

Smartphone Addiction and Sleep Disorder among Students at SDN Setonorejo 1 Kras Kediri

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ABSTRACT

Addiction of Smartphone among students with grades 4 and 5 at SDN Setonorejo 1 Kras Kediri is high and without self-control. The bad effects of internet addiction are concentration problems, sleep pattern disturbances that can have a bad impact on performance. The objective of this study was to identify the description of Smartphone Addiction in grades 4 and 5 at SDN Setonorejo 1 Kras Kediri. The research method used was descriptive. Data retrieval was carried out using the Chen Internet Additional Scale (CIAS) to obtain smartphone incident data. The number of research respondents were 27 students at State Elementary Setonorejo Kras Kediri. Based on the results of the study, it was found that most of the students of State Elementary Setonorejo Kras Kediri did not experience Smartphone Addiction as many as 20 students (74.07%) but there were students who were at risk of experiencing Smartphone Addiction as many as 7 students (28.93%). Meanwhile, disturbances in initiating sleep did not occur at State Elementary Setonorejo Kras Kediri as many as 27 (100%). Based on these results, it was necessary for the cooperation of the school and parents to break the level of gadget addiction so that students can continue to achieve achievement

INTRODUCTION

Internet addiction is a term that includes behavior and problems impulse control. Components of Individual Internet Addiction said experienced internet addiction when showing certain behaviors. This behavior can be in the form of feeling preoccupied with the internet, requiring additional time to achieve satisfaction when using the internet, unable to control, reduce, or stop using the internet, feel restless, moody, depressed or irritable when trying to reduce or stop internet use, accessing the internet longer than expected, losing loved ones, jobs, educational or career opportunities because

of it internet use, deceiving family, therapist, or people nearby to conceal further involvement with the internet, using the internet as a solution to overcome problem or eliminate feelings such as circumstances helplessness, guilt, anxiety or depression (Young, 2017).

According to Effendi (2013) Gadget is a term in English which means a small electronic device with various functions. The gadget itself can be a computer or laptop, tablet PC, and also a cell phone or smartphone. However, continuous use of gadgets will have a negative impact on children's behavior patterns in their daily lives, children

who tend to continuously use gadgets will be very dependent and become activities that must and are routinely carried out by children in daily activities, it is undeniable that nowadays children are more often play gadgets instead of learning and interacting with the surrounding environment, this is worrying, because in childhood they are still unstable, have a very high curiosity, and have an effect on increasing the consumptive nature of children, for that the use of gadgets in children, it needs special attention for parents

Addiction is initially a habit that is always done without self-control. Addiction according to the KBBI is a physical and mental addiction or dependence on a substance. Meanwhile, according to the American Psychological Association. (Rosenberg, M. (1965) explains that dependence is not only caused by dependence on addictive substances, but a certain behavior or activity can also cause addiction, one of which is activities in using the internet.

American Psychological Association Dictionary of Clinical Psychology (2013) states that internet addiction or addiction Internet is a pattern of behavior that has characteristics of use excessive or obsessive online presence. Physiological dependence, usually occurs in drugs characterized by increased physical tolerance and withdrawal symptoms. Acute withdrawal symptoms occur when substance use is sharply reduced or discontinued. Psychological dependence, is a strong and compelling need for something, such as friendship, entertainment, attention, activity, travel, sexual encounters, and so on. When the need is strong, unusual and persistent and is a danger to oneself or others, then the person is likely to have a physical or psychological disorder. Kwon, Kim, Cho, and Yang (2013) state that the term gadget addiction is an attachment behavior or addiction to devices that may become social problems such as withdrawal, and difficulty in performing daily activities or as an impulse

control disorder against a person. Furthermore, according to Chiu, S.I. (2014) gadget addiction is an addiction that has a lighter risk than alcoholism or drug addiction. Behavior can be said to be addictive behavior if a person cannot control his desires and causes a negative impact on the individual concerned. Chiu, S.I. (2014) states that gadget addiction is the same as internet addiction, individuals who cannot control and are dependent on the use of internet-based technology. Park and Lee (in Bian & Leung, 2014) state that the definition of gadget addiction is excessive cell phone use behavior which can be considered as an impulsive control disorder that is not intoxicating and is similar to pathological gambling. Based on some of these expert opinions, it can be concluded that mobile addiction is the behavior of an individual who cannot control and is dependent on the internet through a mobile phone or a gadget.

The NSF (National Sleep Foundation) released the Annual Sleep in America Poll in 2011 to look at the effects of using electronic media before bedtime. The survey results show that 95% of the total respondents, aged 13-64 years, use electronic media such as television, computers, or cellphones before going to bed and 43% of them complain that they rarely or never get a satisfactory sleep.

According to Azizah's 2016 research which examined gadget addiction to insomnia, explained that the results of a sample of 93 out of 103 samples contained insomnia with moderate and severe addiction scores. (Nurul Azizah, 2016). Several cases regarding the negative impact of this gadget often afflict children. Starting from internet addiction, games and also pornographic content. It is also possible that it can affect sleep patterns in children, especially toddlers in general

METHOD

Based on the research objectives, the research design used was descriptive with

the aim of seeing the description of Smartphone Addiction and Sleep Patterns at State Elementary Setonorejo Kras Kediri. Research design was something very important in research, allowing a maximum of several factors that can affect the accuracy of a result (Nursalam, 2020). In this study, the design used was descriptive research design, which emphasizes the time of measurement/observation of independent and dependent variable data only once at a time. In this study, researchers tried to find a description of Smartphone Addiction and Sleep Patterns at State

Elementary Setonorejo Kras Kediri. Data collection for internet addiction used the Chen Internet Additional Scale (CIAS) questionnaire, while sleep pattern disorders used the Sleep Disturbances Scale for Children (SDSC) questionnaire. The questionnaire used was standard. The population in the study was the subject (eg humans or clients) who meet predetermined criteria (Nursalam, 2020). The population in this study were students at State Elementary Setonorejo Kras Kediri in grades 3 and 4 as many as 27 respondents

RESULTS

1. Study Characteristics

Based on the results of research on demographic data for grades 3 and 4 at State Elementary Setonorejo Kras Kediri, the following data were obtained

Table 1 Characteristics of State Elementary Setonorejo Students by Gender and Age in Grade 3 and Grade 4 (n= 27)

NO	Characteristics	Amount	Percentage (%)
1	Gender		
	1) Male	12	44.4
	2) Female	15	55.6
2	Age		
	1) 9 years old	9	33,34
	2) 10 years old	10	37,04
	3) 11 years old	6	22,22
	4) 12 years old	1	3,70
	5) 13 years old	1	3,70

Based on table 1.1, it was found that the most students at State Elementary Setonorejo Kras Kediri was 15 female students (55.6%) and the most age was 10 years old (37.04) years.

2. Special Data

This data presented the level of internet addiction at State Elementary Setonorejo Kras Kediri and Sleep Disorders in Students at State Elementary Setonorejo Kras Kediri. Internet Addiction Level at State Elementary Setonorejo Kras Kediri.

Table 2 Level of smartphone addiction at State Elementary Setonorejo Kras Kediri

No	Level of Smartphone Addiction	Amount	Percentage (%)
1	1) High Level Addiction	7	28,93
	2) Low Level Addiction	20	74,07
Total		27	100%

Based on table no. 2 it can be seen that most students at State Elementary Setonorejo Kras Kediri had a low smartphone dependency level of 20 (74.07%) but there were 7 students (28.93%).

Sleep Disorders of Students at State Elementart Setonorejo Kras Kediri

Table 3 Sleep Disorders at State Elementary Setonorejo Kras Kediri students

No	Characteristics	Amount	Percentage (%)
1	not experience sleep disturbances	27	100

Based on table 1.3, it was found that the students at State Elementary Setonorejo Kras Kediri did not experience sleep disturbances as many as 27 students (100%).

DISCUSSION

Age Characteristics

Based on the results of the study, it was found that the age of students at State

Elementary Setonorejo was at most 10 years old as many as 10 (37.04%) with the most gender being female.

Elementary school children, namely children aged 6-12 years, have stronger physical characteristics that are individual and active and do not depend on their parents. This school-age child is a period where there are various changes in the growth and development of children that will affect the formation of the characteristics and personality of the child. This school age period becomes the core experience of children who are considered to be responsible for their own behavior in relationships with peers, parents and others. In addition, school age is a time when children acquire the basics of knowledge in determining success in adjusting to adult life and acquiring certain skills (Diyantini, et al. 2015)

The results of the study stated that school-age children in the elementary school education level are one level within the age range of 6-12 years. This is supported by the results of the study that the maximum age of students is 10 years. At this age children have started to be independent and not dependent on their parents, have a responsibility to study and go to school and are easily influenced by peers. At the age of 10 years is the stage where the child's growth and development are still ongoing in the sense that the child will still continue to develop physically, cognitively and emotionally. In contrast to adulthood where physical growth has stopped but emotional maturity continues to improve.

2. Characteristics of Gadget Addiction Level
Based on the results of the study, it was found that the majority of Setonorejo Elementary School students had a low smartphone dependence level, but there were also 28.93% with a high level of gadget dependence.

Gadget is a term in English means a small electronic device with various functions special. Gadget (Indonesian: acang) is a term that Derived from English to refer to a device

or instrument which have specific practical purposes and functions that are generally useful given something new. In the general sense of gadgets considered as an electronic device that has a function specifically for each device. For example computers, cell phones, games, and more (Puji Asmaul Husna, 2017). The use of gadgets as a night activity continues to increase amid concerns about the effects of using gadgets on sleep patterns and work during the day. Research in Australia found that 71% of adolescents reported that a night's sleep that was not optimal due to the use of gadgets could affect sleep patterns and the timing of sleep onset in adolescents (King, 2014). According to Andreassen (2013), light from gadgets can affect biological mechanisms that delay sleep and circadian rhythms. Computer games or television shows can be exhilarating and cause insomnia. However, it can be the other way around. Insomnia, and delays in sleep patterns can result in people lying down longer hours of sleep without falling asleep which end up looking for electronic media as entertainment. Excessive internet use is also one of the reasons for using gadgets before bed. According to Young (1998) Internet addiction is a syndrome characterized by spending an enormous amount of time in use the internet and are unable to control its current use on line. The results showed that most of the students were not addicted to gadgets. This is because children at school age have started to learn to be responsible for themselves where children have started to be independent and detached from their parents. Children already have the responsibility of learning rather than just playing. The use of gadgets can be used by students to get learning information rather than just playing. In addition, monitoring from parents and teachers also plays a very important role in preventing students from the adverse effects of using gadgets. Based on the results of the study, it was also found that students were also dependent or had a

high level of addiction to gadgets. Internet or gadget addiction is a condition where students cannot be separated from gadgets, whether they are used for learning or playing purposes. When the use of gadgets is more than needed, students become angry, cry and even don't sleep and forget when to eat. Excessive use of gadgets is also one of the reasons for using gadgets before going to bed. The condition will continue to the stage of addiction or internet addiction, which is the inability of an individual to control internet use which results in significant distress or functional impairment in daily life.

3. Sleep Initiation Disorder

Based on the results of the study, it was found that all students did not have disturbances in initiating sleep.

Normal sleep in children is complex. Sleep patterns in children follow a typical developmental sequence, with a gradual increase in sleep depth and the occurrence of regular sleep cycles. Childhood is a time marked by rapid physiological and neurocognitive growth in which any description of sleep patterns must be included. With relatively large-scale epidemiological studies examining normal sleep and wakefulness in children, as well as with objective measures of sleep. From previous studies, it is currently stated that from infancy to adolescence, sleep duration over a 24-hour period decreases, which corresponds to consolidation of sleep periods and a dramatic decrease in napping in early childhood. (Kozier, Erb, Berman & Snyder, 2003). Total sleep time in healthy newborns is reported to be around 16-17 hours over a 24-hour period, consisting of several short sleep attacks. At 6-8 months of age, total sleep time decreases to 13-14 hours per 24 hours, with longer nocturnal sleep periods and one or two shorter diurnal sleep periods so that children become trained with light/dark cycles and adapt with their parents' daily activities. Sleep patterns in the first year of life are characterized by large inter-individual differences by adapting to

the daily activities of their parents. Sleep patterns in the first year some babies sleep at least 10 hours per 24 hours while others will sleep up to 18 hours per 24 hours. This variability reflects differences in the rate of maturation of the circadian organization. Compared with the first year of life, sleep patterns become relatively stable between the ages of 2-5 years. Total sleep time gradually decreases so that children adopt a pattern of one long nocturnal period of about 10-12 hours and one short nap period. Sleep behavior during this time is largely driven by physical and cognitive development. For example, there is an increase in the amount and length of energy at night so that children begin to have nightmares and can move from one bed to another.

At the age of five, very few children are napping. As children age, the timing and onset of nocturnal sleep are slower, resulting in a decrease in total sleep time. This shift occurs gradually during mid-childhood (ages 5-10 years) which is about 30-40 minutes and then occurs more rapidly in early to mid-adolescence. Developmental patterns appeared consistent across children, but variability in sleep duration remained, although not as pronounced as in infancy. Namely, some children are naturally short sleepers while others are considered long sleepers. This short, optimal or long pattern tends to remain stable in childhood. There is some evidence that sleep duration patterns are influenced by genetics. The quantity of sleep is related to the sleep pattern of the child. Normal sleep patterns of children differ according to age. Sleep patterns in infants initially still not regular. Initially, newborns will sleep longer during the day but will gradually shift so that they sleep more at night than during the day (Kozier, Erb, Berman & Snyder, 2003)

The results of the study showed that elementary school students did not have trouble starting to sleep this could be due to the high activity of students in the morning until the afternoon causing reduced hours of

rest during the day. The density of school activities, followed by tutoring, reduces the break time. This has an impact on children easily tired. So that at night it takes faster time to start sleeping. Normal sleep in elementary school students ranges from 10-12 hours. Adequate sleep has a good impact on health. In addition, students who do not have sleep disorders can be due to good patterns or habits carried out before starting sleep, for example washing their faces, hands and feet using soap, drinking milk before bed and several other habits that also have an impact on students' sleep. So in this case to start sleeping there is no disturbance because students already have good habits before going to bed with high activity during the day so students are easy to fall asleep.

CONCLUSIONS AND RECOMMENDATION

Based on the research results can concluded:

1. The description of the level of Smartphone Addiction at State Elementary Setonoreja Kras Kediri was low
2. Overview of sleep patterns in students at State Elementary Setonoreja Kras Kediri, all of them were not disturbed

Recommendation

It is expected that students will increase their learning activities and social activities more than at home so as to reduce the impact of gadgets on student learning and parents will continue to monitor and assist children in learning so that the use of the device can be optimized for learning purposes

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