Game Over & Out of Luck: Asian American University Student Problem Gambling and Problem Gaming

Calvin Zhao, MA Candidate
Michael S. Liao, MSW
Presenters

Michael S. Liao, MSW
- Director of Programs, NICOS Chinese Health Coalition

Calvin Zhao M.A. Candidate
- Asian American Studies Department, San Francisco State University
San Francisco State University
Asian American Studies

**Mission:** Through teaching, community service, and research, we use interdisciplinary approaches to address the structural and ideological forces that shape the lives of Asian Americans. We support self-determination by developing the creative expressions, voices, critical pedagogies, and analyses of our communities.
Objectives

1. Identify three differences among Asian American ethnic groups regarding problem gambling
2. Specify three key factors affecting Asian American problem gambling among university students
3. Specify three key factors affecting Asian American problem gaming among university students
Addictive Disorders: Gambling & Gaming
NICOS Chinese Health Coalition

**Mission:** To Enhance the Health and Well-Being of San Francisco's Chinese Community.

- Founded in 1985
- Located in SF Chinatown
- Public-private-community partnership of 30+ groups
Gambling & Gaming Addiction

• Gambling Disorder (American Psychiatric Association) – DSM 5 (2013)

• Internet Gaming Addiction (American Psychiatric Association) – DSM 5, Section III (2013)

Internet Gaming Disorder

Repetitive use of Internet-based games, often with other players, that leads to significant issues with functioning. Five of the following criteria must be met within one year:

1. Preoccupation with playing
2. Withdrawal symptoms when not playing
3. Tolerance
4. Unsuccessful attempts to reduce or stop playing
5. Gives up other activities to play
6. Continues playing despite problems caused by it
7. Deceives or covers up playing
8. Plays to escape adverse moods
9. Risks or loses relationships or career opportunities because of excessive playing
ICD-11 Beta Draft (WHO) – pending release in 2018

Gaming disorder is characterized by a pattern of persistent or recurrent gaming behaviour (‘digital gaming’ or ‘video-gaming’), which may be online (i.e., over the internet) or offline, manifested by:

1) impaired control over gaming (e.g., onset, frequency, intensity, duration, termination, context);
2) increasing priority given to gaming to the extent that gaming takes precedence over other life interests and daily activities; and
3) continuation or escalation of gaming despite the occurrence of negative consequences.

The behaviour pattern is of sufficient severity to result in significant impairment in personal, family, social, educational, occupational or other important areas of functioning. The pattern of gaming behaviour may be continuous or episodic and recurrent. The gaming behaviour and other features are normally evident over a period of at least 12 months in order for a diagnosis to be assigned, although the required duration may be shortened if all diagnostic requirements are met and symptoms are severe.
Convergence: Elements of Gambling in Games

- Elements of gambling have been part of gaming for years (betting on races in GTA; loot boxes)
Convergence: “Gamifying” Gambling

• Casinos Look to Video Games as a Draw for Millennials (NY Times, July 2016)
• Slot machine developers turn to popular apps to attract millennials (KTNV, Sept. 2016)
• GameCo wants to bring Video Game Gambling Machines to Las Vegas (KTNV, Aug. 2017)
• ‘First of its kind’ esports arena opens on the Las Vegas Strip (Las Vegas Review-Journal, March 2018)
• Luxor bets on video gaming with new Esports Arena Las Vegas (Travel Weekly, April 2018)
Existing Research – Gambling

• California Prevalence Study: 2.2% Problem Gambling; 1.5% Pathological Gambling (Volberg et al, 2006)

• Pathological Gambling Among University Students: 12.5% among Asian-American vs. 4-5% among African-American, whites, American Indians vs. 11% among Latinos (Lesieur et al, 1991)

• Problem gambling among San Francisco Youth: 11% among API youth vs. 2-6% national average (Chiu & Woo, 2012)

• Asian American Adolescents: AA showed higher levels of at-risk/problem gambling (30.6%) vs. Caucasian adolescent (26.4%) (Kong et al, 2013)

• Research points to being foreign-born as a risk factor of problem gambling, particularly among Asian Americans
Existing Research – Gaming

Accurate prevalence estimates of gaming disorder is confounded by these factors:

- Lack of standard assessment instrument
- Definition of the “problem” vary within individual studies
- Cultural factors may also influence tolerance/acceptance of gaming
<table>
<thead>
<tr>
<th>Country</th>
<th>Author(s)</th>
<th>Age</th>
<th>Size</th>
<th>How IGD was classified</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>Schmidt et al.</td>
<td>14–60+</td>
<td>600</td>
<td>Scores ≥42 on Video Game Dependency Scale</td>
<td>0.5</td>
</tr>
<tr>
<td>Germany</td>
<td>Rehbein et al.</td>
<td>13-18</td>
<td>11,003</td>
<td>Endorse ≥5 of 10 on DSM-5 adapted Video Game Dependency Scale</td>
<td>1.2</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Haagsma et al.</td>
<td>14-81</td>
<td>902</td>
<td>Endorse 7 of 7 on Game Addiction Scale</td>
<td>1.3</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Van Rooij et al.</td>
<td>13-16</td>
<td>4559</td>
<td>Statistical analysis of responses to Compulsive Internet Use Scale</td>
<td>1.5</td>
</tr>
<tr>
<td>Germany</td>
<td>Rehbein et al. Mostly 15</td>
<td>15,168</td>
<td></td>
<td>Scores ≥42 on Video Game Dependency Scale</td>
<td>1.7</td>
</tr>
<tr>
<td>Australia</td>
<td>King et al.</td>
<td>12–18</td>
<td>1287</td>
<td>Scores &gt;5 on Pathological Technology Use Checklist for Video Gaming</td>
<td>1.8</td>
</tr>
<tr>
<td>Germany</td>
<td>Mößle</td>
<td>Mostly 12-13</td>
<td>806</td>
<td>≥42 on Video Game Dependency Scale</td>
<td>1.9</td>
</tr>
<tr>
<td>Norway</td>
<td>Johansson et al.</td>
<td>12-18</td>
<td>3237</td>
<td>Endorse ≥5 of 8 on Young Internet Addiction scale revised for gaming</td>
<td>2.7</td>
</tr>
<tr>
<td>Germany</td>
<td>Festl et al.</td>
<td>14-90</td>
<td>4382</td>
<td>Endorse ≥4 of 7 on Game Addiction Scale</td>
<td>3.7</td>
</tr>
<tr>
<td>Hungary</td>
<td>Papay et al.</td>
<td>Mostly 16</td>
<td>5045</td>
<td>Latent class analysis of Problematic Online Gaming Questionnaire</td>
<td>4.6</td>
</tr>
<tr>
<td>Norway</td>
<td>Mentzoni et al.</td>
<td>15-40</td>
<td>816</td>
<td>Endorse ≥4 of 7 on Game Addiction Scale</td>
<td>4.7</td>
</tr>
<tr>
<td>Australia</td>
<td>Thomas and Martin</td>
<td>Mostly 12-24</td>
<td>2031</td>
<td>Endorse ≥5 of 8 on Young Internet Addiction scale revised for gaming</td>
<td>4.8</td>
</tr>
<tr>
<td>USA</td>
<td>Desai et al.</td>
<td>14-18</td>
<td>4028</td>
<td>Endorse 3 of 3 on Impulse Control Disorder revised for gaming scale</td>
<td>4.9</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Lemmens et al.</td>
<td>13-40</td>
<td>2444</td>
<td>Endorse ≥5 of 10 on DSM-5-adapted Internet Gaming Disorder Scale</td>
<td>4.9</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Lemmens et al.</td>
<td>12-18</td>
<td>1217</td>
<td>Endorse ≥4 of 7 on Game Addiction Scale</td>
<td>5.6</td>
</tr>
<tr>
<td>USA</td>
<td>Gentile</td>
<td>8-18</td>
<td>1178</td>
<td>Endorse ≥6 of 11 on Pathological Video Game Use Scale</td>
<td>8.5</td>
</tr>
<tr>
<td>Singapore</td>
<td>Choo et al.</td>
<td>8-15</td>
<td>2988</td>
<td>Endorse ≥5 of 10 on Pathological Video Game Use Scale</td>
<td>8.7</td>
</tr>
<tr>
<td>Spain</td>
<td>Salguero and Moreno</td>
<td>13-18</td>
<td>223</td>
<td>Endorse ≥5 of 9 on Video Game Addiction Scale</td>
<td>9.9</td>
</tr>
</tbody>
</table>
Existing Research – Gaming

- College Internet and Gaming Addiction (Tang et al, 2017):

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>Singapore</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Addiction (IAT)</td>
<td>4.5</td>
<td>4.9</td>
<td>7.0</td>
</tr>
<tr>
<td>Online Gaming Addiction</td>
<td>26.0</td>
<td>15.4</td>
<td>21.1</td>
</tr>
<tr>
<td>Social Networking Addiction (BFAS)</td>
<td>26.2</td>
<td>29.4</td>
<td>44.5</td>
</tr>
</tbody>
</table>
Relationship between Problem Gambling and Problem Gaming?

- Social and problem gamblers, relative to non-gamblers are significantly more likely to play video games. Similarly, significantly more video game players gambled, compared with non-players (McBride & Derevensky, 2016)
- Classification of either gambling or internet gaming addiction increased risk for the other (Fu & Yu, 2015)
Research Aim

This study is at a west coast California university examining the factors affecting
• Problem Gambling Among Asian Americans
• Problem Gaming Among Asian Americans
• The relationships between the two
Literature Review

• Accessibility (Winter 1998; Hodgins 2012; Lee 2014)
• Cultural Influences (Loo 2008; Fong 2009; Rinker 2015)
• Gender (Fong 2009; Hing 2015)
Methodology

• 312 Asian American undergraduate students participated in this study.
• The survey employed the South Oaks Gambling Screen (SOGS).
• If the participants scored 5 or more on the survey, they were classified to have a probable gambling or gaming disorder.
Study Sample
Study Sample: Age

Overall: Age

- No Answer: 5.4%
- Over 25: 12.5%
- Under 21: 37.5%
- 21 - 25: 44.6%
Study Sample: Nativity

Overall: Generation

- No Answer: 4.8%
- Foreign: 21.2%
- USA: 74.0%
Study Sample: Gender

Overall: Gender

- Male: 46.5%
- Female: 52.6%
- No Answer: 1.0%
### Gambling Activities – 1x week or more

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Played the stock market</td>
<td>6.73%</td>
</tr>
<tr>
<td>Went to casinos</td>
<td>6.09%</td>
</tr>
<tr>
<td>Game of skills for money</td>
<td>6.09%</td>
</tr>
<tr>
<td>Bet on horses/animals</td>
<td>5.77%</td>
</tr>
<tr>
<td>Played cards for money</td>
<td>5.45%</td>
</tr>
<tr>
<td>Played number/lotteries</td>
<td>5.13%</td>
</tr>
<tr>
<td>Played dice games</td>
<td>4.49%</td>
</tr>
<tr>
<td>Played slot machines</td>
<td>4.49%</td>
</tr>
<tr>
<td>Played Bingo</td>
<td>3.85%</td>
</tr>
<tr>
<td>Played pull tabs</td>
<td>2.24%</td>
</tr>
</tbody>
</table>
Top Games Reported

Frequencies

League of Legends: 43
Call of Duty: 13
Maple Story: 12
Overwatch: 9
Counter Strike: 9
Candy Crush: 9
NBA Games: 7
Dota: 6
Pokemon Games: 6
World of Warcraft: 5
FIFA Games: 4
8 Ball Pool: 4
Super Smash Bros: 4
Top Gaming Types/ Categories

- Online Computer Games: 59
- Multiplatform - Shooter Games: 41
- Cell Phone Games: 38
- Multiplatform - RPG: 26
- Multiplatform - Sports Games: 17
- Multiplatform - Racing Games: 6
- Console Games: 4

Game Over & Out of Luck: Asian Am. Univ. Student Problem Gambling and Gaming

SFSU Dept. of Asian American Studies
NICOS Chinese Health Coalition
San Francisco, CA
Problem Gambling
Gambling Findings: % who are Problem Gamblers

- Chinese: 18.75%
- Filipino: 8.779%
- Mixed: 9.52%
- Other: 10%
- Overall PG: 12.82%

n= 40
Gambling Findings: % who are Problem Gamblers

- Under 21: 5.13%
- 21 and 25: 14.29%
- Older than 25: 20.83%
- Overall PG: 12.82%

n= 40
Gambling Findings: % who are Problem Gamblers

Gambling Disorder by Gender

- Male: 22.07%
- Female: 4.88%
- Overall PG: 12.82%

n = 40
Gambling Findings: % who are Problem Gamblers

Gambling Disorder by Generation

- Native Born: 11.26%
- Foreign Born: 16.67%
- Overall PG: 12.82%

n= 40
Problem Gaming
Gaming Findings: % who are Problem Gamers

Gaming Disorder by Ethnicity

- **Chinese**: 31.25%
- **Filipino**: 19.3%
- **Others**: 18.88%
- **Overall PG**: 22.44%

n= 70
Gaming Findings: % who are Problem Gamers

Gaming Disorder by Age

- Under 21: 19.65%
- 21 - 25: 27.92%
- Over 25: 12.5%
- Overall PG: 22.44%

n= 70
Gaming Findings: % who are Problem Gamers

Gaming Disorder By Gender

- Male: 36.55%
- Female: 10.37%
- Overall PG: 22.44%

n= 70
Gaming Findings: % who are Problem Gamers

Gaming Disorder by Generation

- Native Born: 19.48%
- Foreign Born: 65.15%
- Overall PG: 22.44%

n = 70
Problem Gambling vs. Problem Gaming
%’s of Problem Gamblers and Problem Gamers: Ethnicity

![Gambling vs Gaming Ethnicity Bar Chart]

- Chinese: Gambling 18.75, Gaming 31.25
- Filipino: Gambling 8.779, Gaming 19.3
- Mixed: Gambling 9.52, Gaming 23.19
- Others: Gambling 10, Gaming 22.86
- Overall: Gambling 12.82, Gaming 22.44
%’s of Problem Gamblers and Problem Gamers: Age
%’s of Problem Gamblers and Problem Gamers: Generation

Gambling vs Gaming Generation

- Native Born: Gambling 11.26%, Gaming 19.48%
- Foreign Born: Gambling 16.67%, Gaming 65.15%
- Overall: Gambling 12.82%, Gaming 22.44%

Game Over & Out of Luck: Asian Am. Univ. Student Problem Gambling and Gaming

SFSU Dept. of Asian American Studies
NICOS Chinese Health Coalition
San Francisco, CA
Gambling vs Gaming: Gender

Overall

Male

Female

0 5 10 15 20 25 30 35 40

Gambling
Gaming

Game Over & Out of Luck: Asian Am. Univ. Student Problem Gambling and Gaming

SFSU Dept. of Asian American Studies
NICOS Chinese Health Coalition
San Francisco, CA
Dual Disorder
Dual Disorder Findings: % of Problem Gamblers Who are Problem Gamers

28% of all problem gamblers also have a dual gaming disorder.
16% of all problem gamers also have a dual gambling disorder.
Dual Disorder Findings: Ethnicity

- Chinese: 7.14%
- Filipino: 3.51%
- Other: 1.25%
- Overall: 3.53%

n= 11
Dual Disorder Findings: Age

- Under 21: 0.90%
- 21-25: 9.21%
- 25+: 6.67%

n= 11
Dual Disorder Findings: Gender

- Female: 1.22%
- Male: 6.21%

n = 11
Dual Disorder Findings: Generation

- Foreign: 4.29%
- Native: 3.31%

n = 11
Risk Factors
Analysis

• Risk Factors for Problem Gambling
  – Chinese
  – over 25 y.o.
  – Male
  – Foreign-born

• Risk Factors for Problem Gaming
  – Chinese
  – 21-25 y.o.
  – Male
  – Foreign-born
Recommendations

• Prevention of Problem Gambling
  – Address cultural norms of gambling (with emphasis on Chinese)
  – Sensitivity to immigrant and international students
  – Issues of re-entry students

• Prevention of Problem Gaming
  – Address cultural norms of gaming (with emphasis on Chinese)
  – Sensitivity to immigrant and international students
  – Issues of transfer students

• Examining the relationship between Problem Gambling and Problem Gaming
Q & A
Thank You For Joining Us Today
Michael S. Liao, MSW
NICOS Chinese Health Coalition
Tel: 415-788-6426
Helpline: 1-888-968-7888
Email: michael.liao@nicoschc.org