

# Determining the students' Motivation through Social Media Usage: in Abu Dhabi Schools United Arab Emirates

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## Abstract

This research aims to explore the trends in student motivation as determined by social media usage. For addressing this objective, literature support has been provided in a reasonable manner. Furthermore, questionnaire was developed through various items from existing literature for both social media usage and collaborative learning as measured through Five points likert scale. Meanwhile, data has been collected with the help of different techniques. A valid sample response of 403 respondents from different grades ranging from 9th to 12th has been collected from different schools as situated in Abu Dhabi, UAE. The study findings have been covered through descriptive statistics and both measurement model and structural model. The results through measurement model confirm the existence of reliability and validity of the construct, whereas the findings through structural model confirms the significant impact of social media usage on core dimensions of motivation. More specifically, it is found that there is a significant impact of social media usage on psychological needs, safety needs, esteem needs, belongingness and love, and self-actualization, respectively. The study findings have provided some meaningful discussion for various policymakers specifically in the education sector. Finally, there are some limitations through which future directions are also determined.

**Keywords:** social media, student's motivation, two step approach, UAE.

## Introduction

Accessing social media use among students is common, although there have been concerns regarding the impact social networking applications have on academic

success. Social media influences collaborative learning and student motivation when used appropriately (Al-Rahmi, Othman, & Yusuf, 2015). Social media use for collaborative learning has been linked with improved academic performance among students. Students use social media as a way of exchanging information and assisting each other on educational tasks. Schools are adopting the use of social media in their curriculum to promote communication between students and teachers and there has been a significant achievement in the overall student body performance (Al-rahmi et al., 2014). Student motivation can be influenced by social media as the younger generation has become significant users of social media. Student motivation is an essential factor for successful collaborative learning in schools and homes. In today's society, social media's role is increasingly gaining momentum (Mbodila, Ndebele, & Muhandji, 2014). There is already a need to increase student engagement on social media to allow them to achieve their academic goals. Social media can be successfully used as a motivation tool for students. The popularity of online social networks has created a new world of communication and collaboration (Cheung, Chiu, & Lee, 2011). Student motivation from social media use is created by the effective collaboration that students have in learning. Students are able to work together in solving tasks. In collaborative learning students engage in group work rather than working alone. This helps them to learn easily and also gain satisfaction from learning (Ojo & Ntshoe, 2017). Student motivation is essential for student learning. Social networks have a key presence in higher learning institutions (Hortigüela-Alcalá, Sánchez-Santamaría, Pérez-Pueyo, & Abella-García, 2019). There has been a recommendation by the European Commission for the need to promote greater integration with educational technology at all levels of education to enhance lifelong learning and innovation. Many universities have made huge efforts to provide new students with the skills needed to handle various technological tools. Technology in education has become a motivational tool. Social media is getting substantial attention in relation to the learning and teaching process in education (Alcala et al., 2019). The use of social media has grown exponentially in the last decade and can be used as a student motivational tool to increase student academic performance. The use of social networks among students allows them to interact and contact people with extensive practical experience in the subjects they are exploring. Student motivation due to social media is evaluated on the impact it has on student academic achievement (Alcala et al., 2019).

## **Literature Review**

In a study by Ojo and Ntshoe (2017) on student's use of social media for the improvement of the academic performance, it was seen that the utilization of social

media sites additionally influences students' utilization of English language structure. Similarly, social media helped students in developing themselves, enhancing their learning and imagination, utilizing their knowledge exchange, and expanding their specialized abilities. Through the ideal utilization of social media applications, students can access more information as they could previously and reasonably improve their scholarly exhibition and magnificence learning (Kaplan and Haenlein, 2010). The findings of Harrath and Alobaidy (2018) at the University of Bahrain on the student of the Arabian Gulf that there is a positive effect at the scholarly dimension of student through the valuable and ideal utilization of social media applications. Analysis of the Investigation demonstrated that students have good knowledge of the impacts of social media applications on their academic progress. A huge number of students communicated fulfillment with its utilization as a helpful method for gathering information and looking for valuable data. Moreover, social media has helped most of the students join instructive organizations thereby, improving their socialization and, interface with partners and access e-learning assets.

As indicated by Pavlovic, Petrovic, and Vulic (2016) studies, gender difference exists among male and female social media use; the male student for the most part lean toward instructive and stimulation content on social media, while information gathering as well as online video gaming and internet business administrations are overwhelmed by female students. The authors inferred that social media touches s fundamental aptitudes like; knowledge acquisition, regardless of whether in users characterized context, information choice, the elucidation of social settings, and the improvement of communicational abilities. It has additionally positively impact on group and collaborative work, data sharing and knowledge exchange (Petrovic & Pavlovic, 2016).

H3: Social media use has significant impact on student's belongingness and love needs.

H4: Social media use has significant impact on student's esteem needs.

H5: Social media use has significant impact on student's psychological development

H6: Social media use has significant impact on students' safety needs.

H7: Social media use has significant impact on student's self-actualization

## **Research Methods**

There are 256 schools on 2020/2021 academic year, in the emirate of Abu Dhabi. Particularly, in Abu Dhabi Island, there are seven (7) public school comprising four

schools (4) for male and three (3) schools for female with a total population of 4494 students run by the government of Abu Dhabi under the ADEK circle levels. Primary or elementary level/Cycle 1 for grades 1-5, Intermediate level/Cycle 2 for grades 6 to 8 and secondary level/Cycle 3 for grades 9 to 12. This study is focused on secondary level/Cycle 3 for grades 9 to 12 as this is the crucial level that qualifies students for admission into colleges and universities in the UAE. The target population for this research consist of all the students from cycle three level of Abu Dhabi public schools in the Abu Dhabi Island. There are seven (7) public schools in Abu Dhabi Island with cycle three (3) level. Out of these seven (7) schools, four schools (4) are for male and three (3) schools are for female with a total population of 4494 students in 2021 as shown in Table 1. A stratified sampling random was used in this study to determine the sample size from each school. By using stratified random sampling technique for the selection of respondents from each school proportionate sampling was determined.

Table: 1 sample size Source: created by researcher

	<b>School Name</b>	<b>Population</b>	<b>%</b>	<b>Sample size</b>
<b>1</b>	Abu Dhabi Secondary School	600	13.35113	47
<b>2</b>	Alittihad Secondary School	500	11.12595	39
<b>3</b>	Darweesh Bin Karam Secondary	700	15.57632	55
<b>4</b>	Khalif Bin Zayed Secondary	620	13.79617	49
<b>5</b>	Aisha Bin Abu Bakr Secondary School	628	13.97419	50
<b>6</b>	Al Mawahb Secondary School	731	16.26613	58
<b>7</b>	Hanain Secondary School	715	15.9101	56
<b>Total</b>		4494		354

For the purpose of data collection, questionnaire was developed while extracting the items of both independent and dependent variables from existing literature. Finally, the results are discussed while focusing on the descriptive statistics and two step approach for which details are given in Figure 1.

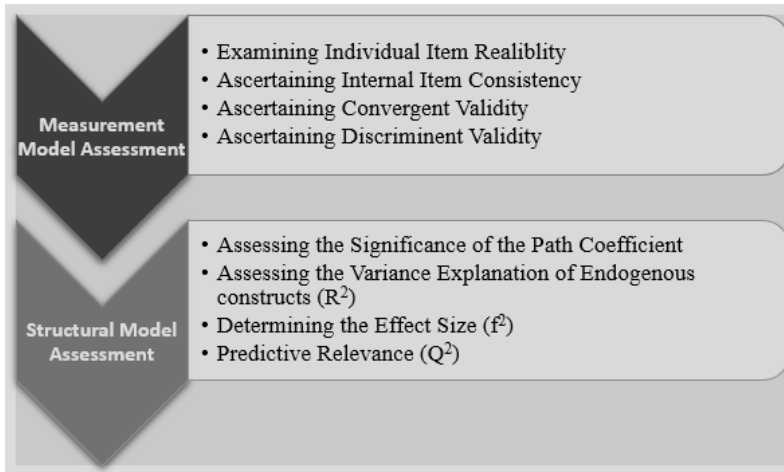


Figure 1 Layout for Measurement and Structural Model

## Results and Discussion

### Descriptive Scores for Motivation

This section covers the descriptive findings for the second dependent variable entitled motivation which is covered through different dimensions. Initially, our study has considered all these items as separate dependent variables to provide a clear picture of the data trends, whereas in the next step all these dimensions are covered under the title of motivation as the main dependent variables in the very first step. Furthermore, the findings under Table 2 report that for the psychological needs, four items were considered ranging from PSYN1 to PSYN4, respectively. It is observed that the highest mean score is reflected by PSYN2 among all the four items of psychological needs with the standard deviation of 1.10. The values for both skewness and kurtosis are also in acceptable range of +2 and -2, indicating the normal distribution of the study items. On the other side, the descriptive trends as reflected by the items of safety needs entitled as SFT is ranging from 2.67 to 4.51 as shown in Table 4.5. This would reflect those respondents have provided different views on the five-point likert scales. Similarly, the trends for the mean scores as linked with the items of belongingness and love reflect that BL1 to BL4 are showing their values like 2.69, 3.41, 3.33, and 4.40, respectively. Similarly, our study has measured the esteem needs through five items ranging from EST1 to EST5 where the highest mean score is reflected by EST3 which is 4.67. Finally, the descriptive trends for self-actualization indicate that SA1 and SA2 has a higher mean score observed as 4.61 and 4.52, accordingly.

Table 2 Descriptive Scores for Motivation Dimensions

Key Items	N	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
PSYN1	403	1.00	5.00	3.1538	.99058	.073	-.740
PSYN2	403	1.00	5.00	4.1414	1.10735	-.128	-1.006
PSYN3	403	1.00	5.00	3.0372	1.23026	-.095	-1.036
PSYN4	403	1.00	5.00	3.1365	1.20064	-.265	-.925
SFT1	403	1.00	5.00	3.0099	1.15034	-.148	-.988
SFT2	403	1.00	5.00	4.5186	.92856	.442	-.805
SFT3	403	1.00	5.00	2.6725	.85339	.297	-.511
SFT4	403	1.00	5.00	4.7717	.91559	.409	-.370
BL1	403	1.00	5.00	2.6998	.94982	.282	-.629
BL2	403	1.00	5.00	3.4169	1.03420	-.847	.140
BL3	403	1.00	5.00	3.3350	1.15230	-.387	-.508
BL4	403	1.00	5.00	4.4069	.96874	-.791	-.068
EST1	403	1.00	5.00	3.1762	1.02274	-.317	-.628
EST2	403	1.00	5.00	3.2829	1.04352	-.455	-.597
EST3	403	1.00	5.00	4.6700	1.02834	.061	-.735
EST4	403	1.00	5.00	2.7519	1.13863	.305	-.909
EST5	403	1.00	5.00	2.7990	1.23860	.324	-.953
SA1	403	1.00	5.00	4.6179	1.11207	.535	-.470
SA2	403	1.00	5.00	4.5285	1.06086	.566	-.327
SA3	403	1.00	5.00	2.5360	1.06532	.315	-.714

Note: PSY means psychological needs, SFT means safety, BL means belongingness and love, EST means esteem needs, SA means self-actualization

In the previous section, it is discussed that (Figure 1) measurement model assessment is based on the several statistical tests and methods through Smart PLS (Ali, Rasoolimanesh, Sarstedt, Ringle, & Ryu, 2018). Under measurement model assessment, initially, the individual item’s reliability, composite reliability, Cronbach’s alpha has been calculated and presented. Furthermore, it is also expressed that measurement model is quite helpful towards the validity and internal consistency and discriminant validity too. More specifically, convergent validity is also observed through average variance extracted for every single construct under study whereas the title of discriminant validity is investigated through cross loadings, Fornell-Larcker criterion and Heterotrait-Monotrait Ratio of Correlations or HTMT, respectively. Therefore, in the very first step, our study has provided the range of findings to confirm the validity of the measurement model and its relevant assessment for which results are given below.

Now, this study is going to check whether the relationship between social media usage, belongingness and love, esteem needs, psychological needs, safety needs, and

self-actualization exists or not. For this purpose, initially, measurement model was assessed through Smart PLS while taking belongingness and love, esteem needs, psychological needs, safety needs, and self-actualization as dependent variables along with the social media usage as main independent variable of interest. In term of measurement model assessment, Table 3 provides the output for the construct reliability and validity as reflected through Cronbach’s alpha, rho\_A, composite reliability, and average variance extracted. The results under Table 3 indicates that the value of Cronbach’s alpha for belongingness and love, esteem needs, psychological needs, safety needs and self-actualization are found to be 0.833, 0.836, 0.851, 0.737, and 0.779, accordingly. This would indicate the reliability of the study constructed as linked with all of these variables as the values of alpha are above the threshold level of 0.70. Furthermore, the scores for composite reliability are also showing scores of 0.90, 0.90, 0.89, 0.852, and 0.86 for all of these variables. In this regard, it is inferred that composite reliability has reasonably defended the presence of internal consistency among the stated scales of these variables as justified by Brunner and Süß (2005). Meanwhile, regarding the threshold level of composite reliability, Netemeyer, Bearden, and Sharma (2003) stated that it should be at least 0.80 or above. In this way, under current study, all of the study variables as shown in Table 4.13 are showing Composite reliability score of above 0.80. Finally, the findings under Table 4.13 reflects the score of average variances extracted or AVE which indicates the convergent validity. The level of AVE reflects the average amount of variance as linked with the indicators of the latent construct managed to explain. Besides, the construct reliability and validity for the social media usage SMU has also been presented in the Table 3.

Table 3 Construct Reliability and Validity

Motivation Dimensions and SMU	Cronbach’s Alpha	rho_A	Composite Reliability	AVE
Belongingness and love	0.833	0.837	0.900	0.750
Esteem_	0.836	0.841	0.902	0.753
Psychological Needs	0.851	0.876	0.899	0.690
Safety	0.737	0.736	0.852	0.658
Self- Actualization	0.779	0.888	0.866	0.685
SMU	0.878	0.942	0.922	0.798

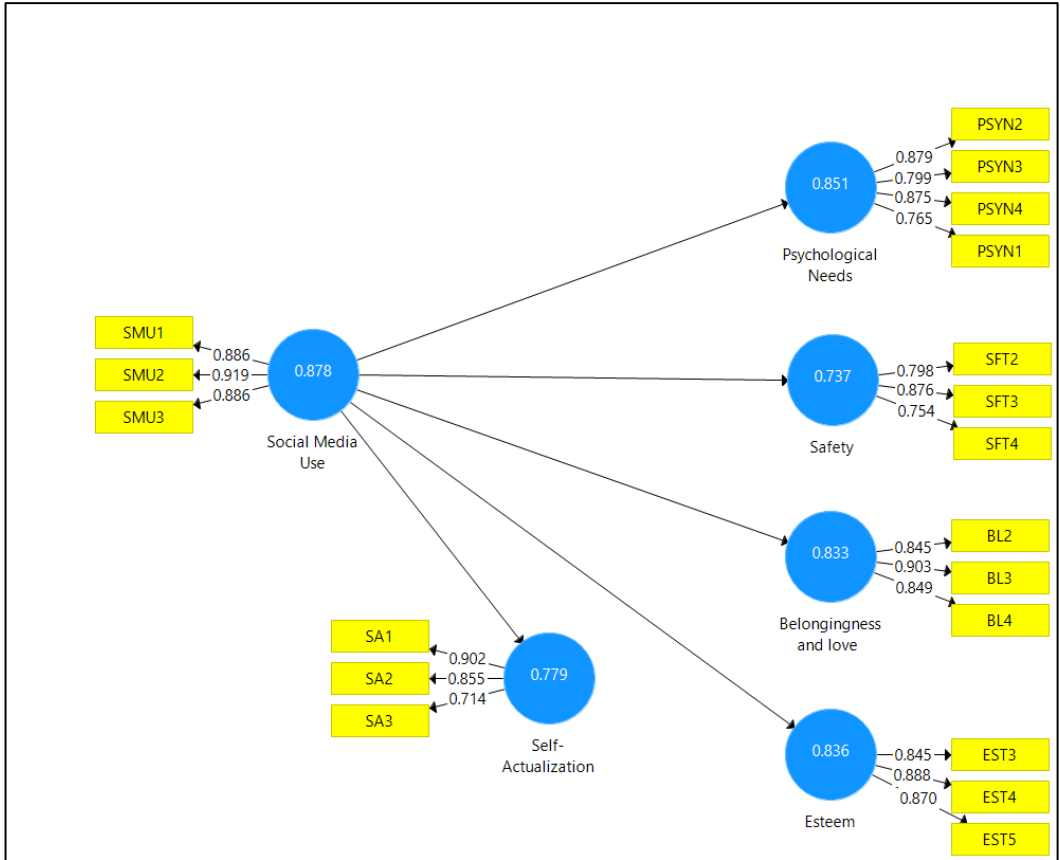


Figure 2 Measurement Model Social Media and Motivation All DVs

### Structural Model Output

After examining the trends in measurement model for the study variables, current section considers the output for the structural model while exploring the relationship between social media usage and belongingness and love. For this purpose, Table 4 provides some interesting facts through original sample coefficients, sample mean, value of standard deviation in the coefficients, T-values, and finally the p-scores as well. It is found that the coefficient for the relationship between social media usage and belongingness and love is 0.315 which indicates a positive association. This would indicate that increasing level of social media usage is leading towards more belongingness and love. More specifically, the value of sample mean is 0.318 which also expresses the similar positive relationship between both. The value of standard deviation is 0.047 through which a T-score of 6.782 was found. In this regard, p-value is highly significant at 1 percent. This would justify the argument that there is a



significant and positive impact of social media usage on belongingness and love among the students in the region of UAE.

In addition, Table 4 also reports the association between social media usage and psychological needs of the students. It is observed that the value of coefficient is 0.185 with the standard deviation of 0.051. In this regard, the research has achieved a t-score of 3.602 for which the p-value is significant at 5 percent. More specifically, this would justify the argument that more utilization of social media among the students at different grades is a good sign as it is directly impacting on the psychological development and vice versa. In the existing literature, there are some studies who have explored the linkage between social media usage and psychological dynamics.

Furthermore, the findings under Table 4 reflects the association between social media usage and safety needs. It is found that the score for this coefficient is 0.400 with the sample mean of 0.403. On the other side, the relative deviation in this coefficient is found to be 0.046 which helps to achieve the t-score of 8.664. In this regard, it is stated that higher utilization of social media usage is leading towards more safety needs of the students. More specifically, the increasing level of social media usage by the students of grade 9<sup>th</sup> to 12<sup>th</sup> is leading towards more safety needs as shown in research.

**Table: Error! No text of specified style in document.** Structural Model Output

	Original Sample (O)	Sample Mean (M)	STDEV	T-value	P Values
SMU>BL	0.315	0.318	0.047	6.728	0.000
SMU>EST	0.299	0.301	0.051	5.836	0.000
SMU>PSY	0.185	0.190	0.051	3.602	0.000
SMU>SFT	0.400	0.403	0.046	8.664	0.000
SMU>SA	0.679	0.682	0.024	28.077	0.000

Note: PSY means psychological needs, SFT means safety, BL means belongingness and love, EST means esteem needs, SA means self-actualization

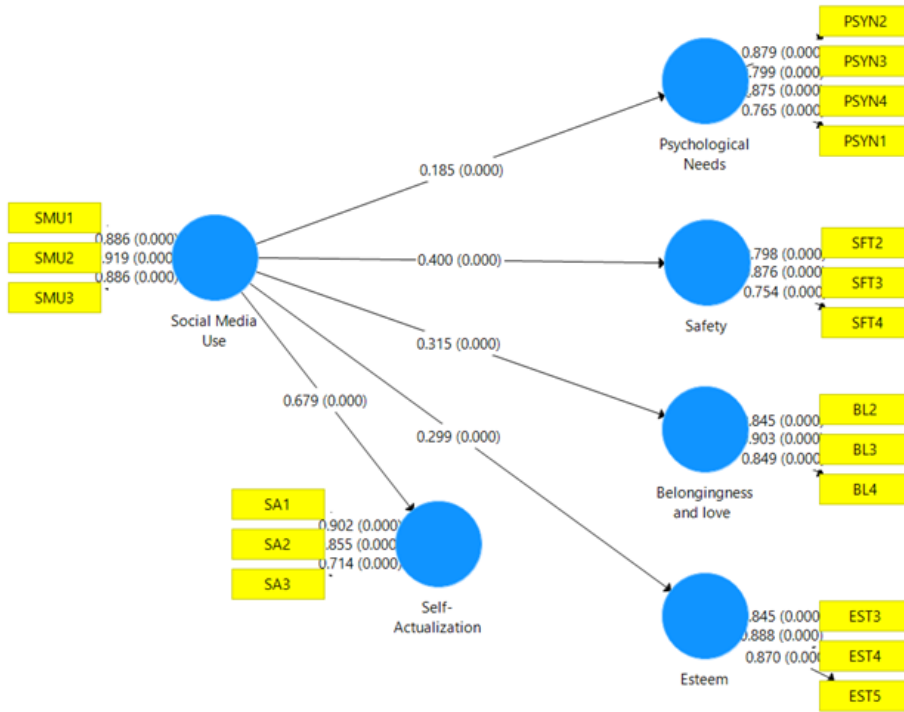


Figure 3: Structural Model Social Media and Motivation

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