

## Traditional Games Intervention Effectiveness for Children with Internet Addiction

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**Abstract.** Internet addiction has lately become a sort of threat for the world as internet more and more easily accessible. Internet addiction threats not only adults but also children. This is due to the affordable gadgets and particular rules for children to own personal gadgets. Some experts across the countries agree that this phenomenon needs special attention as antisocial disorder, anxiety and depression prevalence is increasing in children. Training for children with these disorders to be physically active or doing regular sports is one of all efforts to overcome the distress phenomenon. Indonesian traditional games mostly require physical activity and the games can be used as therapeutic intervention for children with the addiction. The goals of this research were to find the traditional games effectiveness to reduce internet addiction inclination in children. This research was held using experimental approach with pre-post control group design. There were 40 children in an elementary school in Klaten District participated in the research and they were divided into 2 groups. The results showed that traditional games were effective enough as an internet addiction treatment for children.

### Introduction

Gadget or internet addiction has been a sort of threat for the world and they were easily accessible (Frackler, 2007). Some experts agree that this is serious potential phenomenon as long term excessive internet usage may cause mental disorder such as antisocial disorder, anxiety, and distress (Taylor, 2009; Wee, dkk., 2014). There is still disagreement among psychologists and psychiatrists, however, as the word “addiction” for internet usage is quite right as no clear criterions for internet decided yet (Demetrovics, Szeredi&Rozsa, 2008; Taylor, 2009). Some experts agree that internet addiction should be written as a new kind of disorder in the Diagnostic Manual of Mental Disorders considering that it may create serious danger as alcohol addiction or pornography (Taylor, 2009).

Gadget or internet addiction is threatening not only adults but also children (Park & Park, 2014). This addiction causes mental health problems in children if they are under supervised. For example, a case found in South Korea where a diligent pupil suddenly ignore everything such as eating and resting due to his obsession to game online (Flacker, 2007). In Indonesia, gadget has been widely used in many places. The writer survey on gadget usage among elementary school children in a government-owned elementary school in Klaten showed that 80% pupils have their own gadget and they also have personal account in social media. They also spent 4 hours a day in average to play games with their own gadgets. Interventions for gadget addiction rehabilitation and prevention is therefore really necessary considering that this children are in the development stage where they are still unable to think of right action for themselves (Park & park, 2014).

Based on the results of research held by Fackler (2007), physical activity with peers in a rescue camp program, where adolescences with internet addiction inclination should perform the activities, could decrease internet addiction tendency among Korean adolescences. The explanation was that after physical activities with peers, their bodies release endorphin hormones that create addictive effect, consequently they would choose to perform physical activities with peers than to play games in their gadgets.

Indonesian traditional games known to require physical activities with peers and the games may be used as an intervention method to deal with internet addiction cases in children.

## **Theoretical Rational**

### ***Internet Addiction Definition***

The word internet addiction was firstly used by Dr. Coldberg in 1996 which referred to compulsive and pathological internet usage (Suler, in Watson, 2005). Based on this reference, some researchers held further study on internet addiction and they agree to declare that internet addiction have something to do with severe psychological and physiological disorder that may cause one's increasing tolerance toward any causes of addiction, withdrawal symptoms, affective disorder and social relation disturbance (Watson, 2005).

### ***Internet Addiction Symptoms***

According to Watson (2005), several *internet addiction symptoms* are (a) difficulties to complete works, school tasks and household chores; (b) gadget use intensification with lower satisfaction; (c) anger and exhaustion when being offline; (d) unable to lessen online intensity; (e) keep being online instead of physical, psychological and social problems. Young in Sung, Shin, & Cho (2014) articulated some other symptoms such as online activities that generates complains from others, social media examining before starting any activities, keep online activities secretive, insomnia and almost always say "later" every time asked to stop being online.

### ***Internet Addiction Causes***

There are several factors that ignite children internet addiction. From behaviorism point of view, internet is satisfying and this satisfaction is a positive reinforcement for the addicts as they are satisfied and proud and they cannot get that from their real world (Peele & Brodsky, in Watson, 2005).

### ***Internet Addiction Types***

Young in Watson (2005) classified internet addiction into 5 categories, and they are (1) internet overload, this is one's inclination to do compulsive web browsing; (2) online gaming addiction, one's disposition to play games via internet connection; (3) net compulsion or excessive online gambling, shopping and trading; (4) cyber-relation addiction in which individuals with this addiction prefer to find or relate others via online; (5) cyber-sexual addiction that is searching, seeing and sexual-content files trading.

### ***Internet Addiction Danger***

Long term gadget usage may cause brain function disruption in frontal lobes, occipital area, and parietal areas which may lead to behavioral impairment (Taylor, 2009; Wee, et al, 2014). The damage in those areas can also influence thinking process, memory processing and retention, visual settings, hands movement and special ability (Pinel, 2009), and may cause real life ignorance with deterioration in work achievement, sleep time, appetite, and interests (Demetrovics, Szeredi and Rozsa, 2008).

### ***Traditional Games for Prevention and Rehabilitation Method for Internet Addiction***

In South Korea, they have applied physical training for prevention and rehabilitation for internet addiction in children. This way the children get life style experiences without internet or gadgets (Fackler, 2007). According to Farhud, Malmir and Khanahmadi (2014), this physical training ignites endorphins, in which people may feel happy, and this is rewarding, according behaviorism view, for the addicts. Later, they will feel the need to do the training again more than to be addicted to gadgets (Skinner, in Sobour, 2011).



Tabel 2. Data analysis

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Internet addiction	Equal variances assumed	.851	.362	-17.654	38	.000	-77.300	4.379	-86.164	-68.436
	Equal variances not assumed			-17.654	24.903	.000	-77.300	4.379	-86.320	-68.280

This result confirmed the research result of Fackler (2007) which proposed that physical activity was effective to lessen the internet addiction inclination. This is because physical activity ignites endorphins secretion that stimulates happiness (Farhud, Malmir, & Khanahmadi, 2014). According to the behaviorism view, traditional games that require physical activity, and played regularly for more or less 2 months, had made the children tend to choose traditional games than gadgets.

### Closing

Based on the research, it was concluded that traditional games was effective as an alternative way to overcome internet addiction inclination. This research has minor flaw and that is about the small sample of respondents. Therefore, future researchers are suggested to compile data from larger and broaden samples from wide population in order to get more representative data.

### References

- Demetrovics, Z., Szeredi, B., & Rózsa, S. (2008). The three-factor model of internet addiction: The development of the problematic internet use questionnaire. *Behavior Research Methods*, 40(2), 563-574.
- Duncan, S., McPhee, J. C., Schluter, P. J., Zinn, C., Smith, R., & Schofield, G. (2011). Efficacy of a compulsory homework programme for increasing physical activity and healthy eating in children: The healthy homework pilot study. *International Journal of Behavioral Nutrition and Physical Activity*, 8(127), 1-10.
- Fackler, M. (2007). Seoul opens 'rescue camp' for web addiction. *International Herald Tribune*, 1.
- Creswell, J. W. (2013). *Research Design Pendekatan Kualitatif, Kuantitatif, dan Mixed*. Yogyakarta: Pustaka Pelajar.
- Park, C., & Park, Y. R. (2014). The conceptual model on smart phone addiction among early childhood. *International Journal of Social Science and Humanity*, 4(2), 147-150.
- Farhud, D. D., Malmir, M., & Khanahmadi, M. (2014). Happiness & health: The biological factors-systematic review article. *Iranian Journal of Public Health*, 43(11), 1468-1477.
- Pinel, J. P. J. (2015). *Biopsikologi*. Yogyakarta: Pustaka Pelajar.
- Sobour, A. (2011). *Psikologi Umum*. Bandung: Pustaka Setia.

- Sugiyono. (2009). *Metode Penelitian Kuantitatif Kualitatif dan R & D*. Bandung: Penerbit Alfabeta.
- Sung, M., Shin, Y., & Cho, S. (2014). Factor structures of the internet addiction scale and its associations with psychiatric symptoms for Korean adolescents. *Community Ment Health J*, 50, 612-618.
- Taylor, L. (2009). The gadget addict generation. *Daily Mail*, 26.
- Uma, S. (2006). *Metodologi Penelitian untuk Bisnis*. Jakarta: Salemba Empat.
- Watson, J. C. (2005). Internet addiction diagnosis and assessment: Implications for counselors. *Journal of Professional Counseling, Practice, Theory, & Research*, 33(2), 17-30.
- Wee, C., Zhao, Z., Yap, P., Wu, G., Shi, F., Price, T., Du, Y., Xu, J., Zhou, Y., Shen, D. (2014). Disrupted brain functional network in internet addiction disorder: A resting-state functional magnetic resonance imaging study. *PLoS One*, 9(9), 107-306.