

ASSOCIATED FACTORS OF PLAYING VIDEO GAMES AS EXPERIENTIAL AVOIDANCE IN ADOLESCENCE

Luiza C. Brandão¹, Zila M. Sanchez², Márcia H. S. Melo¹

¹Instituto de Psicologia - Universidade de São Paulo - Brasil

²Departamento de Medicina Preventiva - Universidade Federal de São Paulo - São Paulo - Brasil - luizabran@gmail.com
luizabran@gmail.com



Introduction

- Problematic video game playing (PVGP) may be understood as playing that leads to impairment in different dimensions of life (Van Rooij et al., 2017).
- PVGP in adolescents has been found to be associated with an array of mental and behavioral problems such as anxiety, depression, hyperactivity, and inattention (Mihara & Higuchi, 2017).
- Escapism is the use of online environment as a way to forget and avoid thinking of real life problems has been found to be one of the motivations associated with problematic playing (Kardefelt-Winther, 2014; Yee, 2006).
- Escapism, used in the field of research on video game playing, is highly compatible with the concept of experiential avoidance (EA), used in Acceptance and Commitment Therapy (ACT).

Objective

- The aim of the present study was to assess whether sociodemographic factors, drug use, bullying victimization and perpetration, and mental health symptoms were associated with playing video games, with the intent to alleviate problems among Brazilian eighth grade students.

Methods

- A cross-sectional survey nested in a cluster randomized controlled trial was used.
- The participants included 3,939 eighth grade students who answered a self-report questionnaire anonymously.
- Weighted logistic regressions were used to investigate the associated factors.

Results

- The results showed that 57% (CI=55.85; 58.15) of these adolescents reported playing as a form of EA. Playing to forget about problems is associated with being male, using tobacco, bullying victimization and perpetration, healthy levels of prosocial behavior, and emotional symptoms; the strongest association was with emotional symptoms (OR=1.98; 95% CI 1.73;2.28).

Table 1. Logistic regression estimates for playing video games to forget about problems during the year prior to the according to sociodemographic variables, drug use, bullying, and abnormal level mental health problems (SDQ) (crude and adjusted odds ratios).

	Play video games to forget problems (N=3,658)					
	Univariate regression			Multivariate regression		
	cOR	95%IC	p-value	aOR	95%IC	p-value
Boys (ref. Girls)	1.48	[1.33; 1.64]	<0.001	1.96	[1.75; 2.20]	<0.001
Age	0.98	[0.84; 1.14]	0.789	-	-	-
SES (ref. D/E)						
C	0.97	[0.87; 1.07]	0.497	-	-	-
B	1.16	[1.01; 1.34]	0.037	-	-	-
A	1.35	[1.02; 1.80]	0.037	-	-	-
Tobacco use (ref. no)	1.88	[1.54; 2.31]	<0.001	1.59	[1.27; 1.98]	<0.001
Alcohol use (ref. No)	1.29	[1.18; 1.41]	<0.001	-	-	-
Bullying Perpetration (ref. No)	1.66	[1.51; 1.83]	<0.001	1.35	[1.19; 1.54]	<0.001
Bullying Victimization (ref. No)	1.89	[1.75; 2.05]	<0.001	1.63	[1.44; 1.83]	<0.001
Hyperactivity/ Inattention (ref. No)	1.58	[1.38; 1.80]	<0.001	1.31	[1.33; 1.52]	<0.001
Prosocial Behavior (ref. Yes)	1.58	[1.30; 1.92]	<0.001	1.75	[1.54; 1.98]	<0.001
Conduct Problems (ref. No)	1.36	[1.22; 1.53]	<0.001	-	-	-
Peer Relationship Problems (ref. No)	1.42	[1.18; 1.70]	<0.001	-	-	-
Emotional Symptoms (ref. No)	2.08	[1.83; 2.37]	<0.001	1.98	[1.73; 2.28]	<0.001

Conclusion

- Playing video games as a form of EA has been shown to be a relevant aspect for investigation among this population, as it is related to mental health symptomatology in adolescence.
- Understanding PVGP through an ACT lens may help in the development of interventions that can target PVGP and its comorbidities simultaneously.

Table 2. Distribution of adolescents that play video games to forget about problems according to sociodemographic variables, drug use, bullying, and abnormal level mental health problems (SDQ).

		Play video games to forget problems (N=3,658)						p-value
		No (N=1,573)			Yes (N=2,085)			
		N	%	95%CI	N	%	95%CI	
Sex								
	Boys	664	38.19	[36.3;40.11]	1089	61.81	[59.89;63.7]	<0.001
	Girls	869	47.71	[46.19;49.23]	996	52.29	[50.77;53.81]	
Age								
	12 a 14	1393	43.04	[41.96;44.13]	1899	56.96	[55.87;58.04]	0.789
	15 a 17	123	43.55	[39.55;47.64]	162	56.45	[52.36;60.45]	
SES								
	A	51	36.61	[30.89;42.73]	90	63.39	[57.27;69.11]	0.002
	B	365	40.31	[37.86;42.80]	549	59.69	[57.20;62.14]	
	C	859	44.77	[43.11;46.45]	1107	55.23	[53.55;56.89]	
	D/E	262	43.91	[41.96;45.87]	342	56.09	[54.13;58.04]	
Tobacco use								
	No	1463	43.84	[42.71;44.98]	1922	56.16	[55.02;57.29]	<0.001
	Yes	70	29.30	[25.16;33.81]	169	70.70	[66.19;74.84]	
Alcohol use								
	No	1077	45.18	[43.92;46.44]	1315	54.82	[53.56;56.81]	<0.001
	Yes	461	39.04	[37.12;40.99]	779	60.96	[59.01;62.88]	
Bullying Perpetration								
	No	1186	46.22	[44.94;47.50]	1410	53.78	[52.50;55.06]	<0.001
	Yes	330	34.08	[32.19;36.01]	666	65.92	[63.99;67.81]	
Bullying Victimization								
	No	989	49.73	[48.23;51.23]	1020	50.27	[48.77;51.77]	<0.001
	Yes	533	34.30	[32.98;35.64]	1066	65.70	[64.36;67.02]	
Hyperactivity/ Inattention								
	Absent	1299	44.74	[43.42;46.07]	1644	55.26	[53.93;56.58]	<0.001
	Present	202	33.95	[31.34;36.66]	408	66.05	[63.34;68.66]	
Prosocial Behavior								
	Normal	1231	41.43	[40.22;42.66]	1795	58.57	[57.34;59.78]	<0.001
	Problematic	243	52.53	[49.64;55.40]	224	47.47	[44.60;50.36]	
Conduct Problems								
	Absent	1241	44.39	[43.05;45.74]	1592	55.61	[54.26;56.95]	<0.001
	Present	262	36.95	[34.63;39.34]	464	63.05	[60.66;65.37]	
Peer Relationship Problems								
	Absent	1326	43.90	[42.55;45.25]	1759	56.10	[54.75;57.45]	<0.001
	Present	172	35.60	[31.94;39.45]	293	64.40	[60.55;68.06]	
Emotional Symptoms								
	Absent	1295	46.17	[44.78;47.56]	1540	53.83	[52.44;55.22]	<0.001
	Present	206	29.19	[26.90;31.59]	514	70.81	[68.41;73.10]	

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