

## Conference Paper

# Problematic Internet Use in Semarang Middle School Students

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## Abstract

Problematic internet use (PIU) or problematic internet use is a maladaptive pleasure in using the internet excessively without self-control. This study aims to investigate the prevalence and risk factors for the level of problematic internet use held by high school students. To achieve this goal quantitative methods with cross-sectional design were used in this study. A total of 336 students from junior and senior high school were selected using cluster sampling technique. The research data was taken using the Generalized Problematic Internet Use Scale 2 (GPIUS2) instrument. The results showed that the average PIU level owned by students was in the medium category. Education and age levels also have a close correlation with the high level of PIU that students have. In addition there are internal and external factors that can cause students to be exposed to PIU. Thus, it is necessary to provide both preventive and curative counseling services that can help students formulate more potential activities in supporting students' academic and social development.

**Keywords:** *Problematic internet use*, prevalence, middle school

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## 1. Background

The number of internet users (netter) at the end of 2017 increased rapidly (APJII, 2016; Kemp, 2017). This increase in internet users is experienced by all people, including students. The biennial survey results conducted by APJII show that the growth of internet users for students (SD / SMP / SMA or equivalent) in 2014-2016 reached 68% with a total netter of 8.3 million (APJII, 2016). Based on the results of this data exposure it can be estimated that students who use the internet in 2017-2018 will have a much larger percentage.

Referring to the number of students who have used the internet, educators (including counselors / BK teachers) need to pay more attention to the phenomenon. This is important to do because the internet does not only have a positive impact, but can also give negative effects (Alam et al., 2014; Siddiqui & Singh, 2016). When the internet is used positively, has a purpose and within reasonable limits it can be used for educational

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purposes, such as searching for subject matter, preparation for examinations, and interaction media of learning with teachers (Ali, 2014). However, when used excessively and dysfunctional, it will direct students to the problem of internet abuse or termed problematic internet use (PIU) (Mihara et al., 2016; Young & De Abreu, 2017).

PIU is basically just one of the many terms that have the same meaning equivalent, for example internet addiction, excessive internet use, compulsive internet use, internet dependence, pathological internet use (Caplan, 2003; Kuss & Griffiths, 2014; Kuss & Lopez-Fernandez, 2016; Odaci & Çelik, 2016; Young & De Abreu, 2017). PIU refers to maladaptive pleasures accompanied by the inability of individuals to regulate their desire to use the internet for a long time, so that it has a negative impact on academic, social and performance aspects (Aboujoude, 2010; Caplan, 2010; Young & De Abreu, 2017).

This inability of students to manage themselves will cause various other effects, such as compound addiction (Wanajak, 2011; Young & de Abreu, 2017), health problems (Belanger, Akre, Berchtold, & Michaud, 2011), social problems and adjustments to social issues (Işık & Ayaz Alkaya, 2017; Nugraini & Ramdhani, 2016; Nurhusni, 2017), mental health (Choi, Park, & Cha, 2017), lazing around and disrupting academic performance (George, 2016; Zheng, Wei, Li, Zhu, & Ning, 2016).

Considering the amount and magnitude of the danger that can be possessed by students if they experience PIU, it turns out that it is not directly proportional to the identification efforts made by education practitioners in schools (BK Teachers). Therefore, it is important to conduct an initial identification (need assessment) as a means of identifying the disturbances that can hinder the development of student learning in school. This study aims to investigate the prevalence of PIU owned by students in secondary education in terms of aspects of gender and age education. The supporting factors that can increase PIU in students will be explained further in the discussion section.

## 2. Methodology

An observational study with a cross-sectional design that aims to determine the prevalence and relationship of risk factors on excessive internet use in students. A total of 336 students from two different levels of education (junior high and high school) were selected by respondents through cluster sampling technique. Data was collected using the Generalized Problematic Internet Use Scale 2 instrument (Caplan, 2010). This instrument consists of 15 statement items with 7 answer choices ("strongly disagree"

to "strongly agree") and 5 constituent factors (Preference for online social interaction / POSI, mood-regulation, cognitive preoccupation, compulsive internet use, and negative outcomes). The collected data was analyzed descriptively to determine the prevalence of PIU levels owned by students and the chi-square test to determine the relationship between PIU levels, gender, education level and age of students.

### 3. Result and Discussion

Based on the demographic data described in table 1 it can be seen that the total respondents in this study amounted to 336 students, 132 (39%) were male and 204 (61%) were female. Respondents in this study also consisted of two different levels of education, of which 199 (59%) were high school students and 137 (41%) were junior high. In addition, the age of students who were respondents in this study was divided into four levels of age, 69 (21%) students aged 13 years, 48 (14%) students aged 14 years, 176 (52%) students aged 15 years, and 43 (13%) students are 16 years old, with the average age of respondents in this study is ± 15 years. After analyzing the level of PIU owned by all respondents, it can be seen that the average respondent is in the medium category (M = 58), with a standard deviation of 13.34.

TABLE 1: Frequency of PIU Levels for Middle School Students Based on Levels of Education, Gender and Age.

		Range of Problematic Internet Use				Total	%
		Low	Middle	High	Very High		
JK	L	17	57	56	2	132	39%
	P	32	96	68	8	204	61%
Total		49	153	124	10	336	
JP	SMA	39	95	63	2	199	59%
	SMP	10	58	61	8	137	41%
Total		49	153	124	10	336	
Age	13,00	6	32	28	3	69	21%
	14,00	2	18	25	3	48	14%
	15,00	34	82	58	2	176	52%
	16,00	7	21	13	2	43	13%
Total		49	153	124	10	336	
		Max		Min	SD	M	
PIU		97		28	13,34	58	

Note: JK = "Sex"; JP = "education"; L = "Male"; P = "Female"

After knowing the prevalence of PIU levels owned by students. The next analysis is to examine the relationship of each category to the PIU. Based on the results of the

chi-square test in table 3 below it can be seen that gender is not related to the level of PIU owned by students ( $t = 4.05$ ,  $p > 0.05$ ). The results of the statistical tests indicate that both men and women have the same opportunity to experience PIU. Different results are shown by other categories, where education and age levels are related to the level of PIU that is owned by students ( $t = 18.95$  and  $17.92$ ,  $p < 0.05$ ). This can be seen in the following table:

TABLE 2: Chi-Square Test Results for Education, Gender, Age and PIU Level.

	t	df	p
JK*PIU	4,05	3	,256
JP*PIU	18,95	3	,000
Age*PIU	17,92	9	,036

Note: JK= "Sex"; JP= "Education";

Referring to these results, it can be interpreted that the higher the level of education and the increasing age of PIU level owned by students tends to be even greater. In other words, increasing age and level of education has a greater potential to experience PIU. Why is that? Individuals who are having problems in using the internet have low Self-Control so they are less able to prevent excess internet use (May, S., et al 2016; Widiana, Retnowati, & Rahma, 2004). Other internal factors that can increase the level of internet use are problems of loneliness, self-resilience and low stress coping from children so that they divert by using the internet as a medium to seek pleasure and boredom exchangers. In line with this, other studies also support the findings above that individuals with high loneliness will seek diversions of less-purpose activities such as using the internet for a long time (Kim, LaRose, & Peng, 2009; Odaci & Çelik, 2013).

In addition to internal factors, there are other causes from outside such as external control, namely the control of parents. The more mature a person is, the lower the level of supervision is because it is considered capable of managing itself. The results of previous studies also reinforce that parents increasingly reduce their level of supervision of internet use in their children as their age grows (Li, Li, & Newman, 2013). The lack of supervision from parents makes children more of free to use their time to screen-time longer. Thus it is necessary to provide services that make it possible for students to realize that their behavior has only been camouflage.

Handling for students who experience high levels of PIU can be done with several psychological therapies. Kuss & Lopez-Fernandez (2016) describe five psychological therapies that can be used to overcome PIU problems such as CBT (Cognitive Behavior Therapy), MSBG (Multimodal School-Based Group), MGFT (Multiple Group Family Therapy), MI (Motivational Interviewing) and Reality Therapy. These five therapeutic

approaches can be carried out either individually or in groups and more importantly can be applied in school settings (JU Kim, 2008; Liu et al., 2015; Shek, Tang, & Lo, 2009; Wölfling, Beutel, Dreier, & Müller, 2014)

CBT is the most widely used approach in handling PIU or the like. This approach is one of the most effective approaches in reducing PIU. The focus of this approach is to change the problematic way of thinking (cognitive distortion or wrong belief) and the wrong pattern of self-management. Young (2011) states that individuals who experience PIU have an inability to regulate themselves and their desire to use the internet and believe by shifting their problems to the Internet all kinds of anxiety, stress and tension can be eliminated.

MGBS is a psychotherapy model that applies CBT in a group context in a school setting (Du YS & W, 2010). This model does not only focus on providing intervention to students, but also on parents and teachers (Kuss & Lopez-Fernandez, 2016). Students who experience PIU will be given CBT intervention in group settings, parents / guardians are given an orientation about PIU experienced by their children, and the teacher / homeroom teacher is given psychoeducation training in order to understand, treat and provide support to parents and students who experience PIU.

MFGT is a psychotherapy model that uses a family therapy approach as the basis for its implementation (Liu et al., 2015). The focus of this therapy is to enhance the role of the family through the process of interaction between parents and children in reducing PIU. With the creation of communication, closeness, and fulfillment of physical and psychological needs in the family, it is expected that the PIU experienced by students can be derived.

PIU often raises ambivalence or gaps in the sufferer. This ambivalence occurs because participants feel that their internet usage has not been a serious problem, even though the negative impacts have occurred in their lives. If this ambivalence is addressed by rejection or resistance by the therapist, then the therapy or counseling process will not work well. MI is a model in psychotherapy or counseling that attempts to resolve ambivalence (gaps) that have a negative impact on participants (CSAT, 2012). MI is oriented to unconditional acceptance at each participant's ambivalence. Through MI, participants were invited to explore themselves and resolve the gaps they experienced, so that they were aware of the problematic conditions and changed their behavior.

Reality therapy is an approach that focuses on meeting basic needs correctly, responsibly and realistically, as well as participant commitment to change (Glasser, 1977). Reality therapy assumes that behavior is the result of choosing from the process of thinking, acting and feeling (Capuzzi & Stauffer, 2016; Prout & Fedewa, 2015; Sharf, 2012). When

participants are able to think about fulfilling their needs, they must be true, responsible and realistic, so that problematic internet use behavior can be reduced or transferred to other better behaviors.

The use of psychological therapy in overcoming the problem of PIU in students theoretically and practically can indeed be done, but differences in subject characteristics based on demographic aspects become components that can influence the results of the intervention. Therefore, further research is expected to be able to test various approaches to psychological therapy on the problem of PIU in different contexts and places.

## 4. Conclusion

The use of problematic internet use (PIU) for secondary school students is in the low category. This means that the student is experiencing a PIU tendency. Various factors can be the cause, both internally and externally. Internally, individuals affected by PIU have low self-control, so they are less able to manage themselves in using the internet. Loneliness, self-resilience and coping stress can also be the cause of the emergence of activities transferring to internet abuse. Another thing that is not less important is parental supervision. Increasing age, there is also a decrease in supervision from parents on the pretext that students of their age are able choose activities that support their academic and social development, but they do not. Therefore it is necessary to provide counseling services that can help students and parents formulate appropriate actions for the problem of PIU.

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