

A background image showing a person from the side, wearing a green hoodie, glasses, and large black headphones with a blue and white patterned mesh. They are sitting at a desk with two computer monitors. The main monitor displays a colorful, abstract game scene. The person's hand is on a red gaming mouse.

DIGITALACTIVE Cyber Wellness Intervention

Programme Evaluation Report

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Executive Summary

Context

Online gaming is a popular activity among today's youths almost globally. A 2010 study among 3,000 Singaporean youths across 12 primary and secondary schools showed that they spent an average of 20 hours per week on gaming.¹ Furthermore, 1 in 10 showed symptoms of pathological gaming where activities such as meals, schools or interaction with family or peers may be neglected.² Given the possible addiction-like habitual behaviours, excessive device use has concerned the Public Health sector. Despite its prevalence and consequences, there is a lack of evidence of the effectiveness and implementation processes of targeted intervention programmes for youths in Singapore.

DIGITALActive is a cyber wellness counselling programme by TOUCH Community Services targeted at youths aged 12-17 years who exhibit excessive cyber gaming behaviours. The intervention aims to reduce their excessive device usage habits using Choice Theory Reality Therapy counselling framework and Motivational Interviewing technique that undergirded the design of the intervention. The intervention was delivered in various formats, namely individual counselling, group activities, family counselling sessions, and parental consultation sessions.

Evaluation Scope and Objectives

TOUCH commissioned graduate students from the National University of Singapore's Saw Swee Hock School of Public Health to conduct an outcome evaluation for DIGITALActive.

The key purposes of the evaluation include:

1. Review the programme theory of change and logic model
2. Evaluate the effectiveness of the programme
3. Provide suggestions for improvement of the programme

¹ Choo, H., Gentile, D. A., Sim, T., Li, D., Khoo, A., & Liao, A. K. (2010). Pathological Video-Gaming among Singaporean Youth. *Annals of the Academy of Medicine, Singapore*, 39(11), 822-829.

² NIE (2011), cited on Today and LKYSPP's website (https://lkyspp.nus.edu.sg/docs/default-source/ips/td_singaporean-youths-spend-more-time-gaming-than-american-youths_241011.pdf)

Methodology

The evaluation was conducted between January and April 2018. It included youth clients who were enrolled between August 2016 – August 2017. It adopted a mixed-methods design which analysed both qualitative and quantitative outcome indicators:

Table 1: Programme Indicators

Qualitative Indicators	Quantitative Indicators
<ol style="list-style-type: none"> 1. Attendance and demographic records. 2. Pathological Gaming Index (PGI) scores – A score of 5 or more suggests that one is likely to have symptoms of pathological gaming habits (Choo et al., 2010). Pre-post scores were collected and analysed. 3. Quantitative survey measurements of the retention of the 4 key outcomes – clients who were discharged from the programme were interviewed post-programme at one time point. 	<ol style="list-style-type: none"> 1. Clients who graduated from the programme and their parents were interviewed to provide qualitative insights to the quantitative outcome measures, as well as programme feedback. 2. Caseworkers involved were also interviewed to provide insights to the implementation of the programme.

Key Findings

1. Clients' Demographics & Response Rates

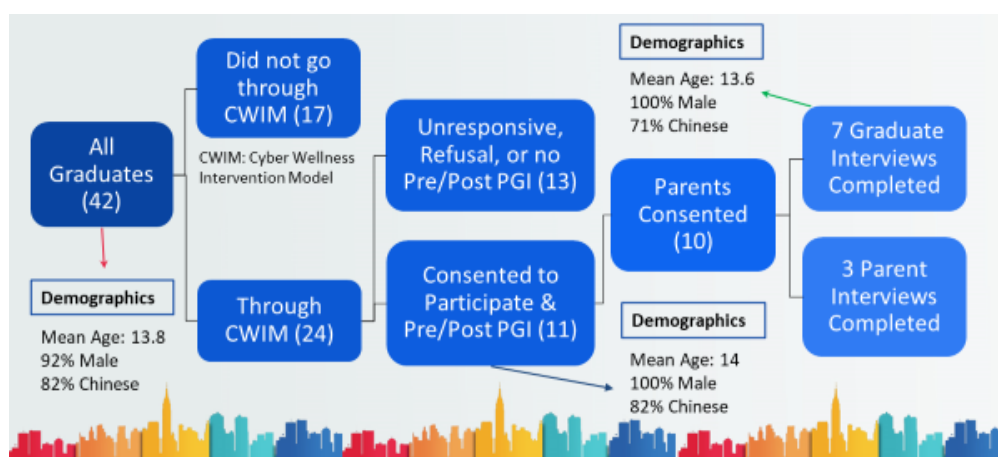


Figure 1: Demographics and respondent flowchart

2. Outcomes

2.1 Main Outcome: Pathological Gaming Habits

- 73% of programme graduates reported an overall reduction in PGI scores, suggesting reduced symptoms of pathological gaming habits.
- Pre-median score: 2.5 (range: 1-6.5); post-median score: 1 (range: 0-4).

2.2 Interim Outcomes

- Interim Outcome 1 – Increased Self-awareness**
 - As compared to only 14% who were able to articulate that their gaming habit was a problem initially, 71% were able to articulate by the end of the programme.
- Interim Outcome 2 – Consequential Thinking and Goal Ownership**
 - 83% of graduates recognised the need to cut down gaming during the programme.
 - All the graduates who were interviewed could identify at least one negative consequence of gaming.

- **Interim Outcome 3 – Better Relationship with Parents**

- 71% of clients reported more effective communication with parents by post-programme.
- Qualitative outcomes include the following:
 - One parent reported spending more time with their child.
 - One parent indicated that their child's usage of phone dropped when they were with them, and this indirectly led to the potential for better parent-child relationship.
 - One parent mentioned that the child had another platform, through the programme, to talk to someone.

- **Interim Outcome 4 – Cultivating A Balanced Lifestyle**

- 83% of clients could correctly identify a plan or steps to take if a relapse occurs.
- 6 of 7 interviewed clients shared that they will either call someone for help (N=3) or self-manage the relapse (N=3).
- Most parents reported having an improvement in perceived positive action of studying. They also reported that their child showed an increase in participation in activities besides gaming, in particular, physical and social activities.

Recommendations

Key Findings	Suggestions
Clarity on recruitment/selection criteria and assessment tool.	Develop clear selection criteria for intake into programme. Expand or revise the PGI to facilitate intake screening.
More group sessions requested by 71% of graduates. Parents also indicated need to increase social skills.	More group activities for building peer relationships and socialisation.
Intervention was designed to be a 6-month programme. However, the modal duration	Extend duration of intervention required for successful recovery.

required for the youth according to caseworker's assessment is about 8 months.	
Differing objectives between parents and graduates – Parents felt that caseworkers were surrogates between them and their children, while caseworkers identified that strong parent-child relationship is an enabler for the child to achieve the programme's intended outcomes.	Establish expectations, roles and therapeutic alliance between caseworkers and parents.

Conclusion

Due to the small sample size (13 quantitative data-points; 7 youth and 3 parents interviewed), the data was analysed and presented as numerical or qualitative summaries (e.g. graphs or thematic findings). It is also recognised that clients who have responded and completed the intervention may be very different from those who did not receive intervention.

Nevertheless, therapeutic alliance between the counsellor and clients is a key component of successful intervention delivery and necessary for the accomplishment of the therapy goals.³ The findings are thus still valid within the intervention sample. The preliminary findings also provided insights into the programme's effectiveness and improvements to be made.

More in-depth study of future adaptations of the programme can be done to establish more robust evidence for cyber wellness interventions programmes in Singapore.

³ Lynch, Margaret McCoy. (2012). Factors Influencing Successful Psychotherapy Outcomes. Retrieved from Sophia, the St. Catherine University repository website: https://sophia.stkate.edu/msw_papers/57

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