Project title

Gaming behavior, Class engagement and Academic Performance

1. Problem statement

Online games have become increasingly popular among universities students, providing short-term enjoyment and utility. However, excessive gaming may generate opportunities cost by reducing time and effort devoted to academic activities. This study examines how gaming behavior and game addiction are associated with class engagement and academic performance among undergraduates student at Chiang Mai University, using econometric perspective that emphasizes trade-offs in time allocation.

1.1 Research Question

- What is the relationship between game addiction, class engagement and academic performance among undergraduate students at Chiang Mai University

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2. Data collection

- Sample size 465 sample
- Data source: Online survey
- Time period: 8 July 2024 – 15 July 2024
- Location: Chiang Mai University

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3. Methodology

- Excel: Data cleansing, descriptive statistics, pivo tables, and visualization
- Stata: OLS regression, one-way ANOVA and post hoc (Tukey) tests

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4. key finding

- Competitive action games(e.g., FPS, MOBA, Battle Royal) are significantly associate with higher level of game addiction.
- Game addiction does not statistically significant direct effect on GPA.
- Excessive gaming time is negatively associated with class engagement.
- Class engagement particularly timely submit assignments, collaborate with peers and effort devote to class preparation plays a crucial role in explaining academic performance (GPA).
- Gender differences in game addiction are observed: male and LGBTQ+ student exhibit significant higher addiction scores than female students, with mean different of 0.71 and0.86 points, respectively. No significant different is found between male and LGBTQ+ students.

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5. Policy Implications

Based on the findings, several policies implication can be drawn. First, educational institution should strengthen student-teacher engagement by designing class activities and informal event that relate to student interest, including gaming related topic of discussion. Students with high level of game addiction may feel disengaged for traditional class setting, but inclusive and related activities can encourage interaction with instructors, improve participants and promote timely completion on academic tasks.

Second, institutions should introduce workshops or short courses on time management and opportunities cost, grounded in economic reasoning. Those programs can help students recognize trade-off between utilities from playing game and opportunities cost of academic responsibilities, encourage more efficient time allocation between leisure and learning, student may make more rational decisions that enhance productivities, collaboration and academic outcomes.

Overall, the finding suggests that game addiction should be address through engagement oriented and educational interventions by promote effective time management and fostering stronger teacher and student relationships. Which will enhance academic engagement and overall class performance (GPA) of students.

My role & Skill Demonstrated

In this project, I dependently designed and executed the entire research process, from data preparation to empirical analysis and policy interpretation

- Collected and cleaned primary survey data (n= 465) ensure consistency and accuracy for empirical analysis.
- Design meaningful variable classification including grouping game genres into analytical relevant categories. (e.g., competitive action games) based on behavioral characteristics
- Conducted exploratory data analysis using Excel, including descriptive statistics, pivot table and visualization to identity key patterns.
- Apply appropriate econometric techniques in Stata and Python, including OLS regression, one-way ANOVA
- Interpret statistical results using economics and behavioral reasoning, focus on opportunities cost and time allocation.
- Translate empirical finding into practical implication relevant to educational institutions.
- Communicated complex analytical result clearly through structure insight, summary sheets, and concise research portfolio.