

# **I'M ALWAYS ONLINE: PROBLEMATIC INTERNET USE AND RISK FACTORS IN ELEMENTARY SCHOOL STUDENTS**

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## **Abstract**

This study aims to reveal the risk factors that cause Problematic Internet Use (PIU) in children. This survey research used a cross sectional design by giving questionnaires Generalized Problematic Internet Use Scale 2 (GPIUS2), Interpersonal Skill Competence, and Achievement Motivation Scale to 278 participants. Participants were obtained using quota sampling with the criteria, namely, elementary school students aged 9-12 years. The research subjects who were netted in the first phase are re-screened with the new inclusion criteria who were identified as having PIU with only moderate to very high hypothetical categories. As many as, 98 students who experienced PIU were obtained and were used as the final research subject. The results showed that as many as 86 students or equivalent to 30.93% had fallen into the category of experiencing problematic internet use tendencies and as many as 12 students or equivalent to 4.31% were in the heavy category of dependence on the internet (Internet Dependence). Besides that, Interpersonal skills and achievement motivation together were shown to have a negative effect on PIU,  $t(97) = -1.45, p < .05$ , and  $t(97) = -1.58, p < .05$ , respectively. Based on these results, counselors should be able to provide preventive and curative services, in order to maintain optimal growth and development in children.

**Keywords:** problematic internet use; elementary school students; achievement motivation; interpersonal skills

## **INTRODUCTION**

The internet has become an unavoidable necessity in life, even for elementary school students. Globally, internet users are experiencing rapid growth of up to 76% worldwide (Poushter, 2016) and is expected to continue to increase every year (WEF, 2016).

The emergence of the internet certainly has an impact on the audience, both positive and negative influences. One of the positive benefits is as a media for literacy and education for students (Anderson et al., 2016; Kiryakova et al., 2017). But in fact there are also negative effects (Sokang, 2016). Students who are not able to control themselves in using the internet in a positive and functional way will experience problems (Anderson et al., 2016; Ravizza et al., 2014). The problems that arise due to internet use are called problematic internet use or problematic internet use and are usually abbreviated as PIU (Anderson et al., 2016; Gómez, et al, 2017; Macur, et al., 2016;

Young & De Abreu, 2017). The term problematic internet use also has other equivalent words such as excessive internet use, compulsive internet use, internet dependence (Kuss & Griffiths, 2014; Kuss & Lopez-Fernandez, 2016; Odaci & elik, 2016; Young & De Abreu, 2017).

Problematic internet use (PIU) is maladaptive pleasure in using the internet for a long time and without self-regulation so that it has a negative impact on academic, social and performance aspects (Caplan, 2003; Kuss et al, 2013; Young & De Abreu, 2017). All people have the possibility to be affected by this problem, including children at the basic education level (APJII, 2018).

Elementary school students who have experienced problems in using the internet are said to have an impact on their social aspects. Why is that? Because these students will prefer to interact online or prefer screen-time for a long time so that their time to play and interact with peers and their environment is reduced. They prefer to use the internet

such as online games, social media, and other things just to spend their time or for fun seeking (Rochmawati, 2012). This will also have an impact on not developing interpersonal skills or decreasing interpersonal skills, because these skills will be honed when the student interacts socially face-to-face (Milani et al., 2009). Whereas at this age they are expected to be able to interact effectively with peers and their environment so that they can develop their interpersonal aspects (Griffiths, 2000).

In addition to having an impact on social aspects, the internet also has an impact on academic aspects related to academic performance (Anderson et al., 2016; Ravizza et al., 2014). How did this happen? Students who are experiencing PIU will have their motivation shifted, from being motivated to learn to switch to using the internet for a long time (Rachmayani, 2017; Smahel et al., 2012). This of course can cause their learning achievement to decrease so that the competitiveness of students to achieve better academic or non-academic achievements (Grant & Chamberlain, 2014; Koronczai et al., 2017; Macur et al., 2016; Young & De Abreu, 2017). This is also justified by Coleman and McNeese (2009) that PIU causes a decrease in their motivation to learn so that it has an impact on their low motivation to compete for achievement or called achievement motivation. This is because students who are experiencing PIU will try to interact with the internet online to find fun or basic needs (Caplan, 2003; Ceyhan, 2011). They no longer use the internet as an educational medium but deviate for other purposes outside of the subject matter (Sokang, 2016) thus affecting their academic achievement.

Starting from these negative impacts, this study aims to determine the description of PIU experienced by students and how much impact interpersonal skills and achievement motivation have on the emergence of PIU. This study is different from other studies that have been conducted because there are still

few studies that identify the level of PIU and its risk factors in children.

## **METHOD**

This study is a correlational study that aims to determine the description and relationship of risk factors on excessive internet use. The research was carried out in three elementary schools in Surabaya, using quota sampling technique. The quota referred to in this study is based on grade level and age. Selection of research subjects divided into two parts. First, a number of 278 students were selected according to the inclusion criteria, which were listed as elementary school students, aged 9-12 years, had a smart phone, and as active internet users, which was free to access the internet according to the students' wishes. While the exclusion criteria are not registered as elementary school students, do not have or do not have a smart phone, and are not active internet users. Second, the research subjects who were netted in the first phase were re-screened with the new inclusion criteria, namely students who were identified as having PIU with only moderate to very high hypothetical categories. Based on this second stage of screening, 98 students who experienced PIU were obtained and were used as the final research subjects.

Data collection uses three questionnaires that have gone through the process adaptation. The process of adapting the instruments used in this study refers to the Translation and Cross-Cultural Adaptation of Assessments for Use in Counseling Research. (Lenz et al., 2017), with the following steps:

### *1. Forward Translation*

The translation process is carried out by two translators based on similarities in semantic meaning and reflecting the grammar of the targeted population.

### *2. Translation Review*

This process focuses on synthesizing the translation results so that the instrument is

culturally acceptable and the target population.

### 3. Back Translation

Retranslation refers to the return of the target language into the original language of the instrument. This process is carried out by at least two translators and the main focus is to see the achievement of the translation process to see errors and failures in the meaning of the translation in the target culture.

### 4. Team Review

This stage can also be called expert judgment (Guillemin et al., 1993) whose function is to provide an assessment of whether the translated version is feasible, appropriate and can be continued at a later stage. This is based on the accuracy of each item in the translated version with the construction of the target culture.

### 5. Pretesting and Revision

After passing through these stages, a readability test is carried out with a small group of individuals as representatives of the target population (Guillemin et al., 1993).

The three questionnaires used in this study were the Generalized Problematic Internet Use Scale 2 (GPIUS2), the Interpersonal Competence Questionnaire 15 (ICQ-15), and the Achievement Motivation Scale-Revised (AMS-R). First Questionnaire, The Generalized Problematic Internet Use Scale 2 (GPIUS2) consists of 15 items to measure the level of excessive internet use according to aspects of mood-regulation, cognitive preoccupation, compulsive internet use, and negative outcomes (Caplan, 2010). This instrument has 7 answer choices on a Likert scale, 1 = “strongly disagree” to 7 = “strongly agree” (Caplan, 2010). This instrument has a Cronbach alpha score of .91.

Second, the Interpersonal Competence Questionnaire 15 (ICQ-15), consisting of 15

items to measure interpersonal skills according to five aspects, namely the ability to take initiative, the ability to be open, the ability to be assertive, the ability to provide emotional support, and the ability to solve problems (Coroiu et al., 2015). This scale consists of a five-point Likert scale, which consists of = “strongly disagree” to “strongly agree” (Coroiu et al., 2015). An example of an item in this instrument is “I will be honest about what happened to me”. The reliability of this measuring instrument is .87.

Third, the Achievement Motivation Scale-Revised (AMS-R) consists of 10 items to measure the level of achievement motivation in accordance with two aspects, namely hope for success and fear of failure (Lang & Fries, 2006). This instrument has a four-point Likert scale from strongly agree to disagree (Lang & Fries, 2006). An example of an item in this instrument is “I like situations when I can show how great I am”. This instrument has a Cronbach alpha score of .70.

This study uses descriptive data analysis to describe the level of problematic internet use, partial correlation test (bivariate) and multiple linear regression tests to determine the relationship between interpersonal skills and achievement motivation in students who experience problematic internet use.

## RESULT AND DISCUSSION

Research data collection was carried out in January 2018. The selection of research subjects was divided into two stages. The first stage was focused on collecting samples that matched the research inclusion criteria, namely being registered as elementary school students, aged 9-12 years at the time of the study, owning a smart phone, and using the internet actively. Based on the data presented in Table 1, it can be seen that the number of students who met the inclusion criteria was 278 students, with details of 103 male students and 173 female students, and an average age of 10.72 years, with an average level of usage. problem internet is low.

**Table 1.**  
Demographic Data of Research Subjects  
Phase 1

Category		<i>f</i>	%	<i>M (SD)</i>
Gdr.	M	105	37.76	
	F	173	62.23	
Age	9	48	17.26	
	10	61	21.94	10.72
	11	80	28.77	(1.08)
	12	89	32.01	
PIU	Nor	39	14.02	
	Lo	141	50.72	
	Mo	86	30.94	40.57
	Hi	12	4.32	(5.45)
	V. Hi	0	0	

Notes. Gdr. = Gender. PIU = Problematic Internet Use.

Respondents who were caught in the selection of research subjects in stage 1 were then re-screened using advanced inclusion criteria, namely only students with moderate to very high PIU levels who will be included as final research subjects and their level of interpersonal skills and achievement motivation will be measured. Based on table 1, it was found that 98 students (consisting of 86 students with "moderate" PIU level and 12 students with "high" PIU level) were selected as the final research subjects. Phase 2 is presented in Table 2.

**Table 2.**  
Demographic Data of Research Subjects  
Phase 2

Category		<i>f</i>	%	<i>M (SD)</i>
Gdr.	M	43	43.88	
	F	55	56.12	
Age	9	22	22.45	
	10	19	19.39	10.65 (1.02)
	11	28	28.57	
	12	29	29.59	
IS	Lo	61	62.25	
	Mo	30	30.61	39.25 (3.31)
	Hi	7	7.14	
AM	Lo	14	14.29	
	Mo	72	73.47	14.37 (2.41)
	Hi	12	12.24	

Note. *N* = 98. Gdr. = Gender.

Based on the information in Table 2, it can be seen that of the 98 students who experienced PIU, on average, they also experienced low levels of interpersonal skills and achievement motivation (Interpersonal = 39.25; Motivation = 14.37, respectively). Therefore, it is necessary to do a correlation test to determine the relationship between interpersonal skills and achievement motivation in students who experience problematic internet use. The results of the correlation test carried out on the three variables can be seen from Table 3.

Table 3 shows that between PIU, interpersonal skills and motivation have a significant negative relationship, where between PIU and interpersonal skills has a correlation of  $-0.790$  with  $p$  value  $< .05$ . That is, the two variables influence and influence each other, if PIU increases then interpersonal skills decrease and vice versa. Likewise, PIU and achievement motivation have a correlation value of  $-0.692$  with a  $p$  value of  $< .05$ , which indicates that achievement motivation becomes lower if the PIU score is high. Thus, the three variables can influence each other. These data are strengthened by the results of regression analysis.

**Table 3.**  
PIU level correlation, Interpersonal Skills and Achievement Motivation

Variable	<i>r</i>	<i>p</i>
PIU and IS	$-0.790$	$.003$
PIU and AM	$-0.692$	$.013$
KI and AM	$.362$	$.152$

Notes. PIU = Problematic Internet Use; IS = Interpersonal Skills; AM = Achievement Motivation.

The results of the multiple regression analysis in table 4 shows a significant model,  $F(2, 96) = .60$ ,  $p < .05$ , with an  $R^2$  of  $.63$ . Interpersonal skills and achievement motivation can explain the emergence of PIU by 63% ( $R^2 = .63$ ), while the remaining percentage is explained by other variables, such as age and gender. Both interpersonal skills and achievement motivation are

negative predictors of PIU,  $t(97) = -1.45$ ,  $p < .05$ , and  $t(97) = -1.58$ ,  $p < .05$ , respectively. The data explains that if interpersonal skills and motivation are low, then PIU will have the potential to increase.

**Table 4.**  
Regression Result of Research Variables

Predictors	<i>b</i>	<i>t</i>
Achievement Motivation ( <i>b</i> <sub>1</sub> )	-.40	-1.45*
Interpersonal Skills ( <i>b</i> <sub>2</sub> )	-.43	-1.58*
<i>R</i>		.79
<i>R</i> <sup>2</sup>		.63
<i>F</i>		.60*

Notes. \* $p < .05$ . Dependent: PIU.

Based on all the data described above, students with low levels of interpersonal skills and learning motivation indicate the emergence of PIU. Students prefer online social interaction rather than face to face in person, so they are more engrossed in their respective devices and eventually experience PIU (Caplan, 2010). As for students with high learning motivation, low theoretically prefer to use the internet for entertainment and social purposes, rather than to study and search for learning materials (Milani et al., 2009). This is what makes students become more engrossed on the internet and eventually experience PIU. This statement is supported by other sources who explain that students with PIU will be diverted their achievement motivation to continuous internet use (Engeser et al., 2009).

These results need to be highlighted by education in schools, especially Guidance and Counseling teachers or counselors as facilitators of student development. Although the number of students experiencing PIU in this study is relatively small, it cannot be left alone. This is important to get attention because PIU can hinder student development. The steps that can be taken by the counselor to overcome this problem are to improve the coping skills possessed by students. This statement is supported by the results of research which

states that students with PIU are indicated to use avoidance coping strategies (Milani et al., 2009). Students prefer to run from their problems to the internet, which indicates low problem solving skills (Ariffudin et al., 2018). In other words, students who do not succeed in going beyond the problems experienced have a tendency to develop PIU (Ekini, 2014).

Thus, it can be said that PIU can become a new problem for life, especially for children in the Surabaya area. This of course needs to get very intensive attention because if there are negative impacts such as low interpersonal skills and achievement motivation, it will hinder the potential and achievement of their developmental tasks. Collaboration and participation from various parties, from schools, parents, teachers, and counselors is very much needed. This is because children still need to be given direction so that their behavior is in accordance with their age and developmental tasks (Henderson, 2016). The implementation of this study cannot be separated from limitations, some of which are still local research samples so that the data cannot be generalized to all children in Indonesia, this research is limited to the age of children, and it would be better if further research could increase research subjects in various cities in Indonesia. Taking into account the variables of the mediator or moderator.

## CONCLUSION

This study is the first step to determine the risk factors that can affect the emergence of PIU in children's lives. A further goal in this study is for further research so that efforts can be made to immediately provide counseling services that are in accordance with the variables suspected as predictors of PIU in children. In addition, considering the above results, counselors are expected to be able to provide preventive services for students who have not been affected by PIU, so as not to interfere with the optimization of child development.

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