Frustration and Online Gamer Loyalty

Ching-I Tenga*, Kay-Ling Chiu“

*aDepartment of Business Administration, Chang Gung University,
259, Wenhua 1st Road, Gueishan Shiang, Taoyuan 333, Taiwan
bDepartment of Business Administration, Chang Gung University,
259, Wenhua 1st Road, Gueishan Shiang, Taoyuan 333, Taiwan
*Corresponding Author: chingit@mail.cgu.edu.tw

The authors thank National Science Council, Taiwan for financial support

ABSTRACT

Online gaming industry grows rapidly, indicating its importance in electronic commerce. Online games involve gaming challenges which may frustrate gamers, but none studies have investigated how gamer frustration impacts gamer loyalty, demonstrating a research gap. Research closing this gap is helpful for enhancing gamer loyalty. Thus this study investigated how frustration influences online gamer loyalty.

This study surveyed online gamers and obtain 558 valid responses. Structural equation modeling was used for testing study hypotheses. Analytical findings indicated that frustration reduces self-efficacy, which is positively related to gamer loyalty, confirming the intuition that frustration reduces gamer loyalty. However, this study separate the sample into experienced (played games ≥ 1.8 years) and novice (<1.8 years) gamers. Surprisingly but reasonably, frustration of novice gamers increases their participation in task teams which boosts their loyalty.

This study is the first in investigating how frustration impacts gamer loyalty, providing novel means for improving gamer loyalty.

Keyword: Online Games, Frustration, Customer Loyalty, Self-efficacy, Participation in Task Teams
Frustration and Online Gamer Loyalty

Ching-I Teng, Kay-Ling Chiu
Chang Gung University
Outlines

- Introduction
- Literature
- Research Framework
- Methods
- Analysis
- Results
- Implications
- References
Introduction (1/2)

- Online gaming industry grows rapidly, indicating its importance in electronic commerce.
- IDC forecasted that the online gaming market will grow substantially from 2009 to 2013 (International Data Corporation, 2009).
- Online games attract gamers and reduce their sleep time (Hussain & Griffiths, 2009).
- Heavy gamers spend an average of 4.7 hours daily playing online games (Lo, Wang, & Fang, 2005).
• Online gamers switch between games frequently (International Data Corporation, 2008) that decrease revenues.

• Online games involve gaming challenges which may frustrate gamers, but none studies have investigated how gamer frustration impacts gamer loyalty.

• **Purpose**
  – To investigate how frustration influences online gamer loyalty.
Literature (1/2)

• Frustration
  – A state of insecurity and dissatisfaction arising from unresolved problems or unfulfilled needs (Merriam-Webster Online Dictionary, 2010).

• Self-efficacy
  – The belief in personal capability that one can perform specific tasks in a designated level (Bandura, 1997).
• **Expectation for future achievements**
  – The belief that online gamers will attain the gaming goal in the near future.

• **Participation in task teams**
  – Gamers accomplish the tasks via task interaction and teamwork in online games.

• **Customer loyalty**
  – The intension to use the product or service supported by specific firms (Zeithaml, Berry, & Parasuraman, 1996).
Methods (1/2)

• Sample
  – Online gamers
  – Returned usable responses: 558
  – Effective response ratio: 86.7%
  – Gender
    • Male: 68.8%
    • Female: 31.2%
  – Age
    • between 20 and 25
Methods (2/2)

- Cronbach’s $\alpha > .72$
- Composite reliability (CR) > .79
- Average variance extracted (AVE) > .59
- Indicator loadings ($\lambda$) all > .58
- Maximum squared correlation for each pair of constructs was equal to .25, below the minimum AVE (.59).
- The above showed acceptable reliability and validity.
Analysis

• The fit indices of the structural model were acceptable.
  – $\chi^2 = 681.42$
  – df = 96
  – GFI = .87
  – AGFI = .82
  – NFI = .93
  – NNFI = .93
  – IFI = .94
  – CFI= .94
  – RMSEA = .10
Results (1/3)

• Frustration is negatively related to self-efficacy.
• Self-efficacy and participation in task teams are positively related to expectation for future achievements.
• Self-efficacy, expectation for future achievements, and participation in task teams are positively related to customer loyalty.
Results (2/3)

• Experienced gamers (played games ≥ 1.8 years)
  – Frustration is **negatively** related to self-efficacy.
  – Self-efficacy and participation in task teams are **positively** related to expectation for future achievements.
  – Self-efficacy and expectation for future achievements are **positively** related to customer loyalty.
Results (3/3)

- Novice gamers (played games < 1.8 years)
  - Frustration is **negatively** related to participation in task teams.
  - Self-efficacy and participation in task teams are **positively** related to expectation for future achievements.
  - Self-efficacy and participation in task teams are **positively** related to customer loyalty.
Implications

• This study is novel in examining whether and how frustration impacts gamer loyalty.

• Game provider are suggested to add “tutorial mode” to decrease the possibility of experiencing a high degree of frustration.
References

Thank You!