Conference Paper

Social Media Addiction and the Association with Self-Esteem among Adolescents in Rural Areas of Indonesia

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Abstract

The use of social media has increased significantly in recent years, particularly among adolescents and this has triggered an upsurge in research into the connection between social media and self-esteem. However, there has been little attention paid to the association between social media and self-esteem in adolescents in rural areas, an oversight this study will address – focusing on adolescents in rural areas of Indonesia. This descriptive correlational study was conducted in 2018 at two senior high school in rural area of Bandung, West Java. Disproportion stratified random sampling was used to select the sample. Social Media Addiction Scale-Student Form Questionnaires (SMAS-SF) and Rosenberg’s Self-Esteem Scale were used to collect the data. Pearson Product Moment correlation was performed to test the relationship between social media addiction and self-esteem. A total of 340 students joined our study, of which 59.7% were female. About 57.6% of the respondents felt discomfort when they had to reduce time spent using social media and 77.6% were addicted to using social media. 57.1% of the respondents have low self-esteem. There was a moderate positive relationship between addiction to social media and self-esteem among adolescents in rural area (r=0.418, p<0.05). This study suggest that social media addiction was correlated with self-esteem, for future studies could be considering gender difference to have better insight. Healthcare professional needs to design an intervention utilize social media to promote self-esteem among adolescents.

Keywords: social media, self-esteem, adolescents

1. Introduction

Adolescence is an important period of life span, a transitional period, a period of change, a period where individuals seek self-identity, a period of unrealism, and a threshold for maturity [1]. One of the psychological developments experienced by adolescents is
socio-emotional development, one of which is self-esteem, which is the method used to know ourselves [2]. Self-esteem is a self-evaluation made by each individual, referring to a person's attitude towards himself, ranging from very negative to very positive. This evaluation states an attitude of acceptance or rejection based on other people's opinions and partly based on specific experiences [3]. There are two factors that affect self-esteem, for instance is the social environment, and in this social environment social values will appear, such as culture of popularity. Popularity culture will greatly affects self-esteem, usually this level of popularity can be seen from how popular someone is in environment and social media accounts [4].

Social Media is one of internet-based applications, based on the ideology and technology of Web 2.0 that allows the creation and exchange of content by users [5]. Most of social media users are adolescents and early adults who can experience changes in personality development due to the use of social media [6]. The impact of social media that comes up most frequently and is discussed is the emergence of “seeking” behavior, which is strongly associated with popularity. The use of social media has triggered the emergence of popularity-seeking behavior, where someone uses social media only so that he is seen and recognized by others. The emergence of a popularity culture causes a person to tend to become obsessed or focused on popularity on social media [6].

Several studies showed the negative impact of using social media. Research on 80 students shows that frequent use of social media has an indirect effect on self-esteem and social well-being in adolescents [7]. Another study conducted on 371 students regarding the use of the internet in college students was associated with self-esteem, the results showed that respondents who used excessive social media had lower self-esteem and were more socially inhibited than non-social media users, saying that almost half of the number of respondents experienced a decrease in self-esteem and general health [8]. Another research on Facebook dependence on sleep quality in 418 college students in Peru, it also states that the use of social media can also cause dependence or addiction which has a bad impact like decreased sleep quality. They show that 55.0 % of the sample experienced poor sleep quality [9]. Other studies conducted on Facebook addiction with psychological health on 477 students in Turkey also showed the same thing, that social media use is also associated with depression and anxiety [10].

A recent study showed that excessive social media users can negatively impact sleep quality, health, relationships, and general well-being problems [11]. The prevalence of internet use is problematic among Chinese teenagers. They found that those who use the internet are more likely to suffer from psychosomatic symptoms, emotional
symptoms, and behavioral and physiological dysfunction. Furthermore, the results show that internet use is more severe in middle school students where they experience more serious social problems than other ages [12].

Based on preliminary study, Most of students said that using social media is very important and they cannot escape from their cellphones. Students say they panic if their cellphones are turned off or there is no network, and they say that they can't get away from social media. Students said everyday they can open social media up to 7-8 times per day with the minimum 1 hour duration. In addition, students said they often uploaded photos or their daily activities into their social media, students felt very happy when they got lots of likes because it proved that students were liked by others and they also feel more confident. But when students get few likes or get comments that are insulting in nature students will delete their posts, because students are embarrassed if they only get a few likes and get bad comments on their social media accounts. Based on the background described above, aim of this research is to determine the relationship between social media dependence and decreased self-esteem in adolescents.

2. Method and Equipment

This study used descriptive correlational with a cross-sectional design. In this study, the population was a senior high school students in rural area of Bandung. Sampling method used disproportion stratified random sampling. Instrument used Social Media Addiction Scale Student Form (SMAS-SF) and Rosenberg's Self-Esteem Scale. SMAS-SF is a 5-point Likert type scale which consists of 29 items and 4 sub-dimensions. 1-5 items are within virtual tolerance sub dimension; 6-14 items are within virtual communication sub dimension, 15-23 items are under virtual problem sub dimension and 24-29 items are under virtual information sub dimension. The highest point that can be scored from the scale is 145, and the least one is 29. Rosenberg's Self-Esteem Scale consisted of 10 question and scoring divided into 2 category. Univariate and bivariate analysis were used to describe each variable and to identify relationship between variable.

3. Results

The results of demographic data from 340 respondents found that the most of the respondents were female (59.7%), most of the teenager has a moderate social media addicted (77.6%) and more than half have a low self-esteem (57.1%).
### TABLE 1: Demographic Data (n = 340)

| Variable                    | n  | %  |
|-----------------------------|----|----|
| Gender                      |    |    |
| Male                        | 46 | 35.1 |
| Female                      | 85 | 64.9 |
| Social Media Addicted       |    |    |
| Not Addicted                | 19 | 5.6 |
| Mild Addiction              | 57 | 16.8 |
| Moderate Addiction          | 264| 77.6|
| Heavy Addiction             | 0  | 0   |
| Self-Esteem                 |    |    |
| Low                         | 194| 57.1|
| High                        | 146| 42.9|

Based on table 2 showed that more than half of the respondents stated that they remain active on social media to find out the latest information about tasks and jobs (64.4%), more than half of the respondents prefer to browse social media (60.3%), more than half of the respondents said it was bad if they had to reduce their time playing social media (57.6%), said they could be what they wanted on social media (57.4%), said they couldn't stop playing social media despite being opposed by their families (54.1%), said their life was meaningless without social media (55.3%), and they preferred to use social media even though they were with other people (57.1%). While a small proportion of respondents stated that they do not really like communicating via social media (3.2%), they can connect with relatives even though they do not use social media (2.1%), and they state that the mysterious world in social media does not make them curious (2.4%).

Based on the results of data analysis using the Pearson product moment correlation, table 3 shows that the p-value 0.00 (<0.05) which indicates a relationship between social media dependence and self-esteem. With the strength of the correlation $r = 0.418$, it shows moderate correlation, if the dependence on social media is high, the self-esteem will be low.

### 4. Discussion

Univariate results regarding social media addiction are described (77.6%) with 264 respondents and light dependence (16.8%) with 57 respondents, then the remaining 19 respondents (5.6%) are not dependent. This shows that the frequency of respondents who are dependent on moderate social media is more than respondents who are dependent on mild social media and are not dependent on social media with the
### TABLE 2: Frequency Distribution of Respondents for Social Media Statement Items (n=340)

| No | Item                                                                 | SD     | DS     | A      | SA      |
|----|----------------------------------------------------------------------|--------|--------|--------|---------|
| 1  | I am eager to go on social                                          | 6 (1.8)| 22 (6.5)| 145 (42.6)| 167 (49.1)|
| 2  | 8 (2.4)                                                              | 34 (10.0)| 161 (47.4)| 137 (40.3)|
| 3  | 8 (2.4)                                                              | 54 (15.9)| 179 (52.6)| 99 (29.1)|
| 4  | 9 (2.6)                                                              | 60 (17.6)| 135 (39.7)| 136 (40.0)|
| 5  | A life without social media becomes meaningless for me               | 3 (0.9)| 29 (8.5)| 188 (55.3)| 120 (35.3)|
| 6  | 6 (1.8)                                                              | 20 (5.9)| 154 (45.3)| 160 (47.1)|
| 7  | 5 (1.5)                                                              | 76 (22.4)| 167 (49.1)| 92 (27.1)|
| 8  | I express myself better to the people with whom i get contact on social media | 5 (1.5)| 61 (17.9)| 194 (57.1)| 80 (23.5)|
| 9  | 6 (1.8)                                                              | 58 (17.1)| 191 (56.2)| 98 (28.8)|
| 10 | 6 (1.8)                                                              | 53 (15.6)| 184 (54.1)| 95 (27.9)|
| 11 | 5 (1.5)                                                              | 52 (15.2)| 148 (44.1)| 167 (49.1)|
| 12 | I want to spend time on social media when i am alone                | 9 (2.6)| 51 (14.9)| 151 (44.4)| 95 (27.9)|
| 13 | 10 (2.9)                                                             | 53 (15.6)| 205 (60.3)| 72 (21.2)|
| 14 | 9 (2.6)                                                              | 39 (11.5)| 185 (54.5)| 107 (31.5)|
| 15 | 8 (2.4)                                                              | 19 (5.6)| 161 (47.4)| 152 (44.7)|
| 16 | I feel bad if I am obliged to decrease the time I spend on social media | 10 (2.9)| 24 (7.1)| 196 (57.6)| 110 (32.4)|
| 17 | 9 (2.6)                                                              | 48 (14.1)| 181 (53.2)| 102 (30.3)|
| 18 | 9 (2.6)                                                              | 72 (21.2)| 172 (50.6)| 87 (25.6)|
| 19 | 7 (2.1)                                                              | 23 (6.8)| 143 (42.1)| 167 (49.1)|
| 20 | The mysterious world of social media always captivates me           | 8 (2.4)| 71 (20.9)| 162 (47.6)| 99 (29.1)|
| 21 | 5 (1.5)                                                              | 62 (18.2)| 186 (54.7)| 87 (25.6)|
| 22 | 9 (2.6)                                                              | 76 (22.4)| 183 (53.8)| 72 (21.2)|
| 23 | 86 (25.3)                                                            | 200 (58.8)| 48 (14.1)| 6 (1.8)|
| 24 | 6 (1.8)                                                              | 60 (17.6)| 172 (50.6)| 102 (30.0)|
| 25 | 96 (28.2)                                                            | 207 (60.9)| 28 (8.2)| 9 (2.6)|
| 26 | 7 (2.1)                                                              | 34 (10.0)| 186 (54.7)| 113 (33.2)|
| 27 | 8 (2.4)                                                              | 67 (19.7)| 175 (51.5)| 90 (26.5)|
| 28 | 6 (1.8)                                                              | 36 (10.6)| 219 (64.4)| 79 (23.2)|
| 29 | I am always active on social media to be instantly informed about what my kith and kin share | 7 (2.1)| 23 (6.8)| 194 (57.1)| 116 (34.1)|

*SD: Strongly disagree, DS: Disagree, A: Agree, SA: Strongly Agree

The difference in mild and moderate dependence as many as 207 respondents and the difference in the number of respondents with moderate dependence with no addiction is 38 people.
TABLE 3: Crosstab Analysis on Social Media Addiction (n=340)

|                     | Low Self Esteem |                | High Self Esteem |                | P Value |
|---------------------|-----------------|----------------|------------------|----------------|---------|
|                     | n               | %              | n                | %              |         |
| Not Addicted        | 17              | 5.00           | 2                | 0.58           |         |
| Mild Addiction      | 138             | 40.58          | 126              | 37.1           | 0.000   |
| Moderate Addiction  | 39              | 11.46          | 18               | 5.28           |         |
| Total               | 194             | 146            |                  |                |         |

In addition, the researcher analyzed from 57 respondents (16.8%) that had light dependence on getting data, more than half of the respondents stated that they remained active on social media to find out the latest information about tasks and jobs (64.4%), more than half of the respondents prefer browsing social media (60.3%). Classification of internet addiction there are at least six criteria that must be owned in order for someone to be classified as an internet addict. The criteria for this addiction are, the mind is propelled by the internet, the time for internet use is increasing for the sake of self-satisfaction, never tried but failed to control, reduce or stop using the internet, online activities exceed the planned time, experience problems or have the risk of losing personal relationships, losing employment, lost educational opportunities, and lost careers [13]. This is also supported by a school program that requires students to have information media that can be connected to the internet, and the existence of wifi facilities provided by the school to make it easier for students to always be connected to their social media accounts which results in students continuing to play their social media even during class hours.

The classification of social media addiction is composed of ten symptoms of social media addiction: always looking for internet connectivity anywhere to be active in social media, always using social media wherever and whenever, making social media an escape from the real world, feeling life is meaningless without social media, preferring social media rather than real friendship, nervous and annoyed when being banned from playing social media, has tried to reduce social media use, but failed, feels bad if you have to cut down on social media time, feels unhappy if you don’t open social media, uses social media too often so forget about homework [14]

Researchers also analyzed 19 respondents (5.6%) who were not dependent and obtained data from a small number of respondents and stated that they did not really like communicating through social media (3.2%), they could connect with relatives even though they did not use social media (2, 1%), and they stated that the mysterious world in social media did not make them curious (2.4%). This is supported by the limitations of
the communication tools, and some of them prefer to play and chat directly than playing social media.

Social media addiction is viewed from three models of social media dependency factors, first, a cognitive-behavioral model which states that abnormal social networks arise from maladaptive cognition and behavior. Second, social skills where abnormal social networking arises because people lack self-presentation skills and prefer virtual communication to interact, and ultimately lead to compulsive and / or addictive use of social networks. Third, socio-cognitive emphasizes that abnormal social networking arises because of the expectation of positive results, combined with internet self-efficacy and lack of self-regulation eventually leads to compulsive or addictive social networking behavior [15].

This is also in line with research conducted by Guðrún Alma Einarsdóttir on “Social Network Site Usage Among Adolescents: Effects on Mental and Physical Well-being” which was conducted on 1,819 adolescents in Australia, more than one-half (55%) of adolescents in Australia uses SNS with frequent and quite long usage frequency. This is also supported by research by Wolniczak et al on Facebook dependence on sleep quality in 418 college students in Peru, who also stated that the use of social media can also cause addiction which has a negative impact [9].

Negative impact in low self-esteem is increasing on this group. The results showed that almost half of the respondents, namely 146 respondents (42.9%), had high self-esteem and more than half of the respondents of 194 (57.1%) had low self-esteem. Nearly half of the respondents stated that they were very useful (50.6%), almost half of the respondents stated that they were as valuable as other people (47.1%), almost half of the respondents said they wanted to be able to respect themselves more (44.1%). Individuals with high self-esteem have an active and aggressive nature, in their relationships they are more leading, free of opinion, do not avoid differences of opinion, are not easily anxious. individuals get along well, have an optimistic nature and are rarely exposed to psychosomatic disorders.

In addition, 194 (57.1%) of respondents with low self-esteem stated that almost half of the respondents stated that they did not take a positive attitude for themselves (41.2%), almost half of the respondents stated that there was not much to be proud of themselves (47.1%), almost half of the respondents said they were not good at all (46.2%), and more than half of the respondents said they were a failure (51.8%). This is in accordance with the theory which states that individuals who have low self-esteem show despair, always imagine failure, always have depression and always feel unattractive to others and feel isolated from social interactions [17]. From the results of this study, data
shows that frequent use of social media has an indirect effect on self-esteem. This is likely influenced by the environment because the environment has a big impact on adolescents through good relationships in social acceptance and self-esteem.

5. Conclusion

The main finding of this research is that there is a significant relationship between social media addiction and self-esteem. When teenager more addicted to social media they will have more low self-esteem. This study suggest that healthcare professional needs to design an intervention utilize social media to promote self-esteem among adolescents.

Conflict of Interest

The author have no conflict of interest to declare

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