

# Are there Subtypes of Gamers More at Risk of Developing Pathologies?

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## Introduction

Gaming is a popular hobby. However, when enjoyed in excess, it can lead to disordered behaviours.

Internet Gaming Disorder (IGD) is a disorder characterized by pathological gaming habits that last for at least 12 months (World Health Organization, 2018; American Psychiatric Association, 2013). In the literature, there has not been previous research that distinguishes high-risk from low-risk gamers regarding the risk factors for development of other disordered behaviours and comorbidity with mental health issues.

Therefore, the current study assessed the risk of gamers development of other pathological behaviour habits and comorbidity with mental health issues, such as social anxiety, depression, ADHD, problematic gambling (PG), and substance dependence.

**Hypothesis:** Because this is an exploratory data analysis, we do not have a clear hypothesis, however, we predict that we will be able to distinguish between high/low risk gamers.

## Method

A secondary data analysis was conducted on data collected by Dr. Matthew Keough through the Amazon MTURK system.

The 289 eligible participants needed to be at least 18 years old, reside in North American and be fluent in English.

58% of our sample were men, 48% were 25-34 and 72% of our sample were Caucasian.

Participants were asked to complete a series of questionnaires including gaming habits, addictive pathologies and emotional pathologies.

A latent class analysis was conducted to determine class memberships of gamers using measures of social anxiety, depression, time spent gaming, IGD, ADHD, gambling disorder, alcohol dependence and cannabis dependence.

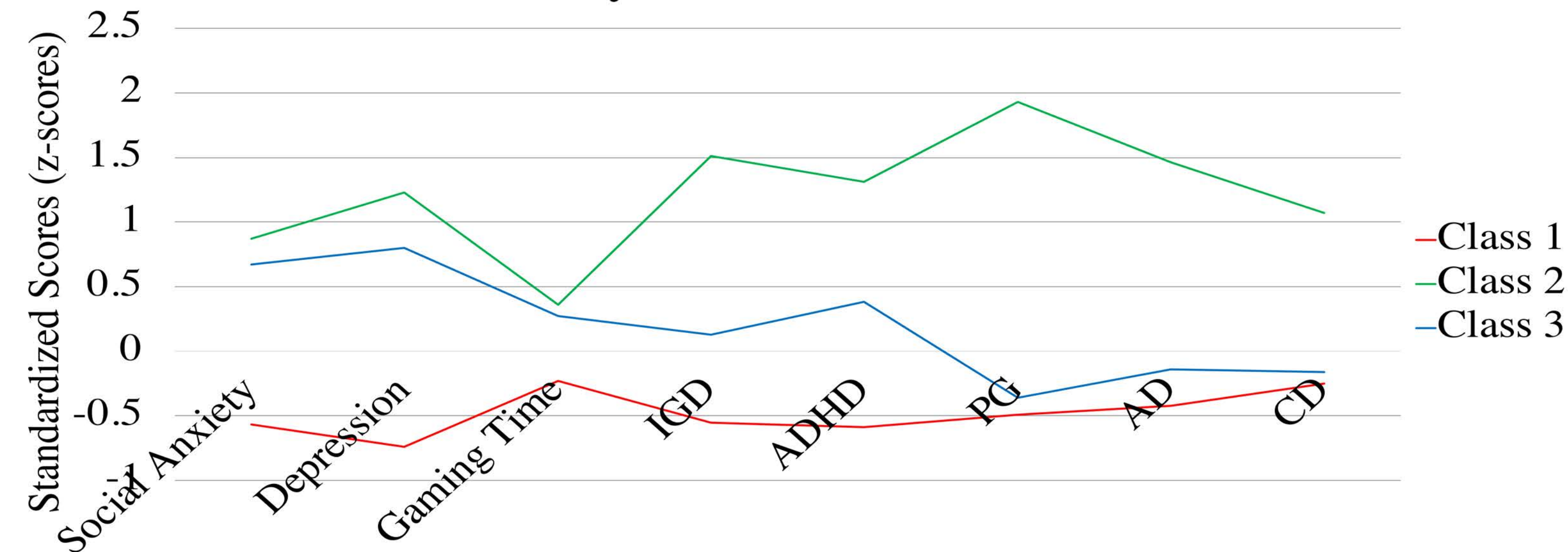
## Results

CLASS #	SSABIC	ENTROPY	(P-VALUES)	SMALLEST CLASS SIZE (%)
1	17528.72	NA		100
2	16352.48	0.994		20
3	<b>16082.54</b>	<b>0.928</b>	<b>0.07</b>	<b>19</b>
4	15947.62	0.938	0.35	6
5	15867.57	0.947	0.12	2
6	15635.65	0.948	0.23	2

## Results Continued

Variable	Mean	Standard Deviation	1	2	3	4	5	6	7	8
SIAS	30.4	20.078	-	.698**	.202**	.565**	.643**	.439**	.371**	.267**
CESD	16.45	13.81	-	-	.215**	.674**	.709**	.607**	.552**	.350**
GTLFB	25.5198	16.27842	-	-	-	.325**	.144*	.201**	.190**	.287**
IGDS9	18.8962	9.54428	-	-	-	-	.696**	.764**	.621**	.430**
ADHD	14.5729	6.08146	-	-	-	-	-	.659**	.551**	.370**
PGSI	4.1869	7.3172	-	-	-	-	-	-	.703**	.483**
AUDIT	8.0458	8.51198	-	-	-	-	-	-	-	.498**
Cannabis TLFB	5.3537	12.62086	-	-	-	-	-	-	-	-

Summary of Latent Class Solution



## Discussion

From the latent class analysis, we have been able to discover three different classes of gamers and how they may be more at risk of developing emotional and addictive pathologies alongside the presence of a gaming addiction.

Because this is an exploratory analysis, we are unable to conclude any specific hypothesis.

This data set is from a secondary data analysis with similar factors for the present study but uncertain context of the original study. This data set was originally intended to be longitudinal as data was collected three different points in time, but we only analyzed the data in the baseline session. This study's sample is unable to be generalized to a larger population as it was mostly made up of young Caucasian adults who were college/university graduates.

## Conclusion

The current study allowed us to identify the different subtypes of gamers in order to see if there was a relationship between addiction of video games and other addictive behaviours.

## References

- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5<sup>th</sup> ed.). <https://doi.org/10.1176/appi.books.9780890425596>
- World Health Organization. (2018). International classification of diseases for mortality and morbidity statistics (11th Revision). Retrieved from <https://icd.who.int/browse11/l-m/en>

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