

RESEARCH ARTICLE

THE RELATIONSHIP OF URBAN ADOLESCENT
STRESSORS TO THE ONLINE ADDICTION
OF GAME ON JUNIOR HIGH SCHOOL

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ABSTRACT

Background: The presence of online games has brought great impact on personal development and adolescent adaptation. Urban adolescents are more vulnerable to the complexity and stress. Chronic exposure to social and environmental stress must be related to psychological pressure which can lead adolescent becoming online game addicts. The aim of this study was to determine the correlation between urban adolescent stress and online games addiction.

Methods: This is an observational study with a cross-sectional study design. Urban adolescent stress was

measured using Urban Hassles Index whereas online game addiction was measured using Indonesia Online Game Addiction Questionnaire. This study used chi square as the statistic test.

Results: This study included 280 students as research subjects, 112 subjects (40.0%) were online game addicts. Urban adolescent stress has a significant correlation with online games addiction ($p = 0.019$).

Conclusion: There is a correlation between urban adolescent stress and online game addictions.

Keywords: online game addiction, urban adolescent stress

BACKGROUND

Along with the rapid development of technology and the widespread use of the internet, new forms of recreational activities such as online games and social networking have emerged and are used by many individuals including children and adolescents. The development of information technology has led to the inclusion of new cultures with new values and norms giving more choices for adolescents in social interaction (mingling) in urban environments that experience faster development due to globalization. The presence of online games in the midst of the pace of technology has brought a big influence on personal development and adaptation of adolescents, not even a few adolescence who turned into game addicts. Adolescence who are addicted to online games have less self-control over themselves. Internet users in Indonesia reached 100 million in 2012 and around three-quarters of them are online game players. Online game players are mostly in children and adolescents at 68% and the rest in adults at 32%. The rise of online games finally makes teens want to continue to play it. If online games are played continuously without any self control from the teens, it will make teens addicted to online games. Addicted to online games experienced in

adolescence, can affect the social aspects of adolescents in living everyday life, because the amount of time spent in cyberspace results in adolescents less interacting with others in the real world.¹⁻³

In children and adolescents, risk factors included are lack of parental supervision, lack of structured activities in the home environment, lack of access or encouragement to participate in physical activity, and unlimited access to money to play video games that are mostly found in urban adolescence. In addition variations in environment can affect adolescent development. Heterogeneous cities can make adolescence have to more anticipate because they have to face diverse city environments and with different cultural backgrounds, social classes. Urban youth are more vulnerable to adolescent problems. They seemed to be required to follow the trend, if not want to say old-fashioned or outdated. Chronic exposure to social and environmental stress has been linked to psychological stress, maladaptive coping strategies, and pathological behaviors that can be a motivating factor for adolescents to forget their true identity and become game addicts online. Because of the description above, the author is interested in examining the relationship between urban adolescence stressors and online game addictions.²⁻⁴

METHODS

Research design with observational and cross sectional sampling. The study was conducted at SLTP Negeri 2 Semarang in March-April 2019. The sample population was urban adolescence who played online games, with a total sample of 220 people. Primary data obtained from the Urban Hasless Index questionnaire and Indonesian Online Game Addiction Question are research forms containing general characteristics. Ethical approval by Diponegoro University School of Medicine. Analysis using a computer program.

RESULTS

Most of the research subjects were female (60%), had grades below the KKM (98.2%), and with moderate urban adolescence stressors (43.2%).

Table 1. Demographic Characteristics of Research Subjects.

Variable	Frequency	%
Gender		
Male	112	40.0
Female	168	60.0
Urban adolescent stressor		
Mild	56	20.0
Moderate	121	43.2
Severe	103	36.8
Value below KKM		
Ever	275	98.2
Never	5	1.8
Variable	Frequency	%
Pocket money		
Below average	135	48.2
Above average	145	51.8
Variable	Mean	Standard deviation
Age	14.19	0.46
Pocket Money (Rupiah)	17325	7017.37

Table 4. Analysis of Confounding Variables Addiction

Variable	Addiction Mean (SD)	No Addiction Mean (SD)	P
Age (years)**	14.24	14.16 (0.469)	0.154
Pocket money (Rp)**	17785.71 (7636.36)	17017.86 (6578.16)	0.371
Variable	Addiction (%)	No Addiction (%)	P
Gender*			
- Male	67 (59.8)	45 (26.8)	0.001
- Female	45 (40.2)	123 (73.2)	
Value below KKM*			
- Ever	111 (99.1)	164 (97.6)	0.315
- Never	1 (0.9)	4 (2.4)	

The results above show the respondents 280 students of grade 8 as research subjects. Based on online game addiction screening data using the Indonesian addiction questionnaire, it was found that 112 subjects (40.0%) were addicted, while 168 subjects (60.0%) were stated as not. There were no subjects who refused to be included in this study so that the total number of research subjects who had met the inclusion and exclusion criteria was 280 people, that number was sufficient to the minimum number of subjects, 250 people. The data collection process was carried out during June 2019.

Table 2. Correlation between urban adolescent stressor with online game addiction

Variable	addiction (n=112)	No Addiction (n=168)	p
Stressor (n%)			
- mild	17 (15.2)	39 (23.2)	0.019
- moderate	43 (38.4)	78 (46.4)	
- Severe	52 (46.4)	51 (30.4)	

The results above show urban teen stressors have a statistically significant relationship to the incidence of online game addiction in adolescents. Most urban teen stressors of research subjects with addiction to online games are severe stressors (46.4%) whereas in adolescents without addiction online games have more moderate stressors (46.4%).

Table 3. Types of Stressors in the Online Game Addiction

Variable	Frequency	%
Environmental stressor	107	95.5
Interaction stressor	95	84.8
Safety stressor	108	96.4
Anticipatory stressor	10	8.9

The results above indicate the safety stressor is the highest type of stressor in the Online Game Addiction Group.

Pocket money*

- Below Average	50 (44.6)	85 (50.6)	0.329
- Above Average	62 (55.4)	83 (49.4)	

* using X² test

** use the unpaired T test

The above results show that gender has a statistically significant relationship as a confounding variable with the incidence of online game addiction in adolescents. Most of the sexes for subjects with addiction to online games are men (59.8%) while for subjects without addiction to online games are female (73.2%).

DISCUSSION

From this study obtained from 280 research subjects, 112 subjects (40.0%) of whom experienced online game addiction while 168 subjects (60.0%) stated otherwise did not experience online game addiction. In Indonesia the number of online game players was more than 25 million in 2013 and has increased 35% from the previous year, and is expected to continue to increase along with technological developments. From other studies in Indonesia, online game players are mostly 68% in children and adolescents, and the remaining 32% in adults. Whereas in other studies specifically conducted on adolescents in Indonesia, it was found that 72.8% played Internet games. 27.2% of them experienced addiction. This prevalence can be different depending on where the research is conducted, this research focuses on researching in the city of Semarang.^{5,6} The above data shows that most online game users both abroad and domestically are adolescence and in Indonesia online game addiction is more common than in the country others have been studied.

The results of this study indicate that most adolescents with online game addiction are accompanied by high levels of stressors. Most urban teen stressors of research subjects with addiction to online games are severe stressors (44.1%) whereas in adolescents without addiction online games have more moderate stressors (45.9%). A meaningful relationship is found between Urban Teen Stressors and Online Game Addiction. Other studies have also shown that there is a relationship between stress levels and the duration of playing online games.^{21,23} Chronic exposure to social and environmental stress has been linked to stress and pathological behavior. Adaptation of creativity is needed to achieve positive results. Harassment, anxiety, social disorganization, and coercion are statistically significant as potential dimensions of stress. Chronic exposure to stress can affect the perceptions, attitudes, and behavior of children and adolescents as they transition into adulthood.⁷⁻¹⁰

According to a recent survey of the American Psychological Association (APA) showing adolescents more

easily experience stress due to lifestyle like adults, the survey also said adolescence stress was more likely to increase and it affected their mental health. Game addiction is characterized by maladaptive patterns of game use that cause clinically significant disturbances or distress. Other studies conclude that the cause of someone playing online games excessively is due to boring routines, lack of opportunities to relax from the tight schedule of school or college, a place to stay away from comfort that causes someone to linger at the game center, and the invitation of friends in playing games to stay together playing online games, where all of these factors are in adolescents who experience high levels of stress.¹¹⁻¹⁴

Most stressors in this study were safety stressors. There are differences in results with the research hypothesis which states that most stressors are environmental stressors. Environmental stressors in this study were the second most stressors in patients with online game addiction. The most common risk factors include social isolation, lack of social support, or pre-existing psychological problems, such as depression or social anxiety.¹⁰⁻¹⁵

Other research also explains dangerous social behavior in urban areas raises more attention to personal and community safety among urban residents.¹⁶⁻¹⁷

Limitations in this study include the first are several research variables that can affect this study are not taken into account such as parenting, genetic, and comorbid diseases. The second limitation of this study is that additional data such as interviews with parents or student data needs to be added to reduce bias in this study.

CONCLUSION

In accordance with the research hypothesis that there is a statistically significant relationship between urban adolescence stressors and online game addiction. Urban adolescence with addicted online games have demographic characteristics in the form of age, gender, educational status, diverse economic status. The most common type of urban teen stressor with online game addiction is a security stressor.

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