

The Correlation Between Emotional Intelligence, Academic Achievement, and the Use of Social Media in Senior High School Students

Mulawarman Mulawarman^{a*}, Fahmi Nuzulul Huda^b, Suharso Suharso^c,
Muslikah Muslikah^d, ^{a,b,c,d}Universitas Negeri Semarang, Guidance and
Counseling Department, Faculty of Education, Email:
^{a*}mulawarman@mail.unnes.ac.id

This study aims to examine the correlation between emotional intelligence (EI) and learning achievement with social media usage on students. This research is correlation quantitative. Subjects were 4 of 10 schools with 226 students using cluster random sampling and purposive sampling. The data was obtained by the questionnaire of social media usage, the scale of emotional intelligence (EI), and the ledger documentation. Validity rate on all of the instruments was high with the level of error 5%, as well as the reliability of the instruments which was also high. The descriptive analysis used mean and standard deviation, while hypothesis testing used the product moment correlation and multiple. The research results found a negative and significant relationship between EI with social media usage ($r_{xy} = -0.251$; $p < 0.05$). Furthermore, there is a significant negative correlation between the learning achievement and social media use ($r_{xy} = -0.429$; $p < 0.05$). There is also a significant correlation between emotional intelligence and learning achievement with social media usage ($r_{yx1x2} = 0.472 \geq 0.138$; $p < 0.05$). It can be concluded the higher EI and learning achievement, the lower social media usage among students, and otherwise. The variables of EI and learning achievement contribute negatively towards the social media use.

Key words: *Social media, emotional intelligence, learning achievement.*

Introduction

The internet is a medium of mass communication media that is continuously progressing with the era. In the education field, the term “internet” is no longer been considered a new term. The internet has been frequently used to search for and obtain academic or non-academic

information. Teachers and students frequently visit websites on the internet as additional learning sources. When accessing internet, students often use social media to search for or to obtain information, interact with other people in cyber space, or to find entertainment.

Nasrullah (2015) explained that social media acts as an internet medium which allows its users to represent themselves, interact each other, work together, share, communicate each other, and form social relationships virtually. The more features available, the more attractive it is for the students. There are 6 main categories of social media, namely, social networking, online journal, microblogging, media sharing, social bookmarking, and wiki (Nasrullah, 2015; Central Team of Indonesian Ministry of Trade, 2014; Mayfield, 2008). Almenayes (2015) explained that the purposes of students using social media are for entertainment, personality utility, information seeking, convenience, and altruism. In terms of the intensity of the use, there are 3 aspects: the first is based on frequency, the second is based on duration, and the third is based on the situation when using the social media.

According to the survey conducted by the Media Research Internet Study (in Suryaningtyas, 2010), 41% of teenagers prefer internet to television. Furthermore, according to data taken from Ministry of Communication and Informatics, 64% of social media users was teenagers in 2011. In terms of their age development, teenagers have a less stable character, particularly in interpersonal relationships, managing life needs, and emotional and cognitive development (Soliha, 2015). According to Smahel, et al., (2012) when teenagers experience difficulty in their development, internet use becomes more important than what people in general do because online activities can expand and strengthen their social network.

Students who are not able to control their social media use will tend to have low emotional intelligence. As stated by Goleman (1999), ability in emotional intelligence covers self-regulation, spirit and determination, and self-motivation. Meanwhile, according to Cooper & Sawaf (2002), emotional intelligence is the ability to feel, understand and use power and emotional sensibility effectively as sources of energy, information, connection and influence that is humane. Therefore, emotional intelligence is a person's ability to observe, understand, and differentiate emotion coming from either oneself or other people so that they can make better relationships with other people and are able to control their mind and behaviour. Emotional intelligence covers 5 aspects. Those 5 aspects are an individual's ability to recognize self-emotion, the ability to manage emotion, the ability to self-motivate, the ability to recognize other people's emotion, and the ability to build relationships with other people (Goleman, 2005). The higher a student's ability to manage their self-emotion, the more possible it is for students to achieve an effective life.

Emotional intelligence has a cognitive aspect. Thus, in the education domain, academic achievement can be influenced by emotional intelligence as well. Slameto (2010) stated that

“intelligence is one of the factors that determine the success and failure of students at school.” Academic or learning achievement itself is the final calculation given by teachers regarding student progress or school performance during certain period of time, (Suryabrata, 2002). Therefore, it can be concluded that learning / academic achievement is the result of the learning achieved by students during a certain period of time that is usually realized in the form of a report. A student’s academic achievement involves cognitive, affective, and psychomotor factors (Bloom in Anitah, 2008).

Nowadays, social media use is a global phenomenon. In America, 95% teenagers, aged from 12 to 17 years old, have gone online and 80% of them accesses social media sites, (Lenhart, 2011). In addition, in Japan, the Ministry of education estimated that approximately 518,000 teenagers experienced internet addiction (Taylor in Soliha, 2015). Meanwhile, here in Indonesia, according to the Ministry of Communication and Information, teenagers internet users, aged from 15 to 19 years old, reached 64% in 2011, and in 2014 the percentage was getting higher with up to 80%, that is, 82 million people, becoming internet users. Young (2004) stated that 58% of students who used the internet excessively would suffer from bad habits, bad scores, or even academic failure. This means that if a student’s internet use is relatively high, it may result in internet addiction, especially among social media users.

Previous research by Far, *et al.*, (2014) shows that all components of emotional intelligence are significantly correlated negatively to internet addiction. It means that the higher a person’s emotional intelligence, the less the tendency for internet addiction, and otherwise. A study by Khoshakhlagh (2012) also shows that there is correlation between emotional intelligence and mental disorder and internet addiction. In this study, anxiety, obsessive-compulsive, aggressive, phobia, hypochondria, and emotional disorder are among the most significant predictors of internet addiction.

Moreover, a study conducted by Turel & Toraman (2015), and Hasnain, *et al.*, (2015) stated that there is negative correlation between the rate of internet addiction and academic achievement. This shows that the more time spent by students on social media, the more their GPA will be influenced. In addition, students who tend to participate less in class will be more involved in social media.

From the initial result of this study, the percentage of social media use in two public senior high schools in the Purbalingga District is quite high, reaching 68.39% and 60.34%. On the other side, the percentage of students’ emotional intelligence in those two schools is quite low, 54.67% and 48.5%. This shows that, while almost all the students have used social media, they lack the emotional intelligence to control themselves in their use of social media.

When a student lacks emotional intelligence, their academic performance may decrease. A student may feel inconvenient or stressed academically so one way to escape this situation is through using social media. In this case, using social media is a catharsis for the student to feel good about him/herself. Thus, the role of teacher, particularly Guidance and Counselling teachers, is highly needed. Counselling teachers can give preventive, developmental, and curative services in order to help students having problem with social media use. They also can help prevent the negative effects of social media on a student's life and improve emotional intelligence and performance through classical, group, or individual services.

Regarding the issue of social media, emotional intelligence and academic achievement, this study aimed to identify the rate of social media use, emotional intelligence, and academic achievement, and also to find the correlation among the three variables, which are emotional intelligence, academic achievement, and social media use on students in public senior high school students all over Purbalingga District (Indonesia).

Research Method

This research used a quantitative correlation approach aiming to find the correlation among the variables. Variables used were independent variables, namely emotional intelligence (X1) and academic achievement (X2), and 1 dependent variable, namely social media use (Y). Subjects in this study were all students in Public Senior High School in the Purbalingga District, which comprised of as many as 4,137 students. This study applied cluster random sampling and purposive sampling to determine the number of student samples in each school. 226 students were finally used as part of the research sample. Instruments used by the researchers were a questionnaire of social media use (Almenayes, 2015), emotional intelligence scale (Goleman, 2005), and documentation in the form of a register. Instrument validity in this study used construct validity and content validity on 30 students as the sample, and the result was high level of validity of each instrument. In order to measure the level of reliability, alpha cronbach was applied, and the result was high level of reliability reaching above 0.7. Data was analysed using descriptive analysis and, to test the hypothesis, product moment analysis, emotional intelligence variable (X1) with social media use (Y), and academic achievement (X2) with social media use (Y), was used. Meanwhile, multiple correlation analysis test was used to test the correlation of the three variables simultaneously. All analyses were calculated using *SPSS version 16.0 software*.

Result

Based on the result of descriptive analysis regarding the indicators of social media use, emotional intelligence, and academic achievement of public senior high school students in the Purbalingga District, the mean and standard deviation can be seen in table 1, 2, and 3 below:

Table 1: Description of Data Indicator of Social Media Use

Component	Indicator	N	Mean	SD	Criteria
Purpose	<i>Entertainment</i>	226	3.572	.668	high
	<i>Personal utility</i>	226	3.829	.579	high
	<i>Information seeking</i>	226	3.902	.626	high
	<i>Altruism</i>	226	3.606	.807	high
Using intensity	Frequency	226	3.292	.886	high
	Duration	226	3.510	.704	high
	Situation	226	2.705	.705	high
	TOTAL	226	3.451	.492	high

Table 2: Description of Data Indicator of Emotional Intelligence

Indicator	N	Mean	SD	Criteria
Recognize Self Emotion	226	3.324	.473	Medium
Manage Emotion	226	3.154	.508	Medium
Motivate self	226	2.428	.335	Low
Recognize Other People's Emotion	226	3.015	.409	Medium
Build Relations with Other People	226	3.229	.487	Medium
TOTAL	226	3.22	.353	Medium

Table 3: Description of Data Indicator of Academic Achievement

Indicator	N	Mean	SD	Criteria
Summative Evaluation	226	74.44	7.07	Not completed

Based on the tables above, it can be seen that overall social media use tends to be high while emotional intelligence tends to be low. In addition, the result of the descriptive analysis of academic achievement variable using the documentation of the registered scores of one odd semester shows uncompleted criteria. The scores were compared with Minimum Score of Completed Criteria which is 75.

Furthermore, to test the hypothesis of correlation between emotional intelligence and social media use on students, *SPSS version 16.0* was used and the result is as follows:

Table 4: The Result of Correlation Test of Emotional intelligence and the use of Social Media

Variable	N	Sig.	Emotional Intelligence	Social media
Emotional intelligence	226	0,000	1	-0.251
Social media		0,000	-0.251	1

Based on table 4, the value of $r_{\text{count}} \geq r_{\text{table}}$ ($P < 0.05$). This shows that there is a negative and significant correlation between the emotional intelligence variable and the variable of social media use, however the correlation of those two variables are weak if seen from the interpretation of r value. Meanwhile, the variable of emotional intelligence contributes as much as 6.3% to the social media use variable, and the rest is explained by other variables. It means that the higher the students' emotional intelligence, the lower the students' use of social media or otherwise it means that the lower the students' emotional intelligence, the higher the use of social media. Moreover, the result of correlation test between academic achievement variable and social media use variable can be seen in the table below:

Table 5: The Result of Correlation Test of Academic Achievement and Social Media Use

Variable	N	Sig.	Academic Achievement	Social media
Academic Achievement	226	0,000	1	-0.429
Social media		0,000	-0.429	1

From table 5, it can be seen that the value of $r_{\text{count}} \geq r_{\text{table}}$ ($p < 0.05$). This shows that there is negative and significant correlation between academic achievement variable and social media use variable. The correlation value of both variables is quite high. Meanwhile, academic achievement variable contributes as much as 18.4% to variable of social media use, the rest is explained by other variables. It means that the higher the achievement of the students, the lower the students' use of social media, and otherwise, the lower the achievement of the students, the higher the students' use of social media. The result of the analysis of the correlation among the three variables can be seen in the table below:

Table 6: The Result of Multiple Correlation Test between Emotional Intelligence and Academic Achievement and the use of social media

Model	R	R Square	F	Sig.
1	0.472	22.27 %	31.91	0.000 < 0.005

From table 6, it can be seen that the result of data analysis shows that the coefficient of multiple correlation between emotional intelligence and academic achievement, and social media use in senior high school students is $R_{\text{count}} \geq R_{\text{table}}$, $F_{\text{count}} \geq F_{\text{table}}$ ($\text{Sig.} < \text{Sig. } 0.05$). Thus, it shows

that there is significant correlation between emotional intelligence and academic achievement, and social media use in public senior high school students in the Purbalingga District.

Discussion

The result of the research on the correlation between emotional intelligence and academic achievement and social media use in public senior high school students in the Purbalingga District shows a high rate of social media use. It means that many students use social media either for entertainment purposes or as a academic or non-academic source of information. They also use social media for their social life. This is in accordance with Almenayes' concept (2015), which states that students have used various types social media for various purposes, such as entertainment, sources of information, communication, and an act of altruism.

Moreover, in general students' emotional intelligence tends to be low. It means that the students have already had a sufficient level of emotional intelligence that can be improved by various practices in order to for them to be able to control their emotion effectively. Meanwhile, the overall result of students' academic achievement is still categorized not completed. This can be caused by some factors, either internal or external factors, (Slameto, 2010). One of internal factors that have tendency to influence academic achievement is psychological factors, namely intelligence, attention, interest, maturity, and loneliness. All those psychological factors may be the cause of low academic achievement. The second factor is fatigue factor, whether physical or mental. Long school hours make the students physically tired, consequently this influences students' study hours and rest hours at home. Meanwhile, external factors that can influence academic achievement are the condition of the family, the school, and the society.

Based on the analysis of correlation among the variables, the result of this study reveals that there is negative and significant correlation between emotional intelligence and the use of social media in public senior high school students in all over Purbalingga district. This result is in accordance with Far', et al. Concept, (2014); Hamissi 's concept (2012); and Khoshakhlagh & Faramarzi's concept (2012) stating that there is negative and significant correlation between internet addiction and the level of emotional intelligence. This finding shows that students who have high emotional intelligence are more able to control their use of internet well so that they will not reach the stage of internet addiction. On the other side, when they have low emotional intelligence, their level of internet use is getting higher, which may cause a higher tendency of internet addiction.

The result of this research on the correlation between academic achievement and social media use shows that there is also a negative and significant correlation between academic achievement and social media use. This is in accordance with the concepts by some researchers stating that there is negative correlation between the level of internet addiction and academic

success of senior high school students (Turel&Toraman, 2015; Hasnain, *et al.*, 2015; Gaol, 2012). This study explains that when students' academic success increases, on the average, students' internet addiction decreases, or otherwise.

Both the results of this study and the results of previous studies reveal that emotional intelligence and academic achievement of senior high school students have quite a strong and significant correlation in influencing the students' daily use of social media. When students' emotional intelligence and academic achievement decrease, their use of social media will increase.

Social media is a tool that enables users to interact, work together, share, communicate, and build social relationship with other people virtually (Nasrullah, 2015). According to Young (1999), there are factors that influence students in using social media. Two of them are emotion and cognition. In this case, emotion is associated with the emotional intelligence of students, while the cognition factor is academic achievement accomplished by students within a certain period of time. When a student has not been able to manage his/ her emotional intelligence, they have a higher tendency to use social media. This also applies to academic achievement. Students who have low mean or are considered to have not completed, according to the Standard Minimum of Completion, have higher level of social media use when compared to the ones who have better academic achievement in class. This is caused by the inability of students to control themselves in their use of social media. Thus, it negatively influences their academic performance.

Emotional Intelligence and academic achievement have quite strong and significant correlation on the use of social media. It means that there are other variables or components that also influence the high level of social media use in students. According to Young (1999), there are 4 factors that influence the use of social media, namely application, emotions, cognition, and life events. Emotions, or in this case emotional intelligence, and cognition, or in this case academic achievement, have a strong correlation so that other components can also influence the use of social media, such as application and also life events. An application that attracts student attention can also make them focus more on cyber space, particularly social media. This can be proven from the high use of social media, which almost all students have used various types of social media.

In addition, life events or an event in a student's life that is considered to be a bad experience make them look for a more convenient life by interacting or having fun through social media. When students feel lonely, they will look for a more meaningful activity. This is in accordance with Rosdaniar's opinion (2008) that the influence of loneliness on internet addiction is because loneliness is one of factors that contribute to internet addiction behaviour. According to Anderson, *et al.*, (in Rosdaniar, 2008), a person who experiences internet addiction is a person



who manages his/ her feelings (mood) by using internet in order to escape from any pressure, improve their feeling when they feel down, anxious or isolated.

Therefore, having known the fact that social media use in public senior high school students in the Purbalingga District is high, teachers and parents must give more attention to the students by closely monitoring any activities done by students when they access social media. There is a concern that the high rate of social media use may affect the psychological condition of students, and may lead to social media addiction. However, this still can be prevented. One way to prevent it is by improving students' emotional intelligence and academic achievement so that they are more able to control themselves in using social media. Counselling and Guidance teachers can provide various services that are preventive or curative for student social media use. Furthermore, counselling teachers can also improve students' emotional intelligence and academic achievement through classical, group, or individual services, considering that emotional intelligence and academic achievement have quite a strong influence on the level of social media use. Therefore, students can build a more effective life.

Conclusion

From the results of the study conducted, it can be concluded that, in general, student social media use tends to be high, while their emotional intelligence tends to be medium. Overall, the students' academic achievement is categorized not completed. Meanwhile, the correlation among variables reveals that there is negative and significant correlation between emotional intelligence and social media use. Also, there is a negative and significant correlation between academic achievement and social media use in public senior high school students in the Purbalingga District. Therefore, overall, there is a significant correlation between emotional intelligence and academic achievement and the use of social media in public senior high school students in the Purbalingga District. This means that the higher the students' emotional intelligence and academic achievement, the lower the level of students' social media use. On the other hand, if emotional intelligence and academic achievement tend to be low, social media use tends to be high. For future researchers who are interested in developing research on correlation between emotional intelligence and academic achievement and the use of social media, they can focus more on those aspects which influence academic achievement on the use of social media, especially when considering that the two variables have quite a strong correlation. Other aspects which tend to influence the use of social media are applications and life events. Moreover, it is expected that the research is aimed at not only identifying correlation among variables, but also giving treatment. It is also recommended to develop this research into an experimental project.



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