PROBLEMATIC VIDEO GAME PLAY IN A U.S. SAMPLE OF CHILDREN: AN EMPIRICAL EXAMINATION

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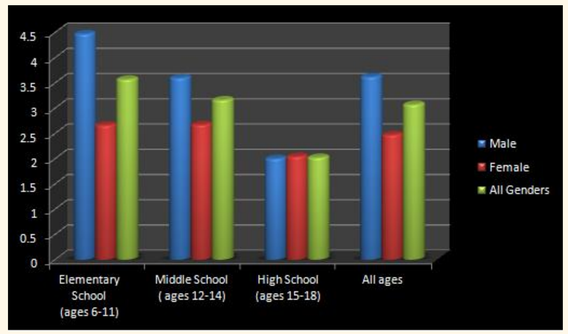
Introduction

- Problematic video game use, internet addiction, and internet gaming addiction or disorder are interconnecting terms in the literature that have become increasingly more common in the past decade
- In 2013 the Diagnostic and Statistical Manual of Mental Disorders 5 included Internet Gaming Disorder as a condition warranting more research (American Psychiatric Association, 2013)
- Internet gaming addiction, including what has been called pathological gaming or gaming disorder, has developed rapidly and is an emerging behavioral problem for adolescents in many countries (King, Delfabbro, Griffiths, & Gradisar, 2011)
- Internet Gaming Addiction has been defined as losing control to excessive gaming or internet use despite negative consequences (Grant, Potenza, Weinstein, & Gorelick, 2010)
- Similarly to addictions of drugs and alcohol, one of the first warning signs of internet and gaming addiction is isolation from family and social events when video gaming takes precedence over all situations in the child or adolescents life (Young 2009)

PVP Measure

1. When I am not playing with video games, I keep thinking about them (i.e. remembering games, planning the next game, etc.)
2. I spend an increasing amount of time playing video games
3. I have tried to control, cut back or stop playing, or I usually play video games over a longer period than I intended
4. When I can't play video games I get restless or irritable
5. When I feel bad (e.g. nervous, sad, or angry) or when I have problems, I use video games more often
6. When I loose in a game or I have not obtained the desired results, I need to play again to achieve my target
7. Sometimes I conceal my video game playing from others (i.e. parents, friends, teachers; etc.)
8. In order to play video games I have skipped classes or work, lied or stolen, or had an argument or a fight with someone
9. Because of video game playing I have reduced my homework/schoolwork, or I have not eaten, or have gone to bed late, or spent less time with my friends and family

PVP Mean Scores



Discussion

- The present study findings contribute to the literature on problematic video game play among a sample of youth and adolescents in the U.S.
- This study is one of the first to compare PVP scores of pre-adolescent children to adolescents
- In a previous research study the mean scores differed with males 2.660 vs 2.833 and females 1.607 vs 1.367 (Salguero & Moran, 2002) but the differences in the mean scores in this study are higher (males 3.62 vs. 2.70; females 2.47 vs. 1.50) indicating more problematic gaming use with this sample
- Our study findings contribute to the discussion that video games are becoming readily available to pre-adolescent children and thus additional empirical data-driven evidence should be gathered on children's behavior with Internet video game usage to determine any risk of video game overuse or addiction

Methods

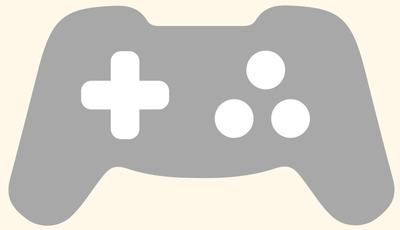
- One hundred and sixty children chose to complete the survey
- Just over half of the participants (51.2%; n = 82) were female
- The mean age of participants was 12.6 years (SD = 3.2), most (n = 76, 48%) were elementary school age (6-11 years old), followed by high school (15-18 years old; n = 45; 28.3%) and middle school (12-14 years old; n = 38, 23.7%)
- The Problem Video Game Playing scale (PVP) was completed by participants from May through August in 2014
- The PVP measure was designed by Salguero and Morán (2002) using the DSM-IV criteria of substance dependence and gambling dependence with each item being dichotomous yes or no answers to meet the proposed criterion
- A higher score indicates more problematic video game play
- For all statistical analyses, SPSS (version 19) was used, with a $p < .05$ standard. Analyses consisted of factorial analysis of variance (ANOVA) using SPSS general linear modeling (GLM), with Levene's tests to determine homogeneity of variances across groups

Results

- A two-way factorial ANOVA analysis was conducted to investigate PVP mean score differences in the sample across gender and school age level, and to examine interaction effects
- The Levene's test of equality of variances for the two-way factorial ANOVA was not significant, F (5, 153) = 1.51, p = .19, indicating homogeneity of variances
- The ANOVA results showed a significant main effect for gender, F (1,153) = 8.35, p = .004, partial η^2 = .052, a medium effect
- Males had a significantly higher PVP mean score (M = 3.62, SD = 2.11) than females (M = 2.47, SD = 1.89)
- There was also a significant main effect for school age level, F (2, 153) = 9.54, $p < .001$, partial η^2 = .111, close to a large effect
- Scheffé post hoc tests indicated significant differences between elementary school age boys mean PVP scores and high school age boys mean PVP scores ($p < .001$) and between middle school age and high school age boys ($p = .02$)
- Elementary school aged males present with the highest problematic video game play mean scores (M= 4.47, SD= 1.83)

Limitations

- Self-administered questionnaire
- Non-random convenience sampling
- Measure based off DSM-IV criteria



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