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Effects of Social Media Interaction on Self-Esteem among Students in Public Secondary Schools in Nairobi County, Kenya

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Abstract:

Adolescents are part of the generation that is growing up in a time when digital technology is rapidly expanding. Therefore, social media interaction has become a way of living for adolescents who are experiencing rapid changes in their development. Part of the changes experienced is a result of the desire for independence and search for self-identity. Self-esteem is part of self-identity. There is uncertainty about how social media interaction impacts adolescents' self-esteem. Therefore, this article investigated the effects of social media platforms on self-esteem among high school students in public secondary schools in Nairobi County, Kenya. The study employed a descriptive survey research design. A sample size of 379 respondents was obtained through stratified and simple random sampling. A structured questionnaire assisted in data collection. SPSS version 20 was employed to assist in data analysis. Descriptive statistics were obtained and presented in tables. The linear regression model was used to predict the effect of social media interactions on self-esteem. The model was significant $F(1, 344) = 2.662$, $p\text{-value} > .05$. The coefficient of self-esteem based on social media interaction showed that the regression weight was not statistically significant ($p > .05$). The output showed social media interaction does not affect students' self-esteem ($\beta = .088$, $t = 19.934$, $p > .05$). It is essential that training is provided to parents, educators, and students to improve their skills and knowledge on digital media, as social media is a powerful resource that can be utilized in schools and at home to support social development.

Keywords: Social Media, Interaction, Self-esteem, adolescents, secondary schools

1. Introduction

Adolescents are part of the generation that is growing and developing in an era when technology is rapidly expanding. Therefore, social media interaction has become part of adolescents' lives. Besides, evidence suggests that smartphones have made it easy for adolescents to access social media platforms (Lenhart et al., 2015; Gorkemli, 2017). Social media platforms include Facebook, Instagram, Twitter, WhatsApp, among others. Adolescents 13 to 19 years old were noted as early as in the 1990s to be the age bracket that used the internet the most (Kraut, Lundmark, Patterson, Kiesler, Mukhopadhyay, & Scherlis, 1998). This age group probably started using the internet earlier before they were 13 years old. Again, Rideout, Foerhr, and Roberts (2010) in their study noted that adolescence ages 11 to 17 years interacted in social media platforms just like adults.

Further, social media interaction through various platforms has increased among adolescents during the COVID-19 pandemic with the new norm of maintaining social connection while keeping a social distance (Hamilton, Choukas & Nesi, 2020). (It is important to note that data for the current study was collected before the COVID-19 pandemic). Social media offer adolescents opportunities to connect with their friends, explore and express themselves, access resources, and information (Anderson & Jiang, 2018; Hamilton et al., 2020). Other studies present the negative effects of social media on adolescents such as poor mental fitness, unhappiness, disrupted sleep, and body dissatisfaction, internet addiction as a result of excessive use of social media platform (Undiyaundeye, 2014; Richards, Caldwell & Go, 2016; O'Keeffe & Clarke-Pearson, 2011; Cain & Gradisar, 2010; Aboujoude, 2010). All these negative effects can in turn impact on adolescents' self-esteem.

Further, the findings on the effects of social media interaction on adolescents' self-esteem are inconsistent. Some studies showing negative effects of social media on self-esteem (Jan, Soomro, & Ahmed, 2017; Mehdizheh, 2010; Sorokowski et al., 2015; Nyaga, Stephen & Mwanja, 2015) while others showing positive impact (Nadkarni & Hofmann 2012; Øverup, Brunson, & Acitelli, 2015). Most adolescents continue to immerse themselves on social media, many adults wonder whether or not this interaction affects self-esteem or not. Thus, it was worthwhile to investigate the effects of social media interaction on adolescents' self-esteem. The information will enhance adolescents, parents, and educators' skills and help them to better understand the effects of social media on self-esteem.

Self-esteem is the judgments that a person makes about himself. It is the person's self-worth expressed through their attitudes, values, and behavior. Adolescents who have high self-esteem have confidence in their abilities. They appreciate their skills; they strive to improve and develop themselves (Baumeister, Campbell, Kruenger & Vohns, 2003). Contrary, adolescents who have low self-esteem have difficulties making their own decisions, they lack confidence, and

they desperately long for other people's approval. Thus, self-esteem can be described as an individual aspect that represents the general way adolescents feel about themselves.

1.1. Purpose of the Study

The purpose of this paper was to explore the effects of social media interaction on self-esteem among students in public secondary schools in Nairobi County, Kenya. The intent is that by sharing the findings produced by this study with parents, educators, and youth workers, they will understand how adolescents' social media platforms interaction affects adolescents' self-esteem. With the understanding, it is expected that parents, educators, and other adults will support adolescents to interact on social media platforms in a way that is beneficial to their social development and in particular in enhancing their self-esteem.

1.2. Research Questions

The following are the main research questions guiding the study.

- What social media interaction do high school students engage in?
- How does social media interaction affect high school students' self-esteem?

The hypothesis of the study:

- H₀1: Social media interaction has no significant effects on high school students' self-esteem.

2. Review of Related Literature

Self-esteem refers to one's worth of the self. It stands for the way one makes judgments of who one is. Crocker and Wolfe (2001) stated that an individual's view of his/her worth depends on perceived successes or failures in abilities, competencies, competition, or appearance among others. A statement echoed by Beane and Lipka (1986) when they said that self-esteem is the extent to which a person is wholly or partly pleased or displeased with self. For instance, an adolescent may be displeased by their body shape and that may influence their self-evaluation. These judgments are dependent on a person's attitudes, beliefs, or interests (Beane & Lipka, 1986). Self-esteem also stands for 'global judgments of the value of the self as a person' (Rosenberg, 1965, p. 141). Self-esteem has to do with the value that an individual place on themselves (the evaluation of self-worth). The body image, cultural and family background, and sometimes sexual orientation plays a big role in how an adolescent evaluates him/herself (Rosenberg, 1965). However, the current study seeks to find out the role social media plays on self-esteem.

According to American Psychology Association (2002) (APA), self-esteem can be viewed in two ways (1) 'Global' self-esteem that denotes a person's general approval of how he/she thinks of him/herself as a whole and 'specific' self-esteem, that has to do with a person's approval of certain elements of his/herself such as physical appearance, one's abilities, for example being an athletics. Self-esteem emerges individually for each adolescent but there is that natural longing in people to score high in their self-worth (Rosenberg, 1965). It depends so much on personal opinion on how one looks like especially their body appearance in comparison to others (Rosenberg, 1965). A person's self-esteem can be boosted by their self-confidence in their present situation and acceptance granted by others (Harter, 1999).

Social Media and Self-esteem

Social media allow adolescents to make opinions on how they think they appear based on other peoples' comments on their profile accounts. 'Users can tag and identify photos of each other and post publicly accessible text messages on each other's profile's pages' (Rui & Stefanone, 2013, p.1287). A survey by Amanda (2015) explored the association between social media usage, levels of self-esteem, and identity formation. The population of the study was 86 secondary school students aged 12 to 18 years. The finding showed no connection between self-esteem and social media interaction. The sampling technique that was employed in their study was convenience sampling, which may not give equal chance to participants. Consequently, the current study employed random sampling to ensure equal opportunity for inclusion.

Another correlational study examined the relationship between social media usage and self-esteem level to 92 undergraduate Psychology students at Rowan University (Pineiro, 2016). Rosenberg's Self-esteem scale was used. The hypothesis was that higher usage of social media would correlate with lower levels of self-esteem for these students. But when Pineiro (2016) did correlation via excel computer software, 'social media and self-esteem levels were not significant, $r(38) = .537, p = .095$ ' (p. 26). Higher use of social media did not relate to low self-esteem levels. Based on the feedback, adolescents' self-esteem was not affected by their social media use. Contrary to other findings that showed higher use of social media resulted in low self-esteem. For instance, Valkenburg, et al (2006) suggested that when adolescents received affirmative feedback on the profiles their self-worth was enhanced but if they received negative feedback their self-value decreased.

In a study among 250 undergraduate students, Bergagna and Tartaglia (2018) studied to find out if there was a significant relationship between self-esteem and the number of time students spent on Facebook. A self-report questionnaire was used, and their study found out that the use of Facebook for social interaction was directly influenced by high self-esteem and indirectly influenced by low self-esteem. Their results also revealed that 'females spent more time daily on Facebook than males' (p.836). Gonzales and Hancock (2011) in a study with 63 university students, wanted to determine the effects of Facebook on self-esteem. They did an experimental study where the subjects were controlled. They discovered that self-awareness by viewing a personal Facebook profile enhanced self-esteem.

Similarly, Jan, Soomro, and Ahmad (2017) verified that a strong relationship existed between social media and self-esteem in a study where they surveyed 150 students from a business college. Additionally, they reported that an

'increase in social media usage causes the self-esteem of individuals to decrease. One hour spent on Facebook daily results in a 5.574 decrease in the self-esteem score of an individual' (p.336). Jan et al (2017) used both questionnaires and interviews, which are the instruments the current study is using. Some studies seem to imply that the use of social media platforms is of more benefit to adolescents with low self-esteem. For example, Ellison et al (2007) asserted that teenagers with lower self-esteem find social media beneficial and in particular Facebook compared to those with higher self-esteem. Their findings were supported by Tazghini and Siedlecki (2013) who found the same thing. Similarly, Shaw and Gant (2002) noted that online communication can heighten social support that on the other hand reduces imagined loneliness and dejected emotions thereby growing self-esteem. Australian Research Alliance for Students and Youth (2013) supports that 'Students and youth who are loved and safe are confident, have a strong sense of self-identity, and have high self-esteem' (p.8).

However, over-dependent on social media is connected to decreased low self-esteem, happiness, satisfaction with life, and increased depression and loneliness in adolescents (Meier & Gray, 2014). Therefore, the kind of feedback adolescents receives from their social media platforms from other people especially the significant others in their lives such as friends, peers, parents, and so forth is very significant. Adolescents are very sensitive at this period of life. The feedback received may affect them positively or negatively. Their sensitivity could be heightened by the fact that adolescence is a stage characterized by self-exploration of who one is and other changes such as physical appearance. Online feedback such as opinion on posted messages, physical appearance, and preconceived ideas is in most cases openly available to other people. Their awareness that other people are viewing their online content may have severe consequences for adolescents' self-esteem.

According to Common Sense Media (2015), 45% of adolescent girls and 24% of adolescent boys get concerned about peers posting ugly photos of them on social media, six out of ten girls keenly stay away from daily activities because they feel insecure about their appearance and nine out of 10 girls wish they could change their physical appearance. Adolescents most of the time suppose that their experiences are distinct and that no one feels, or has ever felt, the way they do, and they think no one understands them. Since they feel different from everyone else, they often experience a sense of invulnerability (Valkenburg & Piotrowski, 2017). They become obsessed with thoughts of how others might view them and their decision-making centers on the need for who they are.

Nyaga, Stephen, and Mwanja (2015) examined the impact of social media networking platforms on the self-esteem of teenagers in secondary schools in Embu County Kenya, through descriptive survey design and found out that social networking affects the self-esteem and psychological wellbeing of a secondary school student. Their study suggested that adolescents are more likely to evaluate their self-esteem based on how people around them act in response to their behavior and appearance. Further, Kimemia and Mugambi (2016) conducted a study amid high school students, and their study proposed that there is a connection between the use of social media and the prevalence of pregnancy among girls in high schools in Kenya. Their study confirmed the use of social media among high school students in Kenya, and the effects of social media on adolescents' self-esteem, as pregnant girls may not be happy with their appearance and so would evaluate themselves poorly.

According to Krause, Baum, Baumann, and Krasnova (2019), the effects of social media on an individual depends on the intentions of the use of that particular person. Using social media sites for social comparison is mainly related to negative effects on users' self-esteem, whereas receiving positive feedback or engaging in self-reflection is associated with elevated self-esteem' (p.24) From the various studies explored in this study on effects of social media and self-esteem, there seemed to be inconsistency in the findings and this, therefore, led to the need to explore social media interactions and self-esteem among adolescents in the researcher's context.

Similarly, adolescents prefer positive feedback from social media platforms. How friends, peers, and even strangers behave on social media platforms affect how adolescents feel about themselves. This is because they interact with other people's comments, photos, profiles, among other things. It is most likely that people put their best look when taking photos that they post on social media platforms; some do photoshop and edits photos to best fit their penchant; they wear clothes that are on fashion and show the best of the hotels or parties they attended. They then share the edited photos with their friends. Such stunning photos and these glamorous looking posts appeal to the mind of a young person who is made to see life as always full of merriments. The young person then is likely to compare their unadorned photos, abilities, qualities, and life with that of others that seem more fantastic and may draw conclusions from these interactions. Thus, adolescents may harshly judge one's self-based on other people's lives that appear wonderful and may feel like life is boring and has nothing to offer and may entertain the feeling of worthlessness.

Additionally, adolescents interact with conversations, likes, comments. For instance, they receive likes, comments from others, and they in turn send their friends. The information they receive from these interactions may be a sign of social acceptance or social rejection. They use the feedback they receive to judge their abilities, attributes, etc., initiating social feedback processing (Krause et al., 2019). Further, adolescents give detailed personal information on their profiles and also share information about the very important moments of their lives when they update their status, share photos, and post videos. By disclosing this information about themselves, self-reflective processes are likely to be activated (Krause et al., 2019). As they reflect on the information they have provided, they are likely to draw conclusions that they use to judge themselves, positively or negatively (Gonzales & Hancock, 2011). According to Vogel and Rose (2016), focusing on one's own positively presented self-image generally leads to beneficial outcomes leads to valuable outcomes, whereas focusing on others' idealized images typically leads to harmful outcomes.

Gallinari (2017) examined the impact of receiving many 'likes' or a few 'likes' on social media. The study examined the likes on Instagram among 124 respondents, all women aged 18 to 25 who were asked to complete a self-esteem scale

to measure their feeling of self-esteem. The results revealed that the number of 'likes' received did not significantly affect self-esteem. However, Drogos' (2015) study among 227 high school students ages 14 to 18 years old, found out that 'adolescents who received more negative feedback from friends reported lower self-esteem than did those who received less negative feedback' (p.73).

Additionally, Jan, Soomro, and Ahmed (2017) used both interviews and questionnaires to survey the impact of social media on self-esteem. They did their study with 150 college students and found out that an increase in social media usage causes the self-esteem of individuals to decrease. 'One hour spent on Facebook daily results in a 5.574 decrease in the self-esteem score of an individual' (p.329). Adolescents post only the positive aspects of their lives. Which include their very best photos of them wearing the latest fashion design, share posts of the recent places they have visited such as parks, parties, etc. Since other adolescents are only viewing the positive aspects of life, if they compare their social lives with those of their peers or friends, they may end up looking down on themselves or getting depressed.

Mehdizadeh (2010) found that adolescents with low self-esteem participate in more self-promoting behaviors such as posting photos on Facebook when likened with those with higher self-esteem, a statement that other researchers supported such as (Sorokowski et al., 2015). An adolescent who feels worthless may do everything to look like the rest from updating status, to uploading thousands of photos trying to appease others through their stories. Contrary to their findings, Nadkarni and Hofmann (2012) discovered that adolescents with higher self-esteem were involved more in self-promoting activities on social media platforms, a statement that was repeated by Øverup, Brunson, and Acitelli (2015).

3. Study Design and Methods

The study used a descriptive survey research design to enable the researcher to understand adolescents 'social media platforms' interaction and its effects on their self-esteem. This descriptive survey intended to explain this social media interaction in detail, to show its distribution among high school students to establish the facts in percentages and frequencies. Descriptive survey design enabled the use of a representative sample of a large population within a short time (Mutai, 2000), with limited resources. The study took place among high school students in Nairobi County.

3.1. Sampling Procedures and Sample Size

The population targeted herein was nine public high schools in Nairobi County. There was a total of 7244 students in the 9 public schools. However, a sample, which is representative of the population was single out for the study as it had elements that were characteristics of the whole population (Mugenda & Mugenda, 2003). Sampling thus involved selecting the respondents that were involved in the study. Stratified random sampling was done, whereby all the nine public secondary schools in Nairobi County were divided into strata. To calculate the proportion of students from each stratum, stratified sample formula (sample size of the strata = size of the entire sample divided by the population size, multiplied by the total of each stratum). Then the sample of each stratum was added up to make the sample size. The sample size was 379 respondents.

3.2. Research Instrument

The questionnaire was used to collect data. The questionnaire included questions on demographic, social media interaction, and Rosenberg Self-Esteem Scale (RSES). Thus, the survey instrument sought information on social media interaction and students' evaluation of their self-esteem (self-esteem level). A pilot study was done to ensure the questionnaire covered important concepts and it was well understood by the respondents. To measure the internal consistency of each question social media interaction, the variables were subjected to Cronbach's coefficient test and obtained α of .73.

3.3. Data Collection Procedure

The researcher personally administered the questionnaire with the help of the teacher on duty in each school that was sampled. The questionnaires were administered during students' free time, just as the researcher had agreed with the head-teachers. This ensured no class hours were interrupted and there was enough time for students to complete the questionnaire. Students were briefed on the aim of the study and were guaranteed that their names were to remain anonymous. They were also informed that the information that they were volunteering was to be used for the reason stated in the study only and not for any other business. The questionnaires took between 20 to 25 minutes to fill in.

3.4. Ethical Considerations

The study observed all the laid down ethical guidelines at the national and international level during the research process. The researcher was able to obtain an approval certificate from Africa International University (AIU) Institutional Ethics Research Board (IERB), and a research permit from National Commission for Science, Technology, and Innovation (NACOSTI). Further permission to access schools was obtained from the County Director of Education Nairobi, as well as from Education Officers from Nairobi Sub-Counties. Some of the ethical issues that were put into consideration included: confidentiality, protection of the minors, and also respondents were given an equal opportunity of being selected and were permitted to decide whether or not to take part in the study. Parental consent was obtained before engaging the students in the study. All the information received was kept confidential and was only available to the researcher.

3.5. Data Analysis

Data analysis was done through Statistical Package for Social Sciences (SPSS) using descriptive statistics, that is, means and percentages, and regression for the prediction of the effects of the social media interaction on self-esteem.

4. Findings and Discussion of the Findings

4.1. Students' Interaction on Social Media Platforms

Respondents were required to indicate how they were interacting on social media platforms. The intention was to establish activities that respondents were engaging in on social media platforms. The respondents were required to respond to the statements by indicating their opinion in a five Likert showing 1= strongly disagree, 2= disagree, 3= neutral, 4= strongly agree, and 5= strongly agree. Descriptive statistics were carried out, that is, the mean and standard deviation to test the distribution of the response. The results were presented in Table 1.

	Mean	Std. Deviation	SD	D	N	A	SA
I often like chatting with friends/family	4.16	.971	2.9	4.0	10.7	38.4	43.9
I repeatedly watch videos for entertainment	4.09	1.133	6.4	3.8	10.4	33.2	46.2
Like checking friends' status update often	4.00	1.059	4.3	7.5	7.5	45.4	35.3
I regularly comment on friends' pages	3.73	1.181	6.9	7.8	18.5	37.0	29.5
Often update my status	3.64	1.278	9.2	11.3	16.8	31.8	30.9
I regularly check on the latest news/events	3.61	1.310	9.5	10.4	18.5	29.8	31.2
I frequently look at friends' pages	3.56	1.186	7.2	12.4	21.4	35.3	23.7
I like posting photos/videos often	3.45	1.307	11.8	13.3	16.8	34.1	24.0
Send instant messages often	3.17	1.269	13.0	16.8	24.9	29.2	15.6
I often like playing online games	3.12	1.485	21.7	14.5	15.6	24.6	23.1
Often use platforms for Academic research	3.01	1.344	17.9	18.5	24.9	21.7	17.1
I often create groups on WhatsApp	2.79	1.367	23.1	22.0	21.4	19.4	14.2
Regularly seek information about sports	2.59	1.401	31.2	20.2	18.2	17.9	12.1
Like posting and reading tweets	2.57	1.328	26.9	27.7	16.8	18.5	10.1

Table 1: Descriptive Statistics for Students' Interactions on Social Media Platforms

The mean value of 4.5 represented SA, the mean value of 3.5 to 4.4 represented Agreed, the mean value of 2.5 to 3.4 represented Neutral, the mean value of 1.5 to 2.4 represented Disagreed and lastly, the mean value of 1.4 represented Strongly Disagreed. According to the findings, almost all the respondents (43.9% strongly agreed and 38.4% agreed) indicated that they were utilizing social media platforms to chat with friends and family (M=4.16 and SD=.971). Many of the respondents (46.2 strongly agreed and 33.2% agreed) indicated that they were using social media platforms for entertainment purposes (M=4.08, SD=1.145). More than three-quarters of the respondents (45.4% agreed and 35.3% strongly agree) reported that they checked on friends' status updates often (M=3.99, SD=1.062). More than half of the respondents (37.0% agreed and 29.5% strongly agreed) said they regularly commented on friends' page (M=3.72, SD=1.174). More than half of the respondents (31.8% strongly agree and 30.9 agreed) reported they regularly checked on the latest news/events (M=3.63, SD=1.285). More than half (29.8% agreed and 31.2% strongly agreed) said they often updated their status (M=3.63, SD=1.284). Slightly high than half of the respondents (35.3% agreed and 23.7% strongly agreed) they frequently looked at friends' page (M=3.54, SD=1.188).

However, slightly more than half of the respondents (34.1% agreed and 24.1% strongly agreed) on posting photos/videos often (M=3.40, SD=1.314). Less than half of the respondents often liked playing online games (M=3.13, SD=1.478). Less than half agreed to send instant messages often (M=3.09, SD=1.233), using social media platforms for academic research' (M=3.06, SD=1.327), often creating groups on WhatsApp' (M=2.78, SD=1.368), regularly seeking information about sports (M=2.60, SD=1.402) and lastly on posting and reading tweets (M=2.60, SD=1.315).

The findings show that almost all students were interacting on social media platforms mainly to communicate with friends and family. Lenhart et al (2011) claimed that adolescents were interacting on social media platforms to connect with friends and family. The majority of the students were also using social media platforms for entertainment. The findings are similar to those of Mwandime (2015) and Wamuyu et al (2018) who said high school students were mainly using social media platforms for entertainment. Several students indicated they were using social media platforms for checking on friends' updates, comments on friends' pages, and profile status. social media interaction depends on the purpose of the use of a particular individual (Devi & Tavera, 2014; Kasahara et al, 2019). Students reported that they were involved in creating profiles that avail individual information and photos, shared photos and videos, sent links, made connections, commented on friends' status and photos.

The finding suggests that students were mainly using social media to interact with friends and for entertainment purposes. However, with the many activities that adolescents are engaged in on social media platforms, they can easily be tempted to constantly remain glued to entertainment, events, and activities taking place on social media platforms, and this may render them incompetent in other tasks, which in turn may increase the feeling of inadequacy. The feeling of incompetence and over-dependent on social media may create anxiety and low self-esteem. Future research should

examine whether dependence on social media platforms generally render adolescent's incompetent or it does increase their skills.

4.2. Effects of Social Media Interaction on Self-Esteem

The third research question of the study was to identify the effect of social media platforms' interaction on high school students' self-esteem. First descriptive statistical tests were performed to show the students' self-esteem. Then, a regression analysis was carried out to test the hypothesis of the study.

4.3. Descriptive Statistics for Self-Esteem

On descriptive, the mean and standard deviation were applied to show the spread of the response. The mean value of 4.5 represented SA, the mean value of 3.5 to 4.4 represented Agreed, the mean value of 2.5 to 3.4 represented Neutral, the mean value of 1.5 to 2.4 represented Disagreed and lastly, the mean value of 1.4 represented Strongly Disagreed. The results were presented in table 2.

	Mean	Std. Deviation	SD	D	N	A	SA
I feel that I have several good qualities	4.22	.956	2.6	3.8	9.8	36.1	46.8
I take a positive attitude toward myself	4.12	1.067	4.0	4.9	11.6	32.4	45.4
All in all, I am inclined to feel a failure	4.05	1.169	48.8	24.3	13.3	8.7	4.3
I am not able to do things as well as most other people	3.89	1.117	4.9	7.2	15.9	36.4	34.4
I feel that I am a person of worth, on an equal plane with others	3.79	1.184	7.2	5.8	20.2	31.8	33.2
I certainly feel useless at times	3.54	1.416	38.4	15.6	17.6	17.6	10.4
I feel I do not have much to be proud of	3.24	1.376	26.0	19.9	17.3	25.1	11.3
At times I think I am no good at all	2.65	1.374	9.2	24.9	17.3	18.2	29.8
I wish I could have more respect for myself	2.43	1.461	17.9	4.9	13.6	28.0	34.4
On the whole, I am satisfied with myself	2.20	1.139	30.6	37.6	16.5	9.0	5.5

Table 2: Mean and Standard Deviation for Self-esteem

The findings show that almost all the respondents (86.7%) reported that they felt that they had several good qualities (M=4.22, SD=.956). About three-quarters of the respondents (77.8%) reported that they took a positive attitude toward themselves (M=4.12, SD=1.067). More than half of the respondents (72.9%) disagree with the statement that they were 'inclined to feel a failure' (M=4.06, SD=1.167). More than half of the respondents (70.8%) indicated that they were not able to do things as well as most other people do (M=3.88, SD=1.118). Half of the respondents (65.0%) agreed with the statement that 'I feel that I am a person of worth, on an equal plane with others' (M=3.79, SD=1.184). Slightly above half of the respondents (54.0%) disagreed with the statement that 'I certainly feel useless at times' (M=3.56, SD=1.407). The respondents were neither agreeing or disagreeing with the statement that 'I feel I do not have much to be proud of' (M=3.24, SD=1.378), and 'At times I think I am no good at all' (M=2.65, SD=1.374). Half of the respondents disagreed with were: 'I wish I could have more respect for myself' (M=2.43, SD=1.461) and 'On the whole, I am satisfied with myself' (M=2.20, SD=1.141).

As of the findings, social media platforms did not have effects on their self-esteem. This implies that either the adolescents had high self-esteem and were interacting to extend their network by connecting to friends or they had low self-esteem and were using social media platforms interaction to boost their self-esteem. Many of the studies done previously reported that social media interaction affected adolescents' self-esteem. However, the current findings are contrary to what was expected. Nevertheless, the findings are similar to those of Bergagna and Tartaglia (2018) who found that the use of Facebook for social interaction was directly influenced by high self-esteem and indirectly influenced by low self-esteem. Some adolescents with low-self-esteem use social media to compensate for their face-to-face interactions that are hindered due to shyness. While those with high self-esteem are motivated to interact more on social media to extend their social network further. Hence, they are less likely to allow negative feedback to decrease their self-esteem. It is also likely that a lower number of 'likes' or 'comments' do not distract them. Individuals with low self-esteem have the motivation to enhance their self-image for social acceptance and so they may post edited photos to make them look good (Ho, et al., 2016). Therefore, it seems adolescents were mainly using social media platforms for connecting with their friends and for entertainment and not necessarily for social comparison.

4.4. Linear Regression Model of Social Media Interaction Effect on Self-esteem

A linear regression model was used to test the study hypothesis, H_0 : 'The social media platforms interaction has no significant effect on high school students' self-esteem'. The first output of the linear regression model was presented in table 3.

Model	R	R Square	Adjusted R Square	Std. An error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.088 ^a	.008	.005	.69989	.008	2.662	1	344	0.104

Table 3: Model Summary of Social Media Interaction on Self-Esteem

a. Predictors: (Constant), Social Media Interaction

The findings in table 3 showed the model was not statistically significant because the p-value (0.104) was greater than the significant level of 0.05 (p-value >.05). $F(1, 344) = 2.662$, Further, the R Square (R^2) = .008 show 0.8% of students' self-esteem can be attributed to social media interactions. ANOVA tests on linear regression were used to determine if the regression model used to answer the hypothesis was fit to determine the predictor other than using the mean comparison, the results are presented in Table 4.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.304	1	1.304	2.662	.104 ^b
	Residual	168.509	344	.490		
	Total	169.812	345			

Table 4: Regression ANOVA of Social Media Interactions on Self-Esteem

a. Dependent Variable: Self-Esteem

b. Predictors: (Constant), social media interaction

Table 4 showed that the regression model was not suitable for predicting the outcome variable since the equation was not significant $p > 0.05$.

The coefficient of self-esteem and social media interaction was presented in table 5.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.547	.183		19.434	.000
	Social media interaction	.079	.049	.088	1.631	.104

Table 5: Coefficients of Social Media Interaction on Self-Esteem

a. Dependent Variable: Self-esteem

Table 5 showed that the social media interaction does not affect students' self-esteem ($\beta = .088$, $t = 19.934$, $p > .05$). Therefore, according to the findings and equation, the null hypothesis of the study, H_{01} : 'The social media platforms interaction has no significant effect on high school students' self-esteem', was accepted.

The findings indicate that the use of social media among public high school students does not affect their self-esteem levels. The findings of the study are consistent with other studies (Gonzalez & Hancock, 2011; Amanda, 2015). For instance, Pineiro (2016) correlated social media and self-esteem levels, the findings were not statistically significant, $r(38) = .537$, $p = .095$. Meaning higher use of social media did not relate to low self-esteem levels. Adolescents may have low self-esteem not necessarily because of social media use. They can intentionally use social media interactions to enhance boost their self-esteem. For instance, people with lower self-esteem attempt to compensate by seeking more friends on social media to establish a sense of belonging and increase the perception of popularity (Bonneti, 2010; Ellison, Steinfield, & Lampe, 2007). Other studies have found out that those with low self-esteem benefit more on social media. For example, Tazghini and Siedlecki (2013) found that people with lower levels of self-esteem benefited more and had greater social capital due to Facebook use than those with higher levels of self-esteem.

The current study looked at the interactions on social media and self-esteem. It seems high school students in this case used social media to strengthen their relationship with their peers and not necessarily for social comparison. Krause, et al (2019), stated that the use of social media for social comparison affected self-esteem negatively but positive feedback increased ones' self-esteem. The overall outcome of social media platform interaction on self-esteem therefore depends on individual usage patterns and predispositions (Krause et al., 2019). A study by Jan et al (2017) found out that there is a strong relationship between social media use and self-esteem for students with upward social comparison. The upward comparison makes adolescents feel inferior, less privileged, and ungrateful. Therefore, the purpose of using social media determines so much the effects on adolescents. Use of social media to connect to friends. However, over-dependent on social media may result in low self-esteem (Meier & Gray, 2014). Future research should correlate adolescents' social media addiction to self-esteem.

5. Recommendations

Based on these findings, the study recommends the following:

Provision of training programs. Training programs should be provided for all school stakeholders, and particularly parents, teachers, and youth workers. These adults should be supported through the enhancement of their

skills and knowledge about digital media. With sufficient digital knowledge, they can respond appropriately to the social needs of adolescents and to support adolescents to interact on social media in ways that benefit them and generate positive outcomes on social development. Additionally, training programs for young people should be made available and affordable to create awareness and sensitize adolescents to use social media safely.

Enhance social development through social media platforms. Social media is a powerful resource that should be harnessed in schools and at home to support young people's social development. Adolescents can access information that can help them understand their self- development and also guidance and counseling. For example, support groups for students can also be created on WhatsApp that can offer guidance to students.

Further research should be done to investigate whether the use of social media during the COVID-19 period had effects on adolescents' social development and in particular self-esteem. Future research should be done on social media addiction and adolescents' self-esteem.

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