

The Role of Social Media in Promoting Reading Attitudes among Undergraduate Students in UCSI University

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Abstract

In recent years, technological advancements in social media such as Facebook, Instagram, Twitter and YouTube have raised concern to how reading and reading attitude is perceived and acted on among students in institutions of higher education. This study was conducted to investigate the relationship between time spent on social media and reading attitude among undergraduate students in UCSI University. The study also intended to find out which social media platforms such as Facebook, Instagram, Twitter and YouTube affected students' reading attitude the most. To answer these questions, the present study adopted the correlational research design to identify the relationship and degree of association between social media use and reading attitude.

Using simple random sampling technique, 614 undergraduate students participated in this study. An online survey was administered to the students to determine their reading attitude. The Pearson's correlation coefficient and multiple linear regression was done to identify the relationship between variables established in the research objectives. The results indicated there was a positive correlation between time spent on social media and reading attitude. This indicates that more time spent on social media reading is associated with a more positive reading attitude. Furthermore, the results also revealed that Instagram influenced reading attitude the most, followed by YouTube, Facebook and Twitter. The discussion of the study indicates that social media positively influences and inspires reading attitude.

Keywords: Social Media, Reading, Reading Attitude, Correlation, Undergraduate, UCSI University, Pearson

Introduction

There have been many studies on research ranging from the importance of reading to the significance of reading attitude. The term reading is described as a process that involves deducing, understanding and grasping sounds (Kamhi & Catts, 2008) (as cited by Akyol, Çakiroğlu & Kuruyer, 2014). Reading has also been described as a cognitive process where knowledge is vital to smooth reading (Eskey, 1983; Kalayci & Humiston, 2015; Rathert, 2012) (as cited by Kaya, 2015). Reading is not without its purpose as well because several studies have shown that the significance of reading is comprehension and without proper reading skills, the progress of learning information and vocabulary understanding will be impeded, as poor reading skills lead to poor reading comprehension which results in lesser reading experience (Lyon, Shywitz & Shywitz, 2003). Consequently, reading gives the ability to learn new knowledge and information, attain necessary information, soothe the mind and enhance the mastery of language and vocabulary (Inderjit, 2014).

However, learning through reading cannot take place without reading attitude, as a positive one will decide the accomplishment of any given instruction (Liu, 2005). Reading attitude can decide whether an individual will begin the reading process in the first place as it plays a crucial role in fostering and the practice of lifelong reading skills (Wilson, James & Roberts, 2006). Alexander (1983) shares that attitude is the first requirement for reading process and that if it was negative, other elements such as incentive, focus and understanding and beliefs will not manifest or even if they do, they will happen in an unstructured manner (as cited by Brooks, 1996). Consequently, reading attitude is significant to the reading process as the students' reading attitude is an integral factor that impacts reading performance (McKenna & Kear, 1990). The importance of reading attitude is shown to be the determiner of the reading process and the link to academic achievement. For example, Wade (2012) found that students who had great achievement in the

subjects of mathematics, social studies and science were related to having positive reading attitudes. Furthermore, a study by Druyor (2012) came across a similar result which found that high achievement in reading was accomplished by students who have positive reading attitudes (as cited by Mohd-Asraf & Abdullah, 2016). These studies show that reading attitudes affect the success or failure of reading and it is the very first and crucial component before reading even begins.

With this in mind, the introduction and the expansion of the Internet and its usage, studies show that reading on the web has provided readers with an emphatic boost to fill up their hunger for knowledge and multiplying their base of intelligence. Clearly, students in particular are able to access the Internet frequently through computers as it was found in survey conducted by OCED (2011), that there is less than 1% of teenagers who have never used a computer before. Meanwhile, it was observed that there was an increase in the amount time spent on reading as the population searched and skimmed through the web. This shows that Internet networks, websites and applications are able generate more interest in reading among the population (Inderjit, 2014).

The growth of the Internet is not without its benefits as a study was done to show how a social media platform which is Facebook, was able to be integrated in the ESL context as a teaching tool. The results produced many positive outcomes such as improvement of students' L2 reading and writing skills, expansion of social proximities, enhancement of communication skills and reduced their fear and anxiety when learning and practicing the language among their classmates (Mahmud & Ching, 2012).

Furthermore, the use of social media platforms such as Twitter has allowed for the convenient circulating of information from teacher to students (Veletsianos & Navarrete, 2012), while instant messaging and websites such as wikis promoted synergy among students and their peers (Hrastinski & Aghae, 2012). With the integration of social media in teaching, students have been positively receptive to it as the social media site contributes to a supportive aspect of their learning experience and improving it (Veletsianos & Navarrete, 2012). Effective teaching-learning participation in an online learning community not just improves the teaching and learning experience but also necessitates both students and instructors to strike a balance of respect and tolerance with one another (Lim & Vighnarajah, 2018), even to the extent of sharing (open) educational resources in the scholarship of teaching and learning (Ganapathy et al., 2015).

Interestingly, there have been new studies on the relationship between the use of social media and reading attitudes which gathered a positive result. According to OECD (2011), students frequently enjoyed reading when often searching for information online which lead them to read a wide range of printed material. To contrast this, another study shows that the increase use of the

Internet and online games affected the reading attitudes of students negatively because the students in that environment spend more time on other recreational and leisure activities rather than reading (Turkyilmaz, 2014). Therefore, further research needs to be done to understand the relationship between these two variables as there are limited studies regarding attitudes and related affective factors carried out with students passing the primary level of education (Kamil, Pearson, Moje & Afflerbach, 2011). The present study will provide new and comprehensive information regarding the subject matter by investigating the role of social media in promoting reading attitudes in undergraduate students in UCSI University.

Statement of the Problem

Ideally, Malaysia has envisioned achieving a literacy rate on 100% by the year 2020 and have made many proactive efforts to contribute to that goal. However, in 1993, the World Education Report revealed that the literacy rate of Malaysians was 85%. Studies have been carried on the reading habits in Malaysia using surveys. It was found that students in tertiary education have spent less hours reading previously before entering university which coincides with another survey that generated the same results (Inderjit, 2014).

While another study conducted by Pandian in 1997, described the state of reading habits and reading attitudes of university students. It was found that 80.1% of university students as unwilling readers towards English language content as reading was perceived to be difficult and anxiety inducing compared to engaging in video games or watching television (as cited by Annamalai & Muniandy, 2013). Additionally, students only spend a minimal amount of time reading English resources outside of the classroom and did not make full use of the library to engage in the reading process. Among the reasons identified for the low amount of time spent on reading was students' interest in different activities and that the environment surrounding them was not stimulating towards reading process. This displays the progressively declining rate of reading among Malaysians (Karim & Hasan, 2007).

Currently, the National Literacy Survey that was conducted in 2005 had calculated that Malaysian students only read an average of two books a year which did not show any improvement. Another survey conducted by the Malaysian National Library which involved a sample size of 60,441 respondents reported that the literacy rate had dipped by 1% from 93% to 92% in the year 2006 (Annamalai & Muniandy, 2013). This alarming rate of decline has provided a clear picture of Malaysians' attitudes towards reading. This troubling trend demonstrates that students who have negative reading attitude will not approach a reading situation thus impeding the reading process from the very beginning. Specifically, reading attitudes of students decline due to the ineffective use of the online technology in the students' learning environment. What is certain is the need for students to be technologically literate for them to successfully savor the

university learning experience (Vighnarajah, 2018). Students are left dissatisfied with the unentertaining use of online technology in their classes which lead them to be bored and disengaged towards reading the text on screen (McKenna, Conradi, Lawrence, Jang & Meyer, 2012).

Nevertheless, in the recent years since the expansion and development of technology, the reading habits and attitude of Malaysians, specifically students may have changed due to the widespread presence and use of the Internet. As such, it is evident that the youth are growing to be more tolerant towards reading on-screen materials and this trend may cause a change towards perception of reading (Liu, 2005)

Given the current state of deterioration of reading attitude which leads to erosion of reading and reading habits of the population, if left to continue, the ability to acquire and learn information will be lost to Malaysians as reading is crucial to understanding and it is a significant agent for lifelong learning (Inderjit, 2014). Therefore, it is important to focus on the role of social media in promoting reading attitudes as reading attitude is the first crucial step for one to even begin the act of reading which later requires reading skill during the and then develops into reading habits. Reading cannot take place without one having a positive attitude towards reading in the first place which will cause one to approach the reading. The act of students reading is dependent on their reading attitude (Yoke, Sharmannie & Azman, 2007).

Social media can be a helpful tool in language learning and improving literacy as mentioned in previous studies but there is a lack of research on social media and reading attitudes in the context of this research. Hence, this explanatory research will identify the role of social media in the promotion of reading attitudes in undergraduate students in UCSI University.

Objectives of the Study

- 1) To identify the relationship between social media and reading attitude amongst undergraduate students in UCSI University.
- 2) To investigate which social media application influences reading attitude the most amongst undergraduate students in UCSI University.

Research Questions

- 1) Is there a statistically significant relationship between social media and reading attitudes amongst undergraduate students in UCSI University?
- 2) Which social media application influences reading attitude the most amongst undergraduate students in UCSI University?

Reading

Over the years, the definition of reading has been defined by many researchers. Nuttall (1996) defined reading as; “The process of getting out of the text as nearly as possible with the message the writer puts into it.” (p.4) while Williams (1996) defined it as; “a process through which one looks at and understands a written text.” (p. 2) (as cited by Solak & Altay, 2014). Additionally, some researchers have defined it as; “Reading is an interactive process consisting of inferring, knowing correct sounds and comprehension” an interactive process consisting of inferring, knowing correct sounds and comprehension” (Akyol, Çakiroğlu & Kuruyer, 2014, p. 200) and “Reading is a receptive skill. It is an intricate mental activity which is essential for the kind of knowledge society that one envisages in the globalized context” (Asiri & Momani, 2017, p.1).

Reading is the most important skill that needs to be honed and sharpened as it is to be used for a lifetime (Inderjit, 2014). Besides, it is a widely known fact that reading cultivates creative thinking, curious cognition and improves the competency of lifelong learning of an individual (Bulgurcuoglu, 2016) and it has been found to aid in occupational achievements, career growth and a better reaction towards change (Kirsh & Guthrie, 1984) (as cited by Karim & Hassan, 2006). Additionally, reading is an important component that is part of the learning process. It is imperative to the academic achievement of the students and includes a convoluted process (Ad-Heisat, Mohammed, Sharmella & Issa, 2009). If a student fails to learn reading at the primary stage of education, the student’s reading ability will be inadequate and influence the students’ learning process negatively (Sloat, Beswick & Willms, 2007). As such, to even consider the being of an accomplished reader, it is required to state the existence of a positive reading attitude in the reader which precedes the act of reading (Turkyilmaz, 2014).

Reading Attitude

Reading attitude is an important of reading and to provide a clear understanding and definition of reading attitude, it is important to define attitude first. Attitude is defined by Fishbein and Ajzen (1975) as ““a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object” (p.6). Allport (1967) defines attitude as the emotional and mental preparedness or a pre-notion based on occurrences, understanding, feelings or motive towards any subject, societal matter or occasion (as cited by BAŞ, 2012). Both definitions highlight a similar element that is the involvement of a feeling or emotion which affects the view of the individual towards a subject. Fishbein and Ajzen (1975) added that reading attitude is "a system of feelings related to reading which causes the learner to approach or avoid a reading situation" (p. 1).

Reading attitude is an important starting point that occurs even before the action of reading which determines the experience of the reading process. Reading attitude plays an important role in the aspect of reading as mentioned by J. E. Alexander (1983) who stated that attitude is the precondition of reading and that if the reading is negative, there is a high possibility that other necessary elements such as motive, focus, understanding and reception may not manifest or even if they do, they would manifest unstructured (as cited by Brooks, 1996). Reading attitude has also been linked to academic achievement as positive attitudes are able to foster growth in the students' reading experience and performance. Positive reading experiences are caused by positive reading attitudes which allow opportunities to promote greater performance in academic matters (Annamalai & Muniandy, 2013). In addition, Walberg and Tsai (1985) explained that reading achievement is strongly correlated by a positive reading attitude as it is one of the greatest correlates (as cited by Annamalai & Muniandy, 2013). The importance of reading attitude is highlighted in these studies clearly because it is a crucial factor in the students' development of reading. Reading attitude plays a role in students' reading achievement and decides whether the student will turn into an independent reader (Logan & Johnston, 2009).

Other authors stress the importance of focusing on the aspect of attitude when researching about reading. Hood, Creed & Neuman (2012) state that research on reading should highlight attitudes as it is an element that forecasts academic achievement (as cited by Bastug, 2014).

Social Media

With the growth of information spread through the digital medium, social media has been prevalent in the past decade and there have been many studies that have been done on the topic. Therefore, the respective researchers have both narrowed down the broad term and defined it accordingly. In a broad sense, social media is; "a term that is broadly used to describe any number of technological systems related to collaboration and community" (Tess, 2013, p. A60). Additionally, social media has been defined as "a variety of new sources of online information that are created, circulated, and used by consumers intent on educating each other about products, brands, services, personalities, and issues" (Mangold & Faulds, 2009, p. 357). While another researcher defined social media "a group of internet-based applications that build on the ideological and technical foundations of Web 2.0, and that allow the creation and exchange of user generated content" (Kaplan and Haenlein, 2010, p. 61). Besides, social media plays a pivotal in the expansion of communication and connection of individuals over the geographical barriers and distance.

Social media is a communication system that allows its users to interact with thousands if not more, of the population across the globe (Williams, Crittenden, Keo & McCarty, 2012). In relation to education, there has been discussion on use of social media in pedagogical teachings.

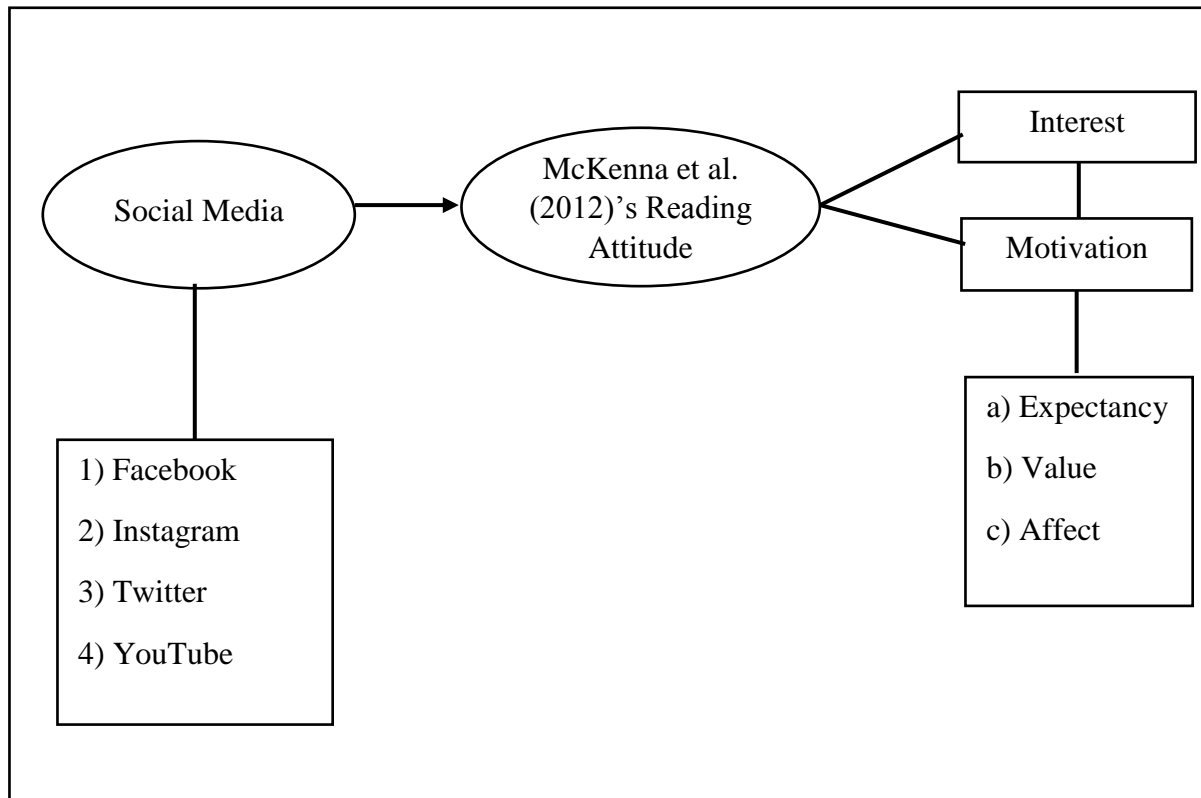
Social media can be used as tools which is defined as “a range of software tools which allow users to interact and share data with other users, primarily via the web” (Minocha, 2009, p. 353). This is a frequent question in the educational context because usage of social media has been so inculcated into the daily lives of students.

The current generation of millennials have been reviewed as “digital natives” by many articles and popular media (Tapscott, 2009) due to the knowledge that social media plays an important role in the lives of students (Greenhow & Burton, 2011). The trend may be so because social media has impacted the lives of individuals and has fundamentally changed the ways of interaction, ingenuity and collaboration (Rafiq, Asim, Khan & Arif, 2019). When speaking of social media platforms, there are a popular few that would come to mind as there is a high usage rate such as WhatsApp, Facebook, Instagram, YouTube and Twitter (Tayo & Yahya, 2019). The respective platforms operate on content that is generated by the user and extremely impactful in a variety of context (Greenwood & Gopal 2015).

With a high usage rate among students, the use of social media for interaction and communication has distracted the growth of reading in users. This is because users spend more time surfing the web online rather than taking part in active reading. Students were found to be constantly occupied by online websites instead of reading (Turkyilmaz, 2014). This then leads to negative reading attitude as the students do not find reading interesting and decide not to place themselves in a reading situation. Consequently, the reading attitudes deteriorate due to the use of social media which presents less difficulty compared to reading. Students often found reading boring and demotivating compared to engaging in activities which involved a media platform (Annamalai & Muniandy, 2013).

Conceptual Framework

Figure 1 Conceptual Framework



In this context, social media refers generally, to these four social media platforms typically used by undergraduate students which are Facebook, Instagram, Twitter and YouTube. The usage of these social media platforms was then connected to reading attitude via the Reading Attitude Theory by McKenna, Conradi, Lawrence, Bong & Meyer (2012). The Reading Attitude Theory then provides the framework of the factors that make up reading attitude. Reading attitude is then broken down into two factors that constitutes it which are Interest and Motivation. Additionally, there are three sub-factors that constitute Motivation which are Expectancy, Value and Affect. These Interest and Motivation factors will then be inserted within the items of the survey to elicits the students' reading attitude in accordance to the respective factors. This was able to provide a comprehensive understanding of the students' reading interest and reading motivation on social media.

Methodology

Research Design

The correlational design was adopted as the research design for the present study. This is because the research looked at the trend of the usage of social media and its role in developing reading attitude among undergraduate students. The research aimed to discover degree of association between the usage of four social media platforms and the promotion of reading attitude. The problem statement was answered by describing the relationship between the two variables where one may have an influence on the other variable (Creswell, 2012).

This was suitable for the current research as it investigated the degree of association between the usage of social media platforms and reading attitudes. This was done by eliciting data from the current undergraduate students at UCSI university. The data collected shows significance as it allows the students to self-report on their attitudes which provides an honest feedback. The online survey was administered to the participants who were part of minimum target sample out of the targeted population. This is because a survey can provide information on how a large group or demographic perceive a topic and provide a wide range of perspective as well. (Creswell, 2012).

Description of Participants

The participants of the research will be undergraduate students who are currently studying at UCSI University. The current research intends to collect data with a sample size of a minimum of 400 undergraduate students of a population of 15,000 individuals (UCSI Education, 2020). The research collected data from nine faculties of the UCSI University. The nine faculties selected were:

- 1) Faculty of Applied Sciences (FAS)
- 2) Faculty of Business & Information Science (FOBIS)*
- 3) Faculty of Engineering, Technology & Built Environment (FETBE)
- 4) De Institute of Creative Arts and Design (ICAD)
- 5) Institute of Music (IoM)
- 6) Faculty of Social Sciences & Liberal Arts (FOSSLA).
- 7) Faculty of Hospitality & Tourism (FHTM)
- 8) Faculty of Pharmaceutical Sciences (FPS)
- 9) Faculty of Medicine & Health Sciences (FMHS)

The current research employed the simple random sampling. Adoption of this sampling technique warrants the acquired sample size to be representative of the targeted population. Moreover, the simple random sampling technique ensure that the data collected is unbiased and

this necessitates the requirement to conduct inferential analysis. This study targeted to achieve a minimum sample size of 400.

Research Instrument

The instrument (see Appendix 1) used in this research is the questionnaire that was adapted from McKenna, Conradi, Lawrence, Bong & Meyer (2012). This questionnaire was chosen because the respective study researched on reading attitude and compared the difference in attitude according to medium; print and digital and purpose; academic and recreational. Consequently, the questionnaire is relevant to the present study as there are items that is used to identify participants' reading attitude in digital mediums. The present study then adapted the items from the questionnaire to suit the variable of social media in the context of the present study.

The questionnaire is divided into three sections known as Section A, B and C. Section A questions will contain the demographic of participant and the rating of social media platforms according to the students' use and the amount of time spent on the platform. As there are two factors that constitute reading attitude which are Interest and Motivation according to Mckenna. et al (2012). Section B and C contained questions prepared according to the definitions of Interest and Motivation and placed within the context of social media. Generally, the questions for each factor are directed to measure the reading attitude of students when using social media platforms.

Section B contained questions which are focused on the factor of Interest. This section contained ten items which elicited the interest of participants towards a specific reading activity. As for Section C, the factor of Motivation was further split into three sub-factors which are: (a) Expectancy, (b) Value and (c) Affect. Therefore, the questions in this section comprised of three questions for the sub-factor of Expectancy, three questions for the sub-factor for Value and four questions for the sub-factor of Affect. These questions were directed towards each sub-factors' definition. However, the respective questions that are directed towards the three sub-factors are compiled into one complete section. A 5-point Likert scale was used in the questionnaire for the participants to indicate their level of agreement or disagreement towards the item.

Reliability Test

The following table 1 illustrates the results of the reliability test of Section B survey items.

Table 1
Reliability statistics for Section B

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.739	.744	10

According to George & Mallery (2016), the Cronbach's coefficients, $\alpha > .9$ is excellent, $\alpha > .8$ is good and $\alpha > .7$ is considered acceptable. Table 1 shows the reliability statistics for Section B which consist of ten items with the Cronbach's coefficient, 0.74. This indicates that the coefficient is acceptable.

The following table 2 illustrates the results of the reliability test of Section C survey items.

Table 2
Reliability statistics for Section C

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.856	.856	10

Table 2 shows the reliability statistics for Section C which contains ten items. The Cronbach's coefficient is 0.86 which indicates that it is good.

The following table 3 illustrates the results of the reliability test of the Section and Section C survey items.

Table 3
Reliability statistics for Section B and Section C

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.874	.876	20

Table 3 shows the Cronbach's coefficient was 0.87 for Section B and Section C which contain 20 items in total. The coefficient statistics that the items in the survey is internally consistent and is reliable.

Due to the circumstances caused by the Covid-19 pandemic, the data collection was conducted via e-mail and necessary online messaging. Subsequently, the survey was converted into an online version using Google forms which were administered through Course Networking (CN), Facebook, Gmail and WhatsApp.

Results and Discussion

Demographic

The participants in the present study remain anonymous and are identified based on their basic information such as age, gender, faculty, year of study and nationality. A total number of 614 undergraduate students participated in the survey. The demographic information collected from the respective participants were then tabulated according to the frequencies, mean and standard deviation of each category. Additionally, data was collected from participants based on their average use of social media platforms such as Facebook, Instagram, Twitter, YouTube and Others, Time spent on social media in a day and Time spent reading on social media in a day. The respective information collected was important in understanding the amount of time spent of participants' use of social media platform that is related to the present study's research questions.

From the data collected, the demographics of participants share several insightful information of the sample size. It was observed that the majority of respondents were of the age of 22 and above (36.8%) and in the Year 3 of their study (37.1%). Besides, there was a total of 252 male respondents and 362 female respondents with the majority of the respondents belonging to the Faculty of Business and Management (FBM) with the percentage of 28.2%.

Table 4
Age demographic

Age	Frequency	Percent (%)
19	85	13.8
20	138	22.5
21	165	26.9
>22	226	36.8

Table 4 shows the demographic of participants' age with the frequency of participants' age. The highest percentage comes from the age group of >22 with a percentage of 36.8%, followed by age 21 with 26.9%, age 20 with 22.5% and the lowest percentage of 13.8% coming from the age of 19. Besides, the table indicates the percentage gap between each participants' age group from 19 until >22. The percentage gap between the age 19 and 20 was 8.7%, while the percentage gap between age 20 and 21 was 4.5% and the percentage gap between age 21 and >22 was 9.9%. Additionally, the biggest percentage gap comes from the difference between the highest frequency of age group >22 and the lowest frequency of age group 19 which is 23%.

Table 5

Year of study demographic

Year of Study	Frequency	Percent (%)
Year 1	141	23.0
Year 2	203	33.1
Year 3	228	37.1
Year 4	42	6.8

Table 5 shows the demographic of participants' year of study with the frequency of participants' year of study with the highest percentage coming from Year 3 with 37.1%, followed by Year 2 with 33.1%, Year 1 with 23% and Year 4 with the lowest percentage of 6.8%. Furthermore, the percentage gap between each group of participants' year of study is indicated in the table. The percentage gap between Year 1 and Year 2 was 10.1% and the percentage gap between Year 2 and Year 3 was 4%. Moreover, the biggest percentage gap comes from the differences between the highest frequency of Year 3 and lowest frequency of Year 4 at 30.3%.

Table 6

Faculty demographic

Faculty	Frequency	Percent (%)
FAS	118	19.2
FOBIS	173	28.2
FETBE	107	17.4
ICAD	50	8.1
IoM	10	1.6
FOSSLA	121	19.7
FHTM	12	2.0
FPS	14	2.3
FMHS	9	1.5

Table 6 shows the demographic of the participants' faculty and the frequencies. The table indicates that most participants belong to the Faculty of Business and Management (FBM) with the highest percentage of 28.2%.

Table 7

Gender demographic

Gender	Frequency	Percent (%)
Male	252	41.0
Female	362	59.0

Table 7 shows the gender demographic of participants and frequencies. The table indicates that the majority of participants are female with the percentage of 59% while other participants are male with the percentage of 41%. The percentage gap between male and female is 2% which signifies a small percentage difference.

Table 8

Nationality demographic

Nationality	Frequency	Percent (%)
Malaysian	499	81.3
Others	115	18.7

Table 8 shows the nationality demographic of participants and frequencies. The table shows that the majority of participants are of Malaysian nationality with a percentage of 81.3% and the remaining participants are other nationalities that amount to a percentage of 18.7%. Moreover, the differences in percentage between the nationality groups are 62.6%.

Findings and Discussion to RQ1

The following discussion highlights the results to RQ1: Is there a statistically significant relationship between social media and reading attitude among UCSI undergraduate students?

The following Table 9 illustrates the result of the relationship between time spent on social media in a day and reading attitude.

Table 9
Relationship between time spent on social media in a day and reading attitude

		Time spent on Social Media in a day	Reading Attitude
Time spent on Social Media in a day	Pearson Correlation	1	.141**
	Sig. (2-tailed)		.000
	N	614	614
Reading Attitude	Pearson Correlation	.141**	1
	Sig. (2-tailed)	.000	
	N	614	614

** . Correlation is significant at the 0.01 level (2-tailed).

According to Pallant (2016, p.143-144), the Pearson product-moment correlation is an example of a correlation coefficient which shows the strength and direction of the linear relationship between two variables. The r-value is the Pearson correlation coefficients that can range from -1 to +1. The symbol in front of the number signifies whether there is a positive or negative correlation between the two variables. A positive correlation indicates as one variable increases, the other variable increases as well while a negative correlation indicates as one variable decreases, the other variable decreases too. According to Marczyk, DeMatteo and Festinger (2005, p.218), the p-value is the main indication of statistical significance. The p-value shows the probability of chance occurring which is used to ascertain the validity of the findings which could be used to represent the population.

Table 9 shows the results of Pearson correlation between time spent on social media in a day and reading attitude, with the r-value being $[r(612)] = .141, p < .001$ which indicate a significant relationship and is statistically significant. The finding shows that there is a positive correlation between the two variables with the correlation coefficient reports a value of $r = .141$. This finding indicates that participants who use social media more are expected to have a more positive reading attitude.

The following Table 10 illustrates the result of the relationship between time spent reading on social media in a day and reading attitude.

Table 10
Relationship between time spent reading on social media in a day and reading attitude

		Time spent Reading Reading on Attitude Social Media in a day	
Time spent Reading on Social Media in a day	Pearson Correlation	1	.203**
	Sig. (2-tailed)		.000
	N	614	614
Reading Attitude	Pearson Correlation	.203**	1
	Sig. (2-tailed)	.000	
	N	614	614

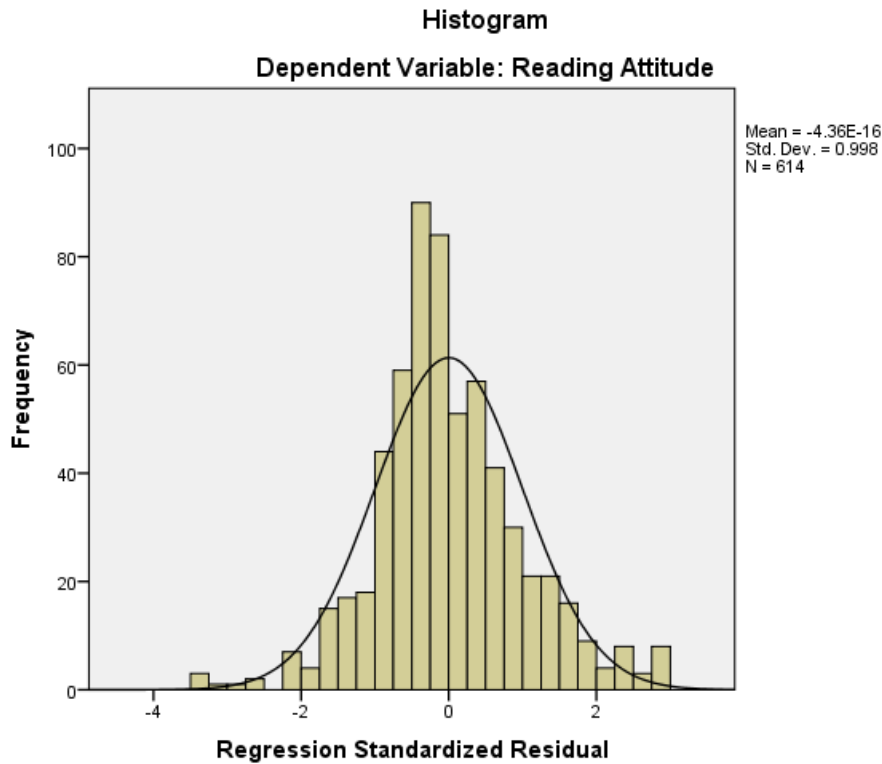
** . Correlation is significant at the 0.01 level (2-tailed).

Table 10 shows the results of the Pearson correlation between time spent reading on social media in a day and reading attitude. The r-value is $r = .203$ with the degree of freedom, $df = 612$ and it is statistically significant because the p-value is $p < .001$. This indicates a positive correlation between the two variables as the r-value, $r = .203$ is positive. This finding shows that participants who spent more time reading on social media in a day are likely to have a more positive reading attitude.

Assumptions for RQ1

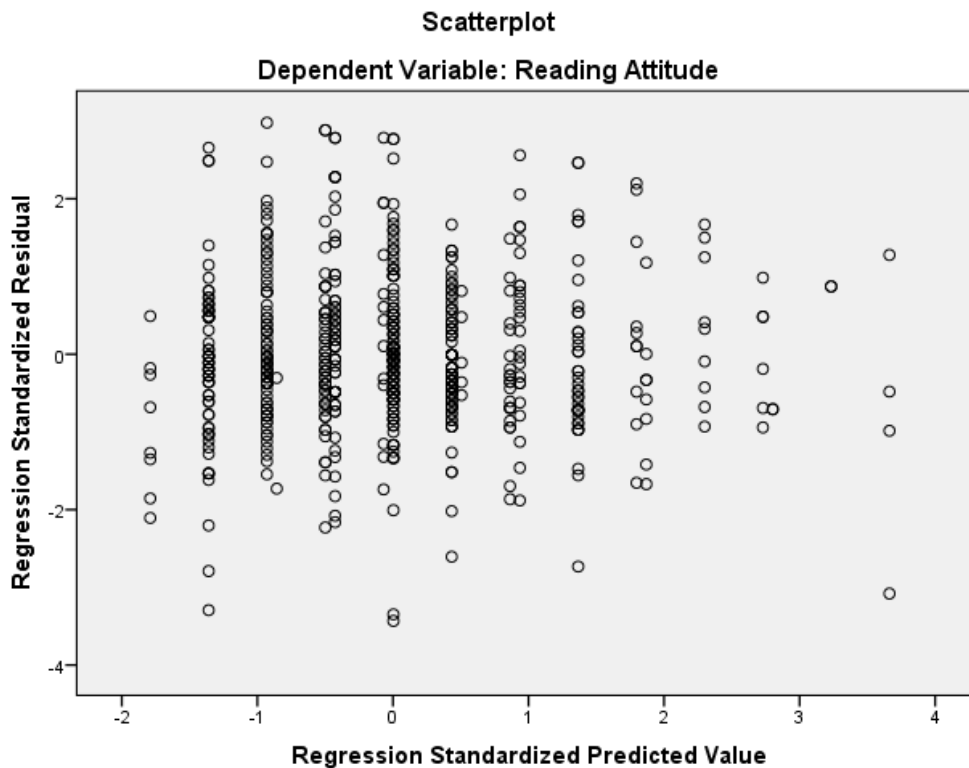
According to Pallant (2016) p.169-171 using the multiple linear regression for analysis of data requires several assumptions of the data to be met. Among them are the assumptions of normality, linearity, homoscedasticity and independence of residuals. The assumption of normality refers to the normal distribution of residuals regarding the predicted values of the dependent variable. Secondly, the assumption of linearity refers to the straight-line relationship that the residuals should have with the predicted value of dependent variable. Thirdly, homoscedasticity refers to the equal variance that residuals should have regarding the all predicted values of the dependent variable. These assumptions look into the different facets of distribution of values and the kind of primary relationship that appears among variables.

Figure 2 Histogram of standardized residual for RQ1



From Figure 2, the residuals about the predicted values about the dependent variable which is reading attitude, is normally distributed as a majority of values appear in the center while the values with lower frequencies stretching out towards each end of the tails of the distribution. A distribution is considered to be normal when the distribution displays a bell-shaped curve that is symmetrical in which the highest frequency of values are in the center along with the smaller frequency of values being sloped towards the extremes (Pallant, 2016).

Figure 3 Residual scatterplot for RQ1



According to Tabachnick and Fidell (2014, p.166), a scatterplot graph is used to assess the assumptions of normality, linearity and homoscedasticity between the predicted values of the dependent variable and prediction errors. This can be done by evaluating the residuals in the scatterplot graph.

Figure 3 shows the primarily normal distribution of the prediction errors as it surrounds all predicted values of the dependent variable which is reading attitude. The residuals are mainly gathered in the centre and the residuals spread fairly symmetrically from the horizontal line that emerges from 0 at the y-axis. The assumption of normality is met when there is a buildup in the centre of the scatterplot of all predicted values and the residuals are distributed normally about the predicted value of the dependent variable (Tabachnick & Fidell, 2014).

Besides, Figure 3 shows the shape of predicted values and residuals to be generally random and scattered and does not resemble any shape of a curve or cone which indicates that the assumption of linearity has been met. This is because the relationship of linearity between predicted values of the dependent variable and residuals are confirmed when the general shape of the scatterplot is rectangular shaped (Tabachnick & Fidell, 2014).

Additionally, Figure 3 shows that the variance of the residuals is primarily equal to the predicted values of the dependent variable which is reading attitude. This means that the variance of the residuals is mainly consistent and similar in width as the predicted values increases. This indicates the assumption of homoscedasticity has been met as the standard deviations of the residuals are generally equal to each predicted value of dependent variable on the scatterplot (Tabachnick & Fidell, 2014).

Inferential statistics results to RQ1

The following Table 11 illustrates the results of the regression of time spent on social media and time spent reading on social media on reading attitude.

Table 11
Regression of time spent and time spent reading on social media on reading attitude

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
	(Constant)	58.495	1.837		31.847	<.001	
Time spent on Social Media in a day	1.153	.543	.088	2.123	.034	.908	1.101
Time spent Reading on Social Media in a day	2.499	.588	.176	4.252	<.001	.908	1.101

a. Dependent Variable: Reading Attitude

The following Table 12 illustrates the results of the model summary of the multiple linear regression for RQ1

Table 12
Model summary of multiple linear regression for RQ1

Model Summary ^b					
Model	R	R Square	Adjusted Square	Std. Error of the Estimate	Durbin-Watson
1	.219 ^a	.048	.045	11.93367	1.918

- a. Predictors: (Constant), Time spent Reading on Social Media in a day, Time spent on Social Media in a day
- b. Dependent Variable: Reading Attitude

According to Creswell (2014) p. 349-350, multiple regression is a statistical test to investigate the relationship between numerous independent variable and one dependent variable and is utilized when researchers intend to observe the effect of several variables on the dependent variable. When using the regression analysis, the R² value is used to describe how much variation that occurs in the dependent variable can be explained by the variation that occurs in all independent variables including the merged consequences of all independent variables (Kline, 2016).

Firstly, Table 11 shows the results of the Collinearity diagnostic which was done to ensure that the independent variables are not correlated with one another. The results show that there was no multicollinearity between both predictor variables (Time spent on social media, Tolerance = .90, VIF = 1.10; Time spent reading on social media, Tolerance = .90, VIF = 1.10). This is acceptable because the Tolerance is not less than 0.1 and the VIF value is not greater than 10 (Dart, 2013). Secondly, Table 12 shows the results of the Durbin-Watson test which was done to ensure that the residuals are not correlated. The results show that the residuals are independent from another (Durbin-Watson value = 1.92). This is acceptable because the value falls in the range of 1.5 to 2.5 which means that it is normal (Glen, 2016).

Based on the multiple linear regression test done, it was found that social media is a significant predictor of reading attitude. Table 12 shows the R² value which is R² = 0.48. This indicates that 4.8% of the variance in the dependent variable which is reading attitude can be explained in the independent variables which are time spent on social media and time spent reading on social media. Table 11 shows the strength of the relationship between time spent on social media and reading attitude ($\beta = 1.153$, $t = 2.123$, $p = .034$) which is statistically significant. Secondly, Table 11 shows the strength of the relationship between time spent reading on social media and reading attitude ($\beta = 2.499$, $t = 4.252$, $p = <.001$) which is statistically significant as well. Hence, there is a statistically significant relationship between social media and reading attitude that is displayed in Table 11. Additionally, these results denote that those who spent more time and reading on social media are more likely to display a more positive reading attitude.

Discussion to RQ1

Firstly, the results indicate a significant relationship between time spent on social media and reading attitude. Secondly, the results also indicate a significant relationship between time spent reading on social media and reading attitude. Hence, a student who spends more time on social media has a more positive reading attitude. Moreover, the use of social media for reading

was found to have a stronger influence on reading attitude compared to spending time on social media. It was found that students' reading attitude is influenced positively with more time spent on social media.

Although, the strength of the relationship for both the independent variables is minimal with an $R^2 = .048$, they are both statistically significant even at $p < .001$. This indicates that these variables still contribute to a positive reading attitude. A positive reading attitude has a better chance to lead students to engage in the reading process. This is supported by Alexander (1983) who states that a positive attitude is the prerequisite of the reading process (as cited by Brooks, 1996). Additionally, findings by Sundari and No (2013) also corroborates these results by mentioning that positive feelings regarding reading plays an influential role in whether a student will approach reading.

This present study indicates that a positive reading attitude is correlated with time spent on social media. This is contrary with previous findings in similar fields, as McKenna, Conradi, Lawrence, Jang and Meyer (2012) indicated that the recent development of media literacies among teenagers has increased time spent online. The mentioned study also elaborates that the increment has played a role in the deterioration of reading attitude. Furthermore, Akanda, Hoq and Hasan (2013) asserts a similar sharing which was time spent on reading becomes limited due to the distraction of the online sites.

However, the findings in the present study suggest otherwise as more time spent on social media is associated with a more positive reading attitude. This indicates that social media can function as a potential reading channel that improves reading attitude. A study conducted by Karim and Hassan (2006), shares a similar finding which is that online platforms are regarded as a growing significant reading source among students. Correspondingly, the findings illustrate that students had a more positive reading attitude on social media compared to reading in the conventional medium of print. Annamalai and Muniandy (2013) shares a related finding in that students had a negative reading attitude as they did not find pleasure in reading in comparison to activities that include the use of technology.

The findings also signified that the time spent on social media can contribute to a positive reading attitude which enables students to take part in reading more. This describes a mutual relationship that encourages an increase in each other. This is because more time spent on social media is likely to improve reading attitude and an improved positive reading attitude can also encourage more time spent on social media for reading. This is corroborated by Bastug (2014) who adds that a positive reading attitude can increase the amount of reading that takes place which causes more time spent on reading.

The results indicate that even though students spend time on social media, there is a small amount of reading that takes place which positively influences their reading attitude through their reading interest and reading motivation. This may be counter intuitive as previous studies such as Pandian (2000) have found that students read less due more time spent on other activities involving the internet, television and games (as cited by Anugrah, 2019). Despite that, the findings suggest that social media is able to generate interest and motivation among students that improves reading attitude. This is due to the possibility that students are more inclined to read more on social media as it is easier to obtain information by browsing through the content. This is aligned with Inderjit (2014), who highlights how online networks are capable in creating more interest among users that lead to more time spent on reading as users skim and survey for information online.

Findings and Discussion to RQ2

The following discussion highlights the results to RQ2: Which social media platform influences reading attitude the most amongst UCSI undergraduate students?

4.5.1 Assumptions for RQ2

According to Heiberger and Holland (2015, p. 356), an assumptions check must be done to ensure that the data analysed is distributed normally and have equal variance which refers to homoscedasticity.

Figure 4 Histogram of standardized residual for RQ2

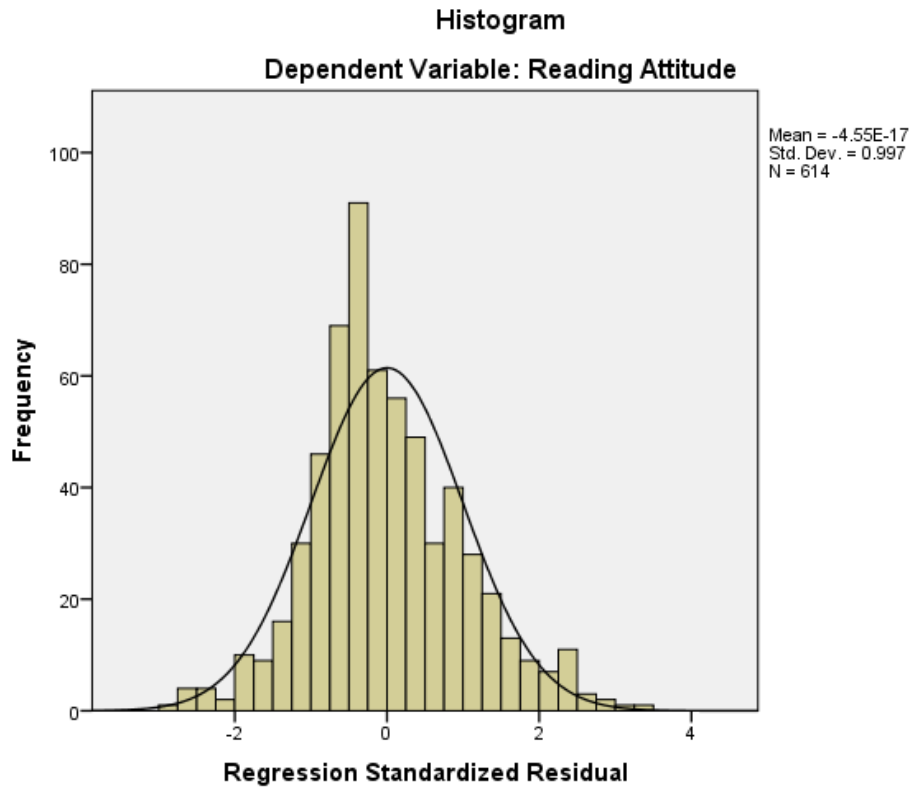


Figure 4 shows that the distribution of residual is normally distributed as the frequency forms a bell-curved shape. Besides, most of the values emerge in the centre and the remaining values with lower frequencies extending to each of the tail equally. This is considered a normal distribution as a normal distribution is defined as a frequency that is bell-shaped to display the dispersion of values with a peak at the center with symmetrical slopes on both sides of the curve (Neuman, 2014).

Figure 5 Residual scatterplot for RQ2

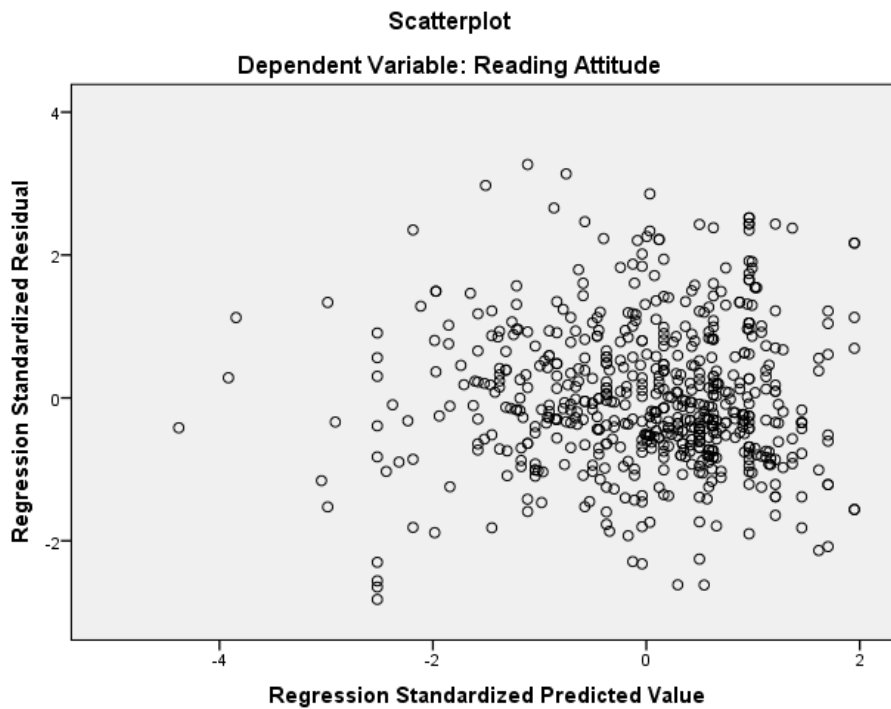


Figure 5 shows that the variance of residuals are primarily symmetrical to the predicted value of the dependent variable which is reading attitude. This indicates that the variance of the residuals is mainly consistent in breadth as the predicted value increases. Additionally, there is no obvious pattern observed in the residuals which indicates a primarily random dispersion. The homoscedasticity assumption is met as the variance of the residuals and the predicted values around the hypothetical regression line that emerges from 0 on the y-axis are alike. (Stockemer, 2019).

Inferential results to RQ2

The following Table 13 illustrates the regression of average frequencies of Facebook, Instagram, Twitter and YouTube use on reading attitude.

Table 13

Regression of average frequencies of Facebook, Instagram, Twitter and YouTube use on reading attitude

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	Sig.	Collinearity Statistics	
	B	Std. Error	Beta		Tolerance	VIF
(Constant)	42.271	3.146		13.437	<.001	
Average frequency of Facebook use	1.383	.371	.146	3.725	<.001	.950 1.053
Average frequency of Instagram use	2.220	.412	.211	5.389	<.001	.948 1.054
Average frequency of Twitter use	1.020	.339	.116	3.007	.003	.971 1.030
Average frequency of YouTube use	1.924	.554	.134	3.469	.001	.981 1.019

a. Dependent Variable: Reading Attitude

The following Table 14 illustrates the results of the model summary of the multiple linear regression for RQ2

Table 14

Model summary of multiple linear regression for RQ2

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.339 ^a	.115	.109	11.52732	1.858

a. Predictors: (Constant), Average frequency of YouTube use, Average frequency of Instagram use, Average frequency of Twitter use, Average frequency of Facebook use

b. Dependent Variable: Reading Attitude

Firstly, Table 13 shows the results of the Collinearity diagnostic (Average frequency of Facebook use, Tolerance = .95, VIF = 1.05; Average frequency of Instagram use, Tolerance = .95, VIF = 1.05; Average frequency of Twitter use, Tolerance = .97, VIF = 1.03; Average frequency of YouTube use, Tolerance = .981, VIF = 1.02). These results show that there is no multicollinearity between the independent variables as the Tolerance is not less than 0.1 and the VIF value is not greater than 10 which means that it is acceptable (Dart, 2013). Secondly, Table 14 shows the results of the Durbin-Watson test (Durbin-Watson value = 1.86) which means that there is no correlation between residuals. This result is acceptable because it falls within the range of 1.5 and 2.5 which indicates it is normal (Glen, 2016).

The multiple linear regression test shows that each social media platform affects reading attitude at different levels. Table 14 shows the regression on how the frequency of use of different social media platforms on reading attitude with $R^2 = .115$. This indicates that 11.5% of the variance in the dependent variable which is reading attitude is explained by the independent variable which is the average frequency of Facebook, Instagram, Twitter and YouTube use.

Table 13 shows the positive increase of reading attitude for the average use of each social media platforms. Firstly, with increased use of Facebook, the reading attitude will increase positively ($\beta = 1.383$, $t = 3.725$, $p < .001$) which is statistically significant. Secondly, with the increased use of Instagram, the reading attitude will increase positively ($\beta = 2.220$, $t = 5.389$, $p < .001$) which is statistically significant. Thirdly, the increased use of Twitter will result in the positive increase of reading attitude ($\beta = 1.020$, $t = 3.007$, $p = .003$) which is statistically significant. Fourthly, the increased use of YouTube will likely increase reading attitude positively ($\beta = 1.924$, $t = 3.469$, $p = .001$) which is statistically significant. The findings demonstrate that Instagram use establishes a stronger influence on reading attitude ($\beta = 2.220$) as compared to YouTube ($\beta = 1.924$). This is followed by Facebook use ($\beta = 1.383$) and Twitter use ($\beta = 1.020$) over reading attitude.

Discussion to RQ2

The findings indicate a statistically significant relationship between the average frequency of Facebook, Instagram, Twitter and YouTube use and reading attitude. Interestingly, Instagram and YouTube projected a stronger influence on reading attitude compared to other social media platforms such as Facebook and Twitter. The results shown could be due to the popularity of Instagram that has been increasing among students. Recently, the application has been fast growing and overtaking other social media applications in the aspect of use and popularity (Al Fadda, 2020). In general, a positive reading attitude occurs as users are more inclined to take part in the reading process because of the small size of text such as captions and text in videos. This is aligned

with the findings by Morshidi, Embi and Hashim (2019) which found that students were very eager to participate in the reading process again when the Instagram video tool was utilized.

Another possible reasoning to this finding is the effect of students' socio-economic status (SES). The socio-economic status (SES) of the student is most commonly determined by combining parents' educational level, occupational status, and income level (Jeynes, 2002). These factors have a pertinent effect on students' exposure and access to the technological world especially where social media is concerned. Lack of such access results in the deterioration of exposure to online reading materials and information. This limits their comprehension and perception of reading to only within the boundaries of books and written documents. In fact, low SES has been found to negatively affect academic achievement because low SES prevents access to vital resources (Barry, 2005).

Besides, the use of YouTube is able to generate more interest in users through the use of attractive visuals. This can interest users to be more engaged in the video which then generates a better positive reading attitude. It is possible when the user is more engaged in the video presentation, they are more willing to take part in the reading process of small amount of texts such as the words and captions. These results are consistent with Alwehaibi (2015) who found that students had a positive experience with the use of YouTube in the English as a Foreign Language (EFL) classroom. The mentioned study shares that students were highly encouraged to read due to the delightful and fascinating environment constructed by YouTube.

Additionally, the weaker reading attitude with the average use of Facebook and Twitter is consistent with the related findings of Turkyilmaz (2014), which disclosed a relationship between possessing a social media account on Facebook and Twitter with reading attitude. The findings shared that students had a lower reading attitude when engaging with the respective social media platforms compared to student who did not have an account. Conversely, the findings in the present study does not mean that reading does not take place within the respective social media platforms but only resulting in a weaker reading attitude in comparison to the other social media platforms. Reading content produced by the social media platform such as posts and comments are considered as reading nonetheless. McKenna, Conradi, Lawrence, Jang & Meyer (2012) argues a similar notion in that reading texts or a Facebook page is a form of reading.

Overall, the results share that there is a transition from the reading of text in primarily written form referring to Facebook and Twitter to Instagram and YouTube which is substantiated with the audio-visual form and content. The latter group can generate a more positive reading attitude corresponding with the frequency of use among users in comparison to other platforms. This is corroborated by Lomicka and Lord (2016) which shared there has been shift from Facebook

among youths to Instagram in liking towards brief content. Furthermore, the respective authors predicted a decrease in text with an increase in images which was noted to be prevalent among the social media community.

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