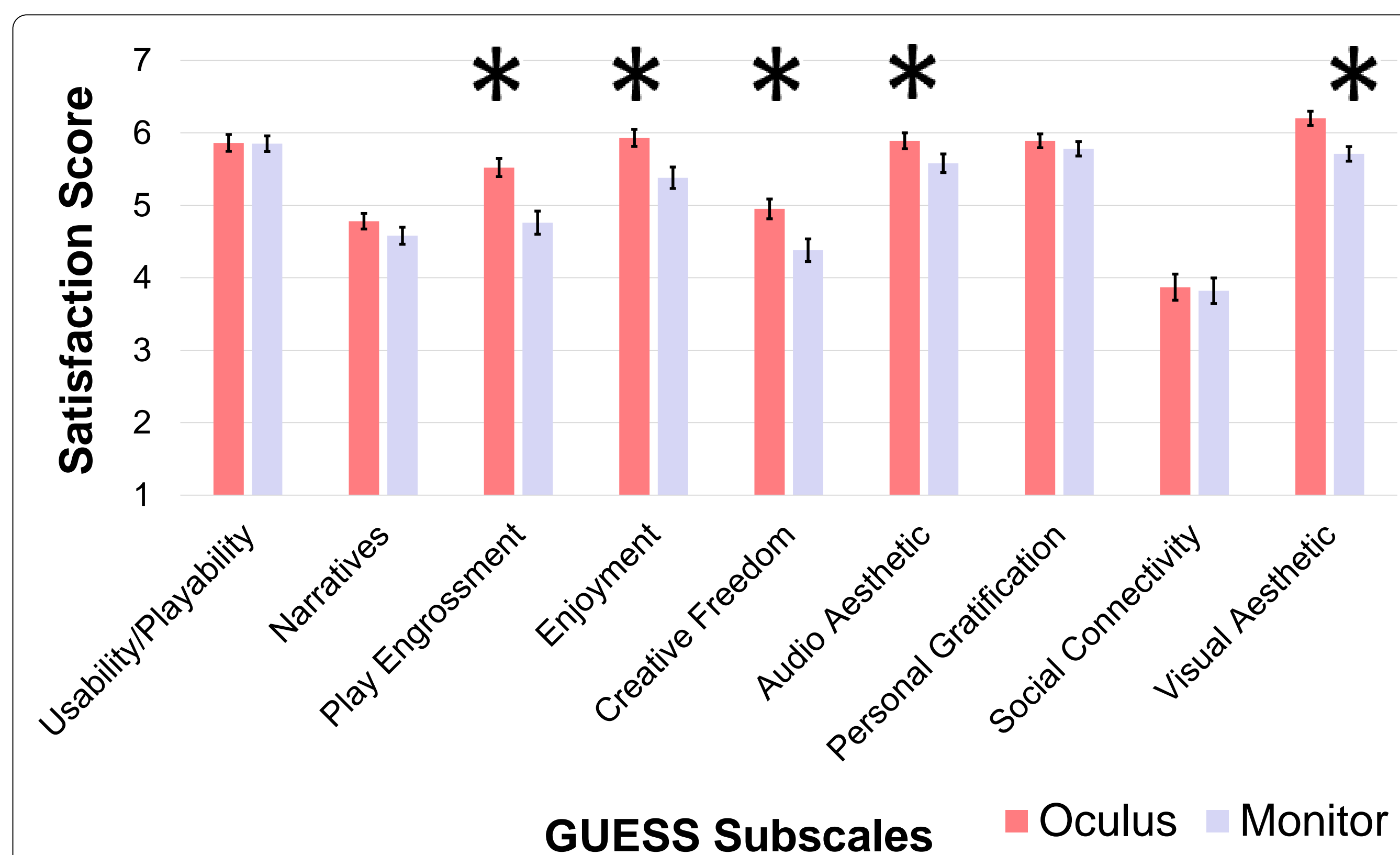

Figure 1. Comparison of GUESS subscales scores of the VR and non-VR versions of Defense Grid 2 (7 = more satisfied).
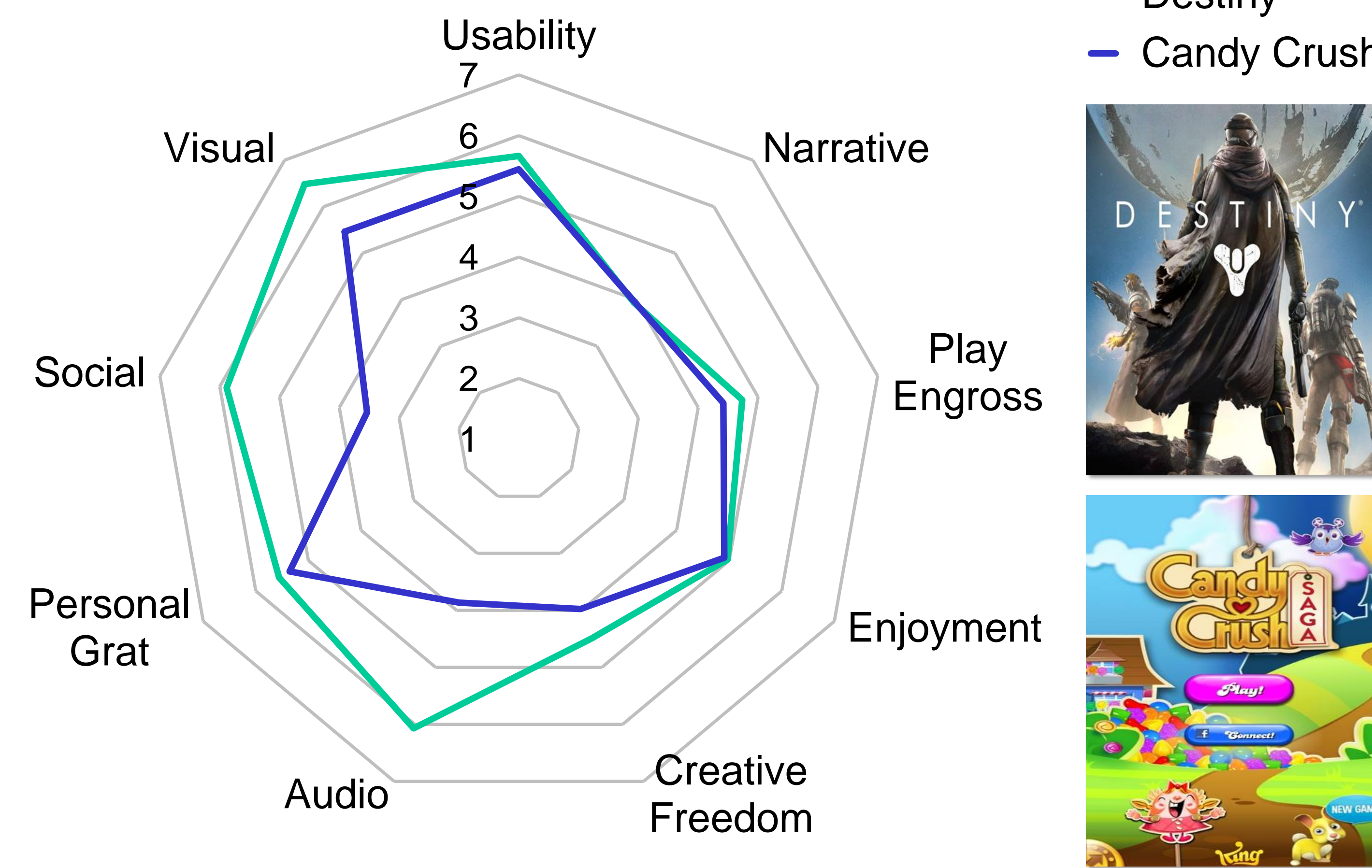
Comparing Games with the GUESS

Figure 2. Comparison of GUESS subscales scores of Destiny and Candy Crush (7 = more satisfied).

Other Applications of the GUESS

- The GUESS has been used in several domains such as virtual reality gaming, healthcare simulation, mixed reality, and social interaction.


Creation of the GUESS-24

- A 24-item version of the GUESS was developed to be used in iterative game design, testing, and research.

- The GUESS-24 is encouraged as a brief, practical, yet comprehensive measure of video game satisfaction for practitioners and researchers.

- Developers could use information from the GUESS-24 to broaden their games and help them identify their strengths and areas where designs could be improved.

Satisfaction & Continuance

- This research looked at the relationship between three experience scales (UEQ-S, ENJOY, GUESS-24) and how well they could predict continuance intention of some popular video games.

- 130 participants were surveyed from Amazon Mechanical Turk and a university's online research pool. Participants had to have played one of the 6 games below.

- A multiple linear regression was conducted to predict continuance intention based on the three overall experience measures.

- The total scores of each scale combined explain 65.7% of the variance of continuance intention. Each scale also had a significant unique contribution in predicting continuance with the GUESS-24 (β = .46) having the highest, then the ENJOY (β = .25), and finally the UEQ-S (β = .17).

- Looking at just the GUESS-24 subscales, Enjoyment (β = .69) was the best predictor of continued play. Looking at the ENJOY, Pleasure (β = .74) was the best predictor of continued play.
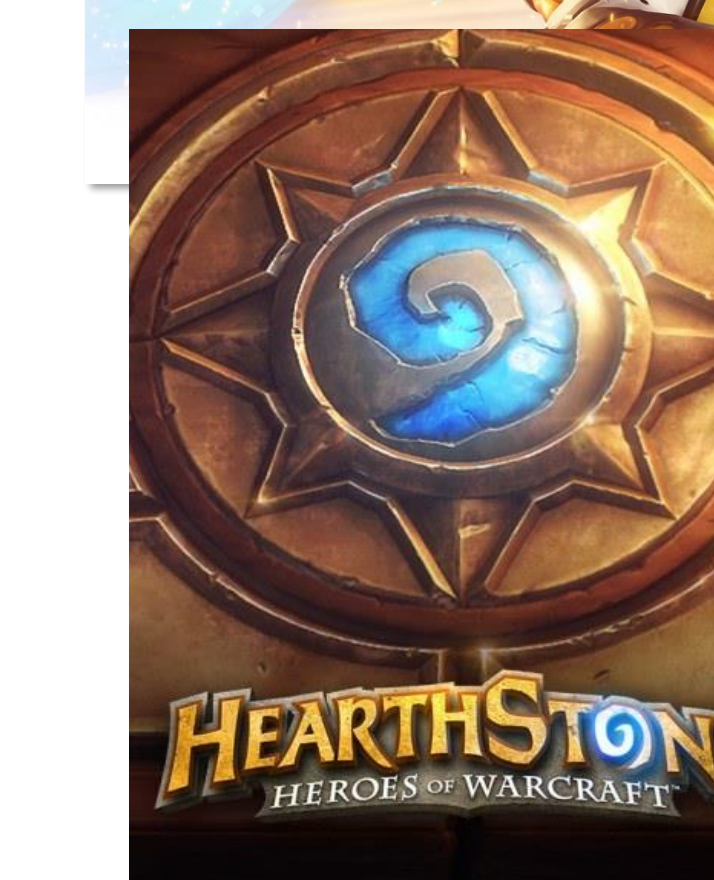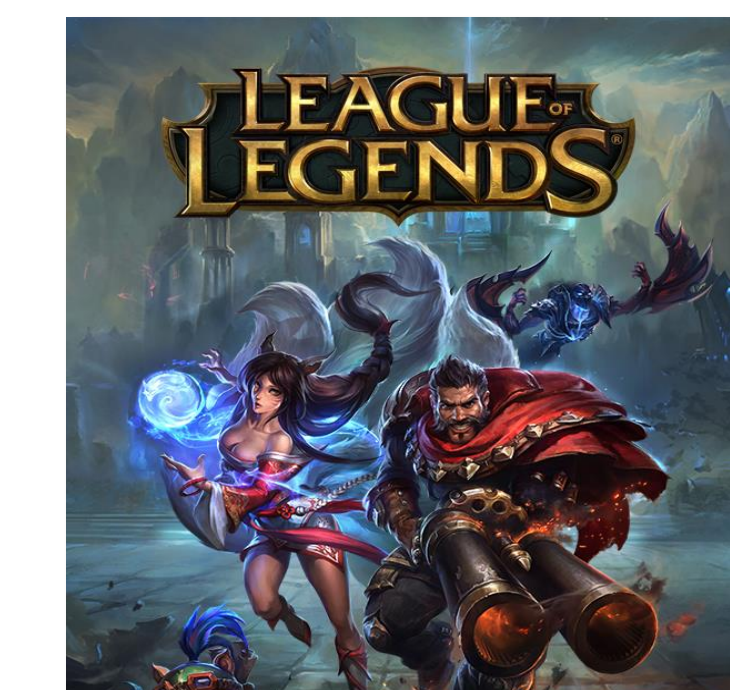
GUESS Future Research

- The GUESS and GUESS-24 are being used in ongoing research.

- Evaluating "bad" games or games that score poorly on the GUESS

- Evaluating video game satisfaction over time by examining ongoing games

- Examining the relationship between satisfaction and motivations of different video game players.

References

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- Shelstad, W. J., Smith, D. C., & Chaparro, B. S. (2017, September). Gaming on the rift: How virtual reality affects game user satisfaction. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 61, No. 1, pp. 2072-2076). Sage CA: Los Angeles, CA: SAGE Publications.