

Seventh Family Research Network (FRN) Forum

“The Social Cost of Addictions in Singapore”

Thursday, 20 October 2011
Auditorium, Level 1, Civil Service College



Singapore Kids and Video games: Findings of a 3-year longitudinal study

Dr Angeline Khoo
Associate Professor
Psychological Studies,
National Institute of Education

Definition of Pathological Video Gaming (PVG)

- Gaming activities that damage the individual's social, occupational, family, school, and psychological functioning with some addictive symptoms

Pathological Symptoms in Video-Gaming*

1. Has your schoolwork suffered because you spent too much time playing computer/video games?
2. Have you ever skipped your studies or co-curricular activities to play more computer/video games?
3. Do you need to spend more and more time and/or money on VGs to feel the same amount of excitement?
4. Have you played VGs to escape from problems, bad feelings, or stress?
5. Are you thinking about computer/video games more and more?
6. Have you stolen a VG from a store or a friend, or stolen money in order to buy a VG?
7. Have you tried to play VGs less often or for shorter periods of time, but are unsuccessful?
8. Have you become restless or irritable when trying to cut down or stop playing computer/VGs?
9. Have you ever lied to family or friends about how much you play VGs?
10. Have you ever needed to borrow money so you could get or play computer/video games?

*Gentile, D. A. (2009). Pathological video game use among youth 8 to 18: A national study. *Psychological Science*, 20, 594-602.

Sample and questions

Six primary and six secondary schools in Singapore responded to the invitation to participate.

Year 1 -- A sample of **3012** students Primary 3 and 4, and Secondary 1 and 2.

Year 2 – A sample of **2,601** students from Primary 4 and 5, and Secondary 2 and 3 were followed up from Year 1.

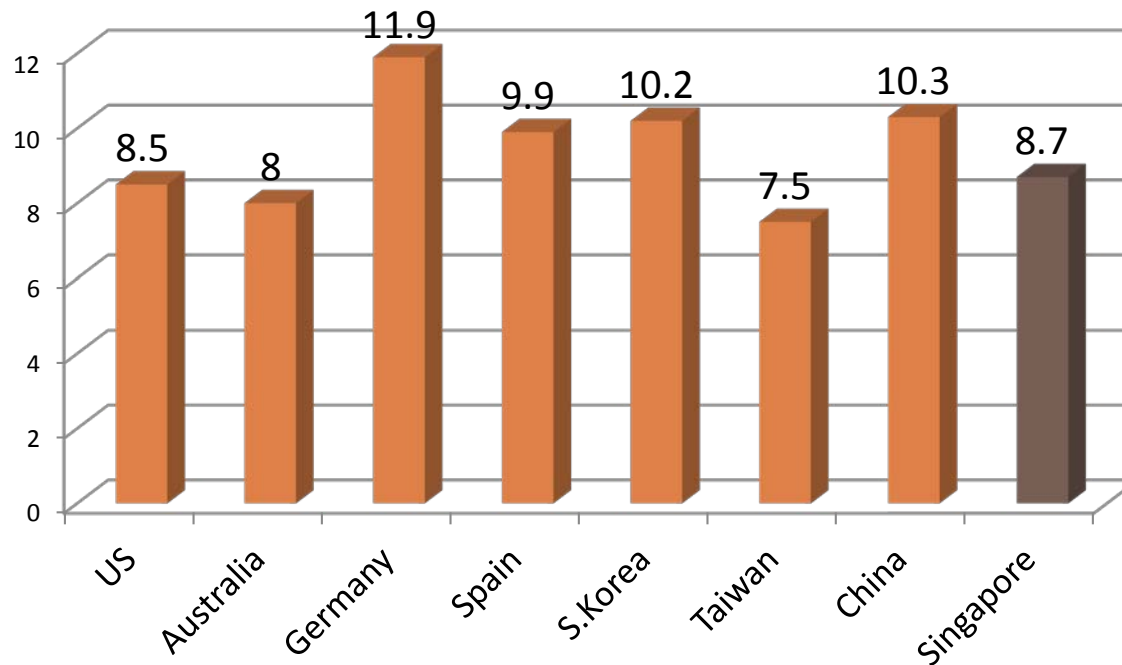
Year 3 – A sample of **2527** students from Primary 5 and 6, and Secondary 3 and 4 were followed up from Year 2

- Questionnaire comprises:
 - ▣ Demographic information
 - ▣ Gaming habits & pathological video-gaming
 - ▣ Personal strengths, prosocial attitudes, aggression and hostile traits
 - ▣ Parent-child relationship, parental control, and home environment
 - ▣ Somatic symptoms and more

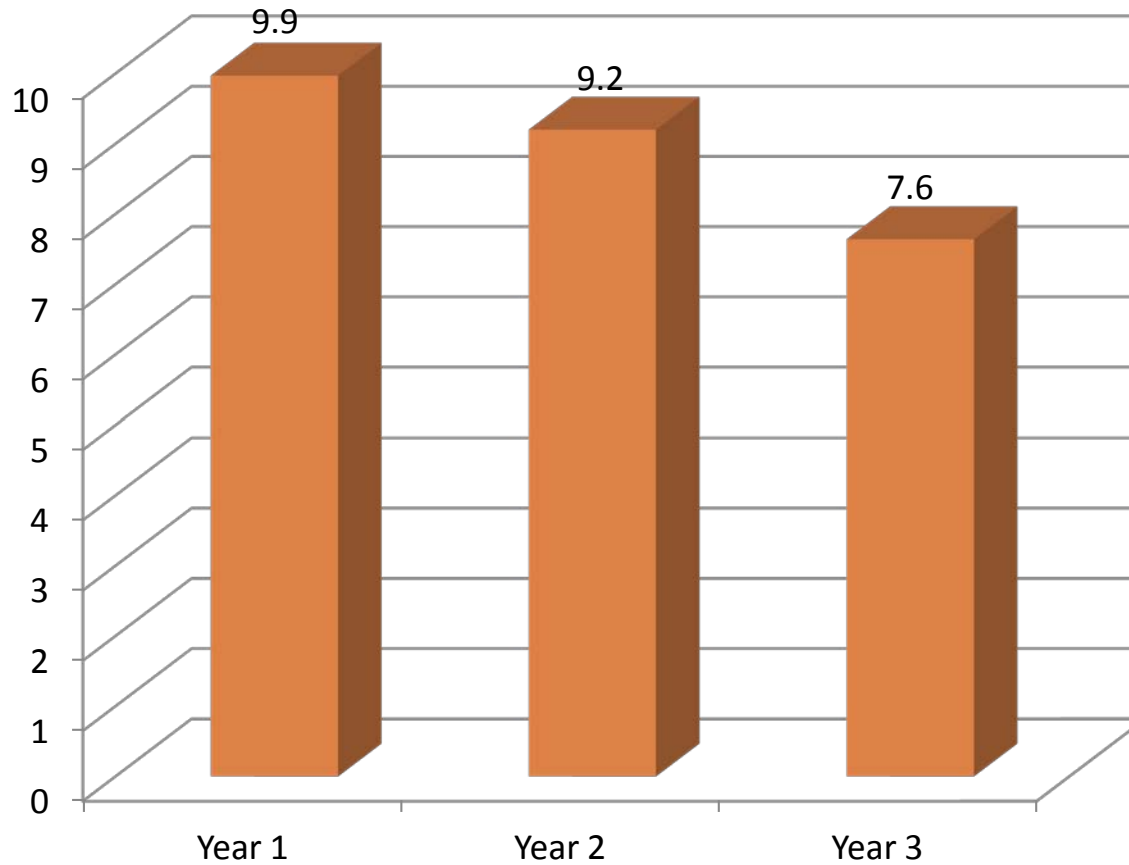
Prevalence of PVG

Those who report 5 or more symptoms out of 10 are considered as “pathological gamers”

Comparison of prevalence of PVG in other countries:



Percentage of pathological gamers over 3 years

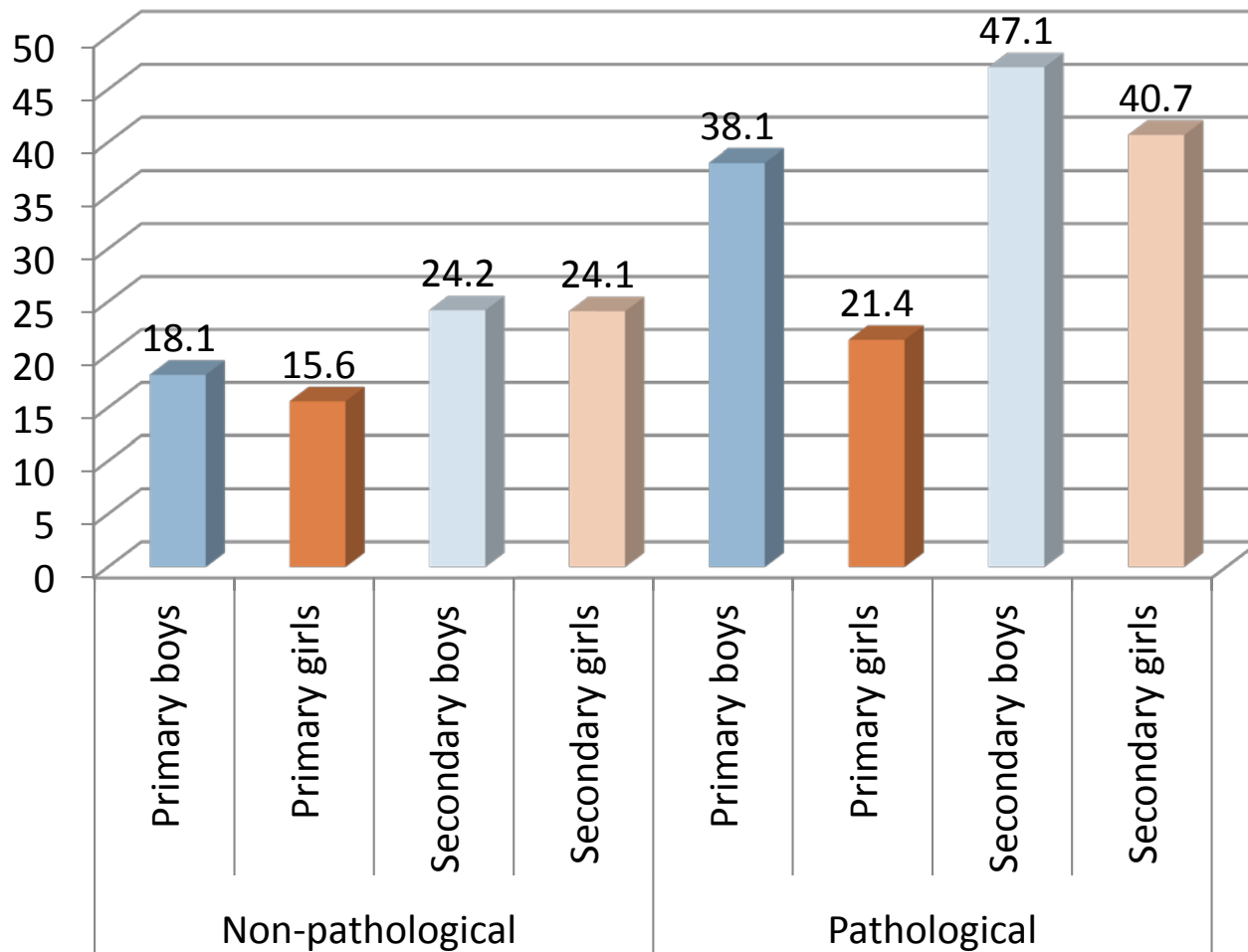


PVG symptoms

Symptoms	Prevalence
4. Played games to escape from problems, bad feelings, or stress	54%
8. Have become restless or irritable when trying to cut down or stop playing games	46%
5. Thinking about games more and more	42%
7. Have tried to play games less often or for shorter periods of time, but unsuccessful	41%
1. Have schoolwork suffered because you spent too much time playing games	36%
9. Have lied to family or friends about how much playing games	26%
3. Need to spend more and more time and/or money on games to feel the same amount of excitement	24%
2. Have skipped studies or co-curricular activities to play more games	16%
10. Have needed to borrow money so you could get or play games	9%
6. Have stolen a game from a store or a friend, or stolen money in order to buy a game	7%

Comparison between pathological gamers and non-pathological gamers

Non-pathological and pathological gamers' hours of play per week



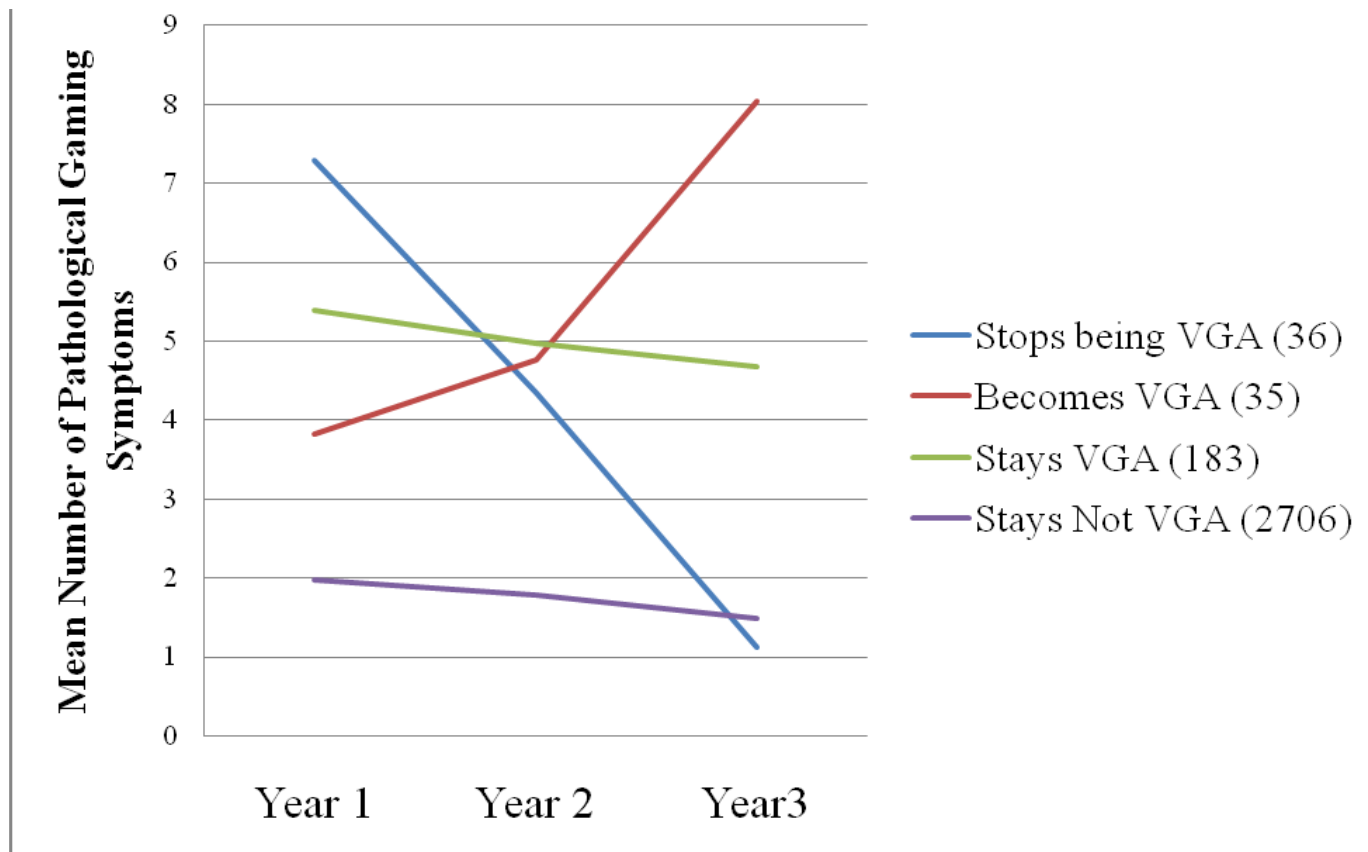
Comparison between pathological gamers and non-pathological gamers

In general, pathological gamers

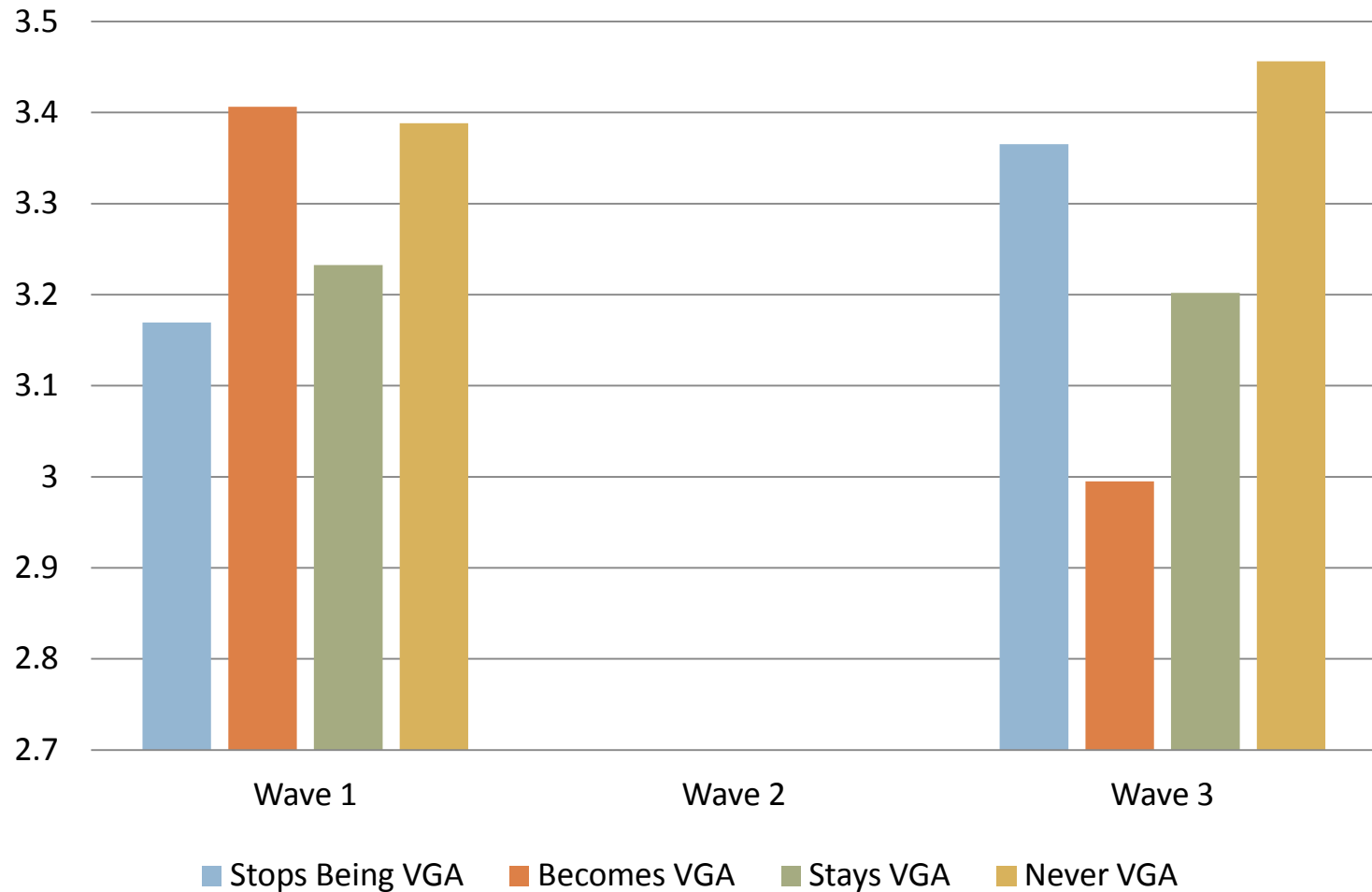
- spend about **36.8 hours** per week on gaming compared to non-pathological gamers who average only about 20.5 hours per week.
- visit **LAN centres** more frequently
- are more likely to have a **video gaming system in their bedrooms**
- have **poorer grades** in school.
- have more **school-related problems** like being late for school and not completing their homework
- have more **arguments with parents**
- spend **less time with family and friends**
- have **poorer social skills**
- are more likely to **neglect health** like having too little sleep and skipping meals

Latent Class Analysis – Four Groups of gamers

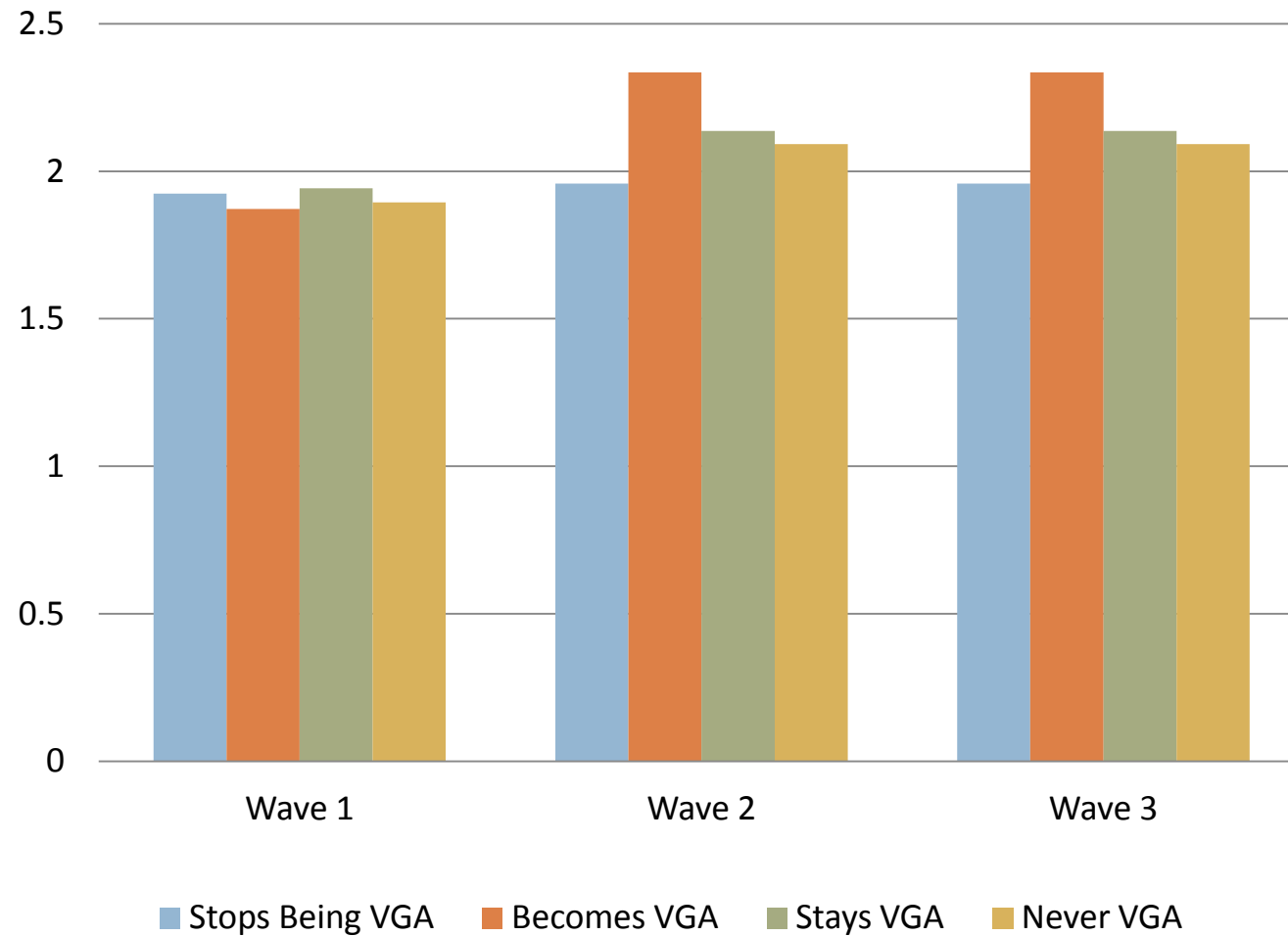
Using Latent Group Analysis (this statistical technique allows researchers to examine longitudinal data and identify clusters of gamers based on patterns of changes in their behavior over time) 4 groups of gamers were identified.



Latent groups and relationship with parents

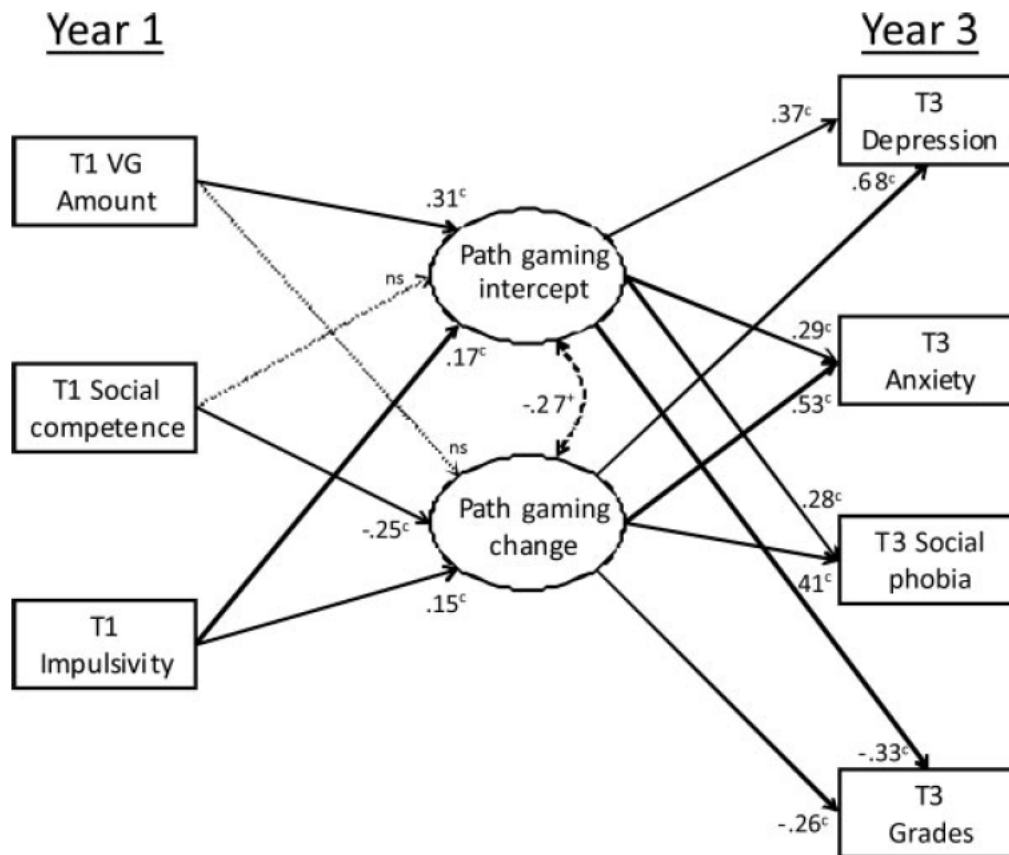


Latent groups and parental involvement



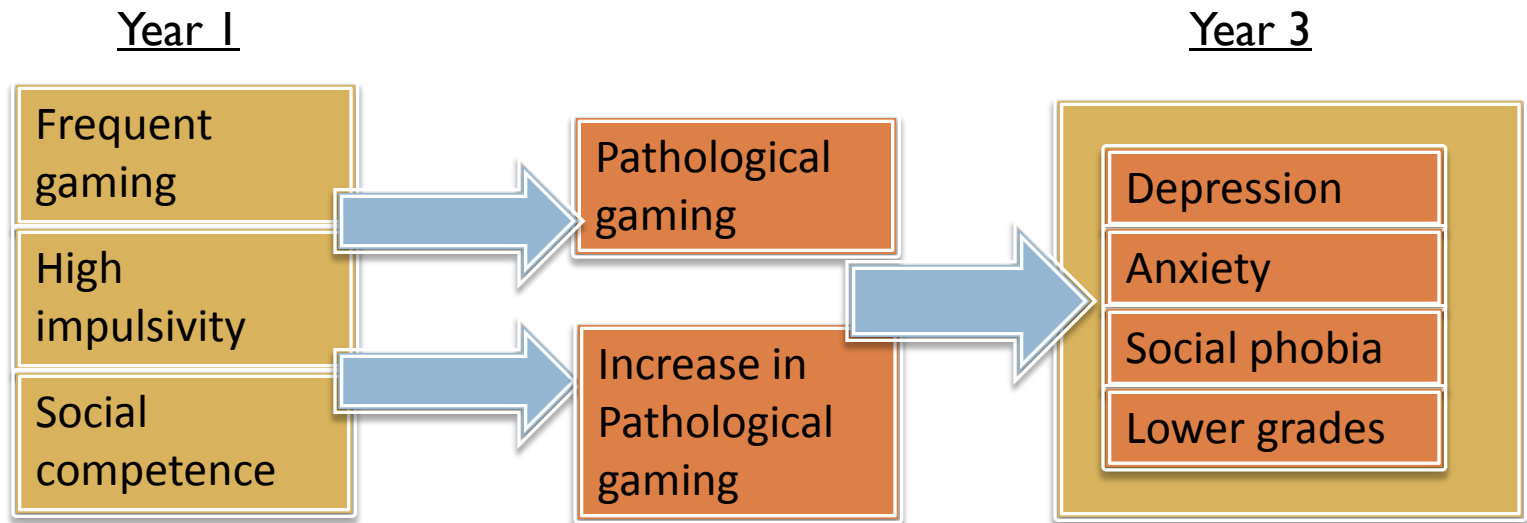
Effects of changes in pathological gaming over 3 years

Amount of play, social competence and impulsivity



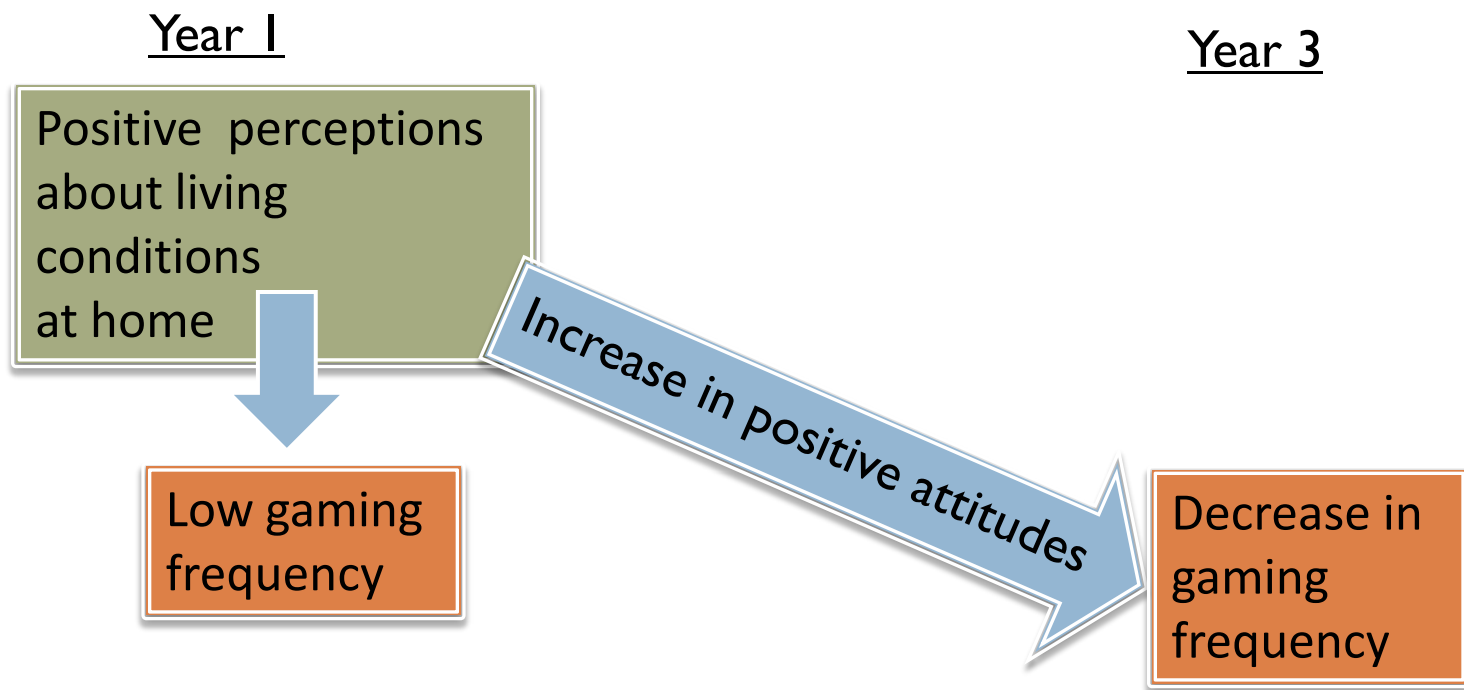
Effects of changes in pathological gaming over 3 years

Amount of play, social competence and impulsivity



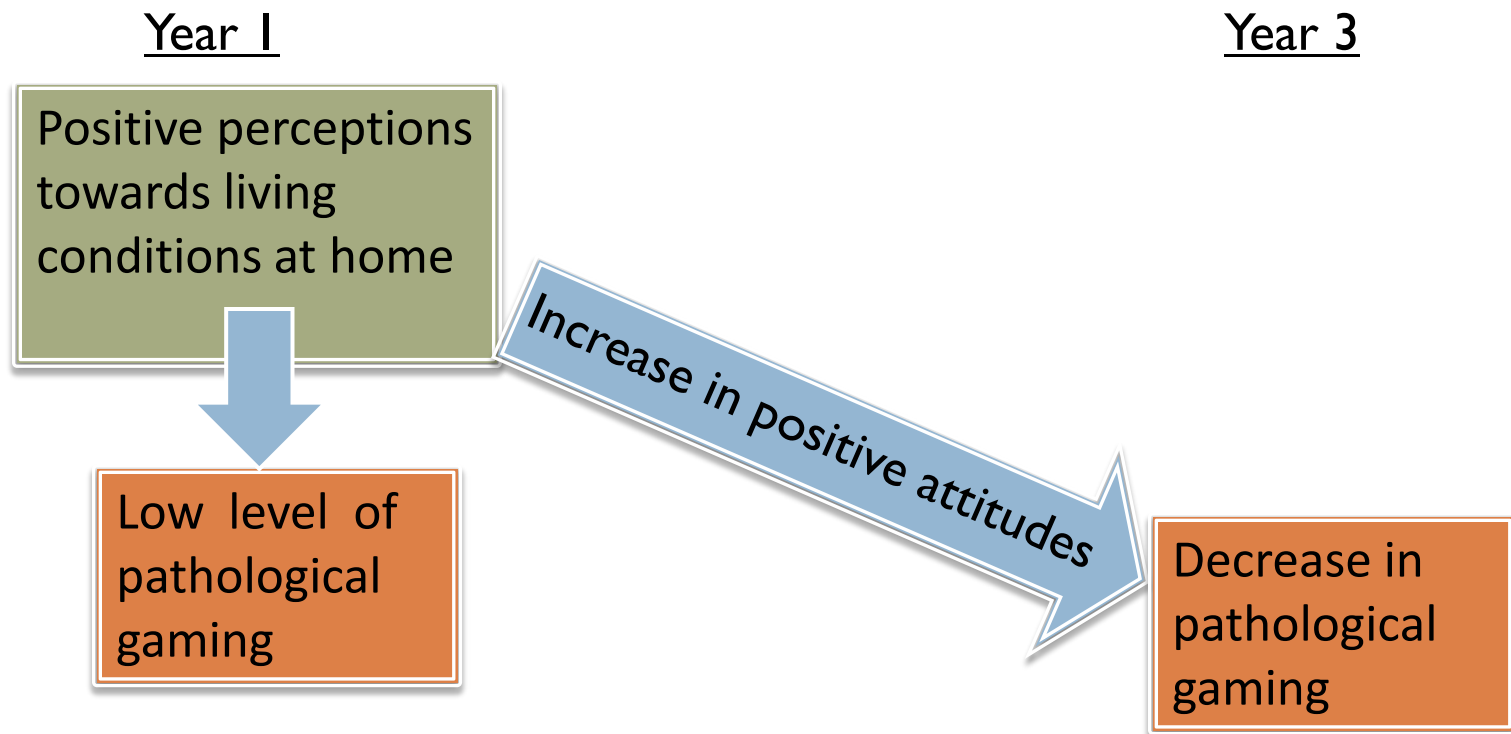
Effects of changes in pathological gaming over 3 years

Home environment



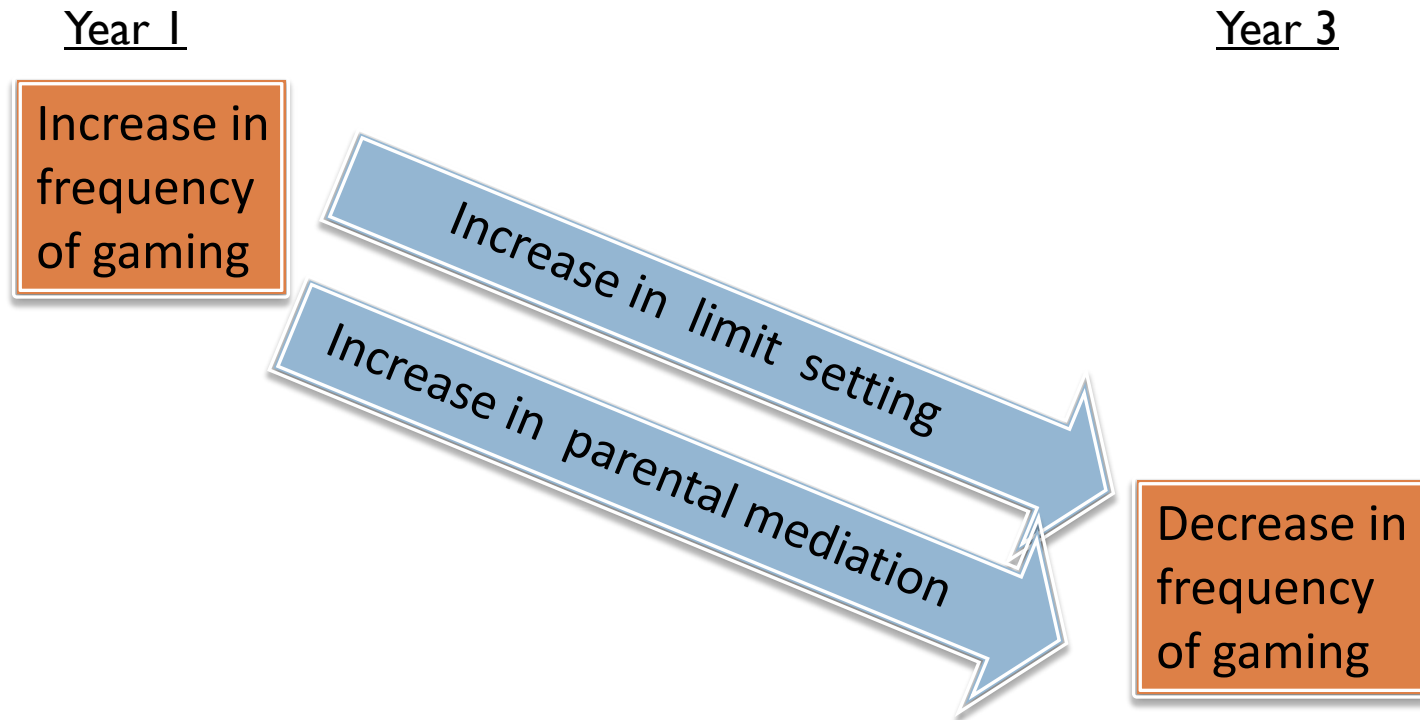
Effects of changes in pathological gaming over 3 years

Home environment



Effects of changes in pathological gaming over 3 years

Parental mediation



Note:

Parental supervision is found to be positively correlated with pathological gaming
But recent research also shows that parental mediation (particularly game rating checking) predicts frequent game playing and deceptive gaming behaviours (Shin & Huh, 2011)

Counsellors' views

- Counsellors interviewed reported the importance of involving the **families** of their clients
 - ▣ parents are often in a position to introduce alternative activities to video gaming to their children
 - ▣ parents need to ensure that their children follow through with the goals set (i.e., reduction of time spent on video gaming)
- It could take place in the form of formalized family therapy sessions, or informal dialogue with the families.
- PVG often has underlying causes, issues which have led the clients to turn to video gaming as a **coping mechanism**.
- These include familial problems (i.e., parents' divorce), self-esteem issues etc. The intervention therefore cannot be complete without tackling these underlying issues

Implications and recommendations

Parents support group for parents of gaming children

For parents:

- To enhance parenting skills
- To know the type and content of games their children are playing
- To know more about game ratings
- To appreciate why their children are attracted to the games
- To monitor hours of play, especially in the bedrooms
- To know where and with whom their children are playing games with (e.g. in school, gaming centres or friends' homes)
- To set realistic limits on amount of game play
- To avoid punitive measures of limiting play
- To foster more communication especially about gaming issues
- To provide a comfortable home environment
- To be role models for their children by demonstrating healthy online habits

Implications and recommendations

Hands-on understanding of gaming for educators

For teachers

- To identify students who may be at risk of pathological gaming
- To refer those who need professional help with gaming issues to counsellors
- To provide an empathetic listening ear
- To help address academic problems especially with gamers who have allowed their grades to fall, and help them set achievable academic goals.
- To improve self-regulation skills such as emotional regulation and goal setting
- To address gaming issues by incorporating them in lessons

For schools

- To organize hands-on training sessions on gaming for teachers
- To establish partnerships with operators of gaming and LAN centres
- To facilitate setting up of gaming centres in schools
- To encourage offline activities, specifically catered for gamers as alternatives

Implications and recommendations

Hands-on understanding of gaming for counsellors

For counsellors

- To be aware of negative stereotyping of gamers
- To use peer influence and group counselling
- To organize peer support and game mentoring
- To use family-based interventions
- To act as mediators in parent-child conflicts

Financial support for development of gaming websites and training resources

For the community

- To set up game information websites for parents
- To help in the training of counsellors
- To encourage the development of prosocial games

Future research

Evaluation of strengths and weaknesses of
PVG intervention programmes in Singapore

- In progress-- a study in partnership with

