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<tr>
<td>Author(s):</td>
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<td>Affiliation(s):</td>
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<td>Conflict of Interest:</td>
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Impact of Social Media Platforms on the Learning Habits of University Students

Abdul Shakoor Rana*, Muhammad Tahir Khan Farooqi, Shehzad Ahmad
University of Okara Pakistan

ABSTRACT The current study aims to find out the effects of social media sites on the academic performance of university students. Social media has been globally the major source of communication between individuals. Social media includes Cell phones, Facebook, Tick-talk, YouTube, Twitter, Myspace, Instagram, Skype, Tumblr, and many other social media platforms. Researchers all over the world have varied findings on the effect of social media on the academic performance of university students. The current study deployed a survey methodology by filling questionnaires from the respondents, regarding the usage of social media and its effects on the academic performance of students. For this purpose, two hundred students of the social sciences department enrolled in the BS program were the sample for the current study. Data were collected using an adapted questionnaire and for the analysis of data, AMOS Software version 24 was applied to develop a model. This model was developed to represent, the effect of social media on student academic achievement at the university level. The finding indicated study found that social networking media significantly affect the academic performance of university students. With this data, it is recommended that the administration must regulate the proper time usage of SMN by the students to save them from the destruction of excessive media usage.

INDEX TERMS Academic performance, AMOS, RMSEA, Social media networking, Social learning theory, Structural Equation Modeling.

I. INTRODUCTION

Social media sites enable people to interact with others to socialize and strengthen their social capital [1]. The phenomenon of social interaction is shifting the pattern of social behavior day by day [2]. According to Spanner's work [3], social media possess characteristics of sharing, participation, openness, and conversation. Likewise, Nicholson, Nugroho, and Rangaswamy, [4] viewed social media as a group of internet-based applications based on the technological and ideological foundation of WEB. Similarly, Anjugu [5] portrayed social media as an internet-based appliance that makes and exchanges user-generated content. In the same way, Ezeh, Asogwa, and Edogor [6] endorsed social media as interactive communication channels through which people connect and share their ideas, pictures, messages, latest information, historical events, and things of common interest.

Social media might be the new-fangled concept in the current globalized world, however, the idea of applying media sites for socializing dates back to the age of the telegraph and cell phones [7]. Popular trendy social sites include Blogs, Twitter, YouTube, Facebook, cell phone, and Tick Talk. Social media is becoming a very well-liked medium of interpersonal and civic communiqué. While Daluba and Maxwell [8] declared that the conventional mode of

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contacting each other has vanished and people now meet on social media websites. Whereas, Van Cuilenburg, & McQuail, [9] distinguished social media and noted that conventional communication was unidirectional, while the modern mode of communication is much more interactive.

A. PURPOSE OF THE STUDY

The purpose of the current study was to investigate the effect of various social media platforms on students' study habits and resultantly explore their effect on the academic performance of the students. Furthermore, the current study will explore the relationship between social media usage, and its consumption among young students indicating its positive and negative outcomes and their impact on academic performance. The study will also explore the abiding relationship between social media addiction and academic performance.

B. SIGNIFICANCE OF THE STUDY

The study will affect the academic institution program and help in formulating learning objectives. This study would also contribute to the existing literature on social networking and its impact on academic performance. Therefore, advisors can use this study’s findings for professional and academic guidance to regulate social media among students in Pakistan.

C. DELIMITATION OF THE STUDY

1- The study at hand was delimited to the public sector universities of the Punjab province.

2- Students of the social sciences department of public sector universities were the sample of the study.

3- Students of both gender and locale were the respondents of the study.

D. RESEARCH QUESTIONS

1. Which are the commonly used social media sites?
2. What are the uses of SMS and how long do students spend on the media?
3. What are the influences of SNSs on students' study time and their learning habits?
4. What is the relationship between social media and students’ academic performance?
5. What are the advantages and disadvantages of the use of social media networking sites?
6. To what extent social networking sites can be useful?

E. TIME SPENT ON THE SOCIAL MEDIA

Innovation in computer technology has enabled the internet to serve as a platform for seeking information, exchange of ideas, and obtaining expert opinions through email, teleconferencing, chatting, and other avenues. The initiation of social media networking sites such as Facebook, Twitter, Cell Phone, and Tick Talk has changed the perception of internet usage. Such websites are being used for academic and non-academic activities. Ghanta, and Chandra Shekhar [10] in their study illuminated that the majority of students spend most of their time on social media sites and redirect their attention towards non-constructive, non-ethical, illusory, and indecent activities. Most of the time, students waste their time by texting and chatting with their online friends, searching or stalking people's private life, or watching porn videos. However, a good number of students have
been found using social media for academic, and online instructional exercises, and downloading learning material.

Despite many advantages of the SMN, online time spent by higher education students might affect their academic performance and learning consistency. For those who are addicted to the Internet, their studies might have been adversely affected [11]. The study by Yu [12] authenticated that the average time spent by university students on the internet was 164 minutes per day. Likewise, Robison [13] pointed out that 47% of African-American college students spent an average of two hours every day on social media. Furthermore, they pointed out that a small percentage of students spent 5-6 hours per day. Similarly, the study of Guan, Isa, Hashim, Kamar, and Singh [14], explored that the average duration of time spent by Malaysian Medical students was approximately 13.31 hours. Social networking sites are preferred in place of reading time and homework by students [15]. The negative effects of excessive use of social media have been a major concern all over the world [16]. Although many educational institutions have applied many strict forbidding rules for the use of handheld communication devices during teaching hours many students are still able to connect to the outer world during class hours [17]. Moralists like Onah and Christian [18] believed that social media have fueled the level of immorality among the youth of a country. The immoral sites available on social media have put a negative impact on students' ethical and academic standards. They further pointed out that moral issues like sexual promiscuity; cybercrime, vulgar dressing, sexual harassment, impatience, and quick syndrome are the result of excessive use of social media. Many other researchers have similar concerns about the misuse of social media. They believe that the use of social media causes distraction during learning time.

**F. IMPACT OF SOCIAL MEDIA ON STUDENT’S PERFORMANCE AND ACADEMIC LEARNING**

Maguth, Yaguth, and Elliot [19] carried out a study and disclosed that students use social media for various scholarly activities such as research, communication, add to the search for evidence. Despite this, the research proved that the use of social media does not guarantee the academic success of students. The study of Gupta and Irwin [20] endorsed that Facebook could distract students and their, academic goals. Similarly, Junco [21] viewed an analogous opinion and declared that the excessive use of social media among students for academic activities can have between current knowledge about social media and its academic implication. Interviews with some studious students confirmed that time spent on social media was a waste of time that could be utilized for actual study [22]. Likewise, Jankovic, Nikolic, Yukonjanski, and Terek [23] found that the student who spent more time on Facebook and other online sites consequently paid suffer in their academic carrier. In another study, Stutzman [24] pointed out that most students initially used social media as a communication tool but their priorities and intentions changed over time as they become social media acquitted. On the contrary Çolak, [25] viewed the role and the positive impact of social media on students' academic carrier. According to him, social media has a positive impact on students' academic performance. Social media offer a platform where they can create their own social life, make their friends, and communicate with them. It provides a podium for collaborative learning, sharing
of ideas, exchange of views, academic discussion, and areas of common discussion. Learners can join group activities, projects, and common assignments through social media platforms [26]. On the other hand, the researcher pointed out some negative aspects of social media and declared that students are so much involved in social media sites and become addicted to bad media venues. Due to this addictive behavior, some students kept using social media even in the classrooms, which cause class disturbance and concentration issues.

Olubiyi [27] pointed out that if students are 24/7 anxious about social media and often do social networking during class it would harm their academic performance. Most students distract their academic carrier by excessive use of Social media sites. Another study carried out by Subramani [28] explored the maximum number of students who were unaware of e-magazines for studies and they download neither an e-dissertation for academic research nor a research paper for studying purposes. Social networking sites are preferred by students instead of reading and home tasks assigned to students. The negative effects of excessive use of social media have been a major concern globally [29]. Although many educational institutions have applied many strict rules to handle communication devices during teaching hours still many students can connect to the outer world during class hours. Various moralists believed that social media have fueled the level of immorality among the youth of a country. The immoral sites available on social media have been a prime cause of creating a negative impact on students' ethical and academic standards. They further pointed out that moral issues like sexual promiscuity, cybercrime, vulgar dressing, sexual harassment, impatience, and quick syndrome are the results of excessive use of social media. Many other researchers have similar concerns about the misuse of social media. They believed that the use of social media causes distraction during learning time. According to Duivestein, and Bloem, [30] social media have badly darkened the bright benefits of knowledge and information in academia. Social media can bury all true serendipity if we do not regulate it, and this will eliminate an important source of innovation and creativity that results in cocooning and tunnel vision [31].

G. SOCIAL MEDIA USAGE AND RELATED REASONS

According to Vitak [32], there are several reasons for using social media networking sites. The first and foremost reason is to increase the sphere of friendship and social circle. Results acclaimed that majority of the students responded that their mutual friends introduced them to social media sites which later became an addiction. This social media interaction and friendship developed because of their common interest and likelihood. Social media sites are a powerful source of interpersonal relationships which is fueled by online friendship. They can contact their fellows via messaging, and chatting on Facebook and WhatsApp by using different social media Websites/ platforms. Social media can change offline relations into online relations by building a bridge between two socializers. Keeping in touch with friends, become a prime actual reason for the consistent usage of social media sites for school students and gender. Students can communicate and maintain healthy relationships with friends by using private chat rooms and messaging apps. Social media offer a platform where they can create their own social life, and make their friends, which can communicate with them.
according to their likelihood. It provides a podium for collaborative learning, sharing of ideas, exchange of views, academic discussion, and areas of common discussion. Moreover by using social media learners can join group activities, projects, and common assignments. On the other hand, the researcher also pointed out certain negative aspects of social media and declared that students get too involved in social media sites and thus become addicted to bad media venues sites. Due to this addictive behavior, some students keep using social media even in the classrooms, which is the prime reason for causing the class disturbance and other related issues.

**H. STUDY HABITS**

Study Habits are premeditated prototype patterns gained by the students for academic understanding and qualifying exams [33]. Study habits are the inmost apprehension of parents and teachers as this play an essential development role in long-life reading habits. Habits are customary natural or acquired practices of individuals. In other words, habits are a prototype of various activities which are performed unconsciously [34]. Study habits are the student’s capabilities of time and material management for the accomplishment of academic tasks. Similarly, Ozsoy, Memis, and Turan [35] described study habits as study routines adopted by students during his/her study academic career. According to Maureen [36], study habit is a permanent routine of students learning. Similarly, Palani [37] viewed that study habits play a pivotal role in creating a literate society, personality development, and improving critical thinking. Study habits are a student’s systematic way of studying. It may be efficient or inefficient. Efficient habits produced positive academic performance otherwise it produces ineffective academic performance [38].

Accordingly, Noor [39] categorized study habits, as to how and how much and what students read. As indicated it is a pattern of the learning schedule of the individual student. In the broader sense study habits determine the chance of academic success. Pragmatic and creative education involves the habit of personal investigation, which demands personal investigation, creativity, self-thinking, and critical thinking. Study habits are naturally developed at a very young age in school, but once formed, they last forever [40].

**II. RESEARCH DESIGN**

The current study deployed a descriptive survey method to collect the data. This research design seems to be appropriate as it allows the researchers to gather data through structured research instruments. An adapted questionnaire tool was used for data collection. The finalized questionnaire comprised various parts that would gather data in terms of respondents' demographic profiles, academic behaviour, and the impact of social media sites on the scholastic performance of the students.

### III. DATA ANALYSIS

<table>
<thead>
<tr>
<th>TABLE I</th>
<th>THE THRESHOLD VALUE OF MODEL FIT MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMIN/df</td>
</tr>
<tr>
<td>Terrible</td>
<td>&gt;5</td>
</tr>
<tr>
<td>Acceptable</td>
<td>&gt;3</td>
</tr>
<tr>
<td>Excellent</td>
<td>&gt;1</td>
</tr>
</tbody>
</table>
Impact of Social Media Platforms...


TABLE II
MEASURES OF THE PROPOSED MODEL

<table>
<thead>
<tr>
<th>Measure</th>
<th>CMIN</th>
<th>df</th>
<th>CMIN/df</th>
<th>CFI</th>
<th>RMR</th>
<th>RMSEA</th>
<th>p</th>
<th>Close</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threshold</td>
<td>-----</td>
<td>----</td>
<td>Between 1&amp;3</td>
<td>&gt;0.95</td>
<td>&lt;0.08</td>
<td>&lt;0.06</td>
<td>&lt;0.05</td>
<td></td>
</tr>
<tr>
<td>Estimate</td>
<td>756.227</td>
<td>430</td>
<td>1.759</td>
<td>0.935</td>
<td>0.049</td>
<td>0.038</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Interpretation</td>
<td>-----</td>
<td>----</td>
<td>Excellent</td>
<td>Acceptable</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
<td></td>
</tr>
</tbody>
</table>

Numerous tests were applied for measuring the measurement model. Test like (RMSEA) root means square of approximation, (CFI) comparative fit index, CMIN (Minimum Discrepancy), and DF (degree of freedom) were applied. The recommended threshold value of RMSEA estimated the ballpark figure of model fitness. The threshold value for RMSEA of the close fit model is .06 while the value ranging from .06 -08 is an indication of a moderate fit. These above-mentioned values are considered as a rule of thumb but not as a strict benchmark [42 p.58]. Similarly, Beauducel and Wittmann endorsed varied threshold values which have weak weightage for generalization. Furthermore, it has been pointed out that the confirmatory factors index value must be ≥ .90 as per the tranquil criterion. The value ≥ .90 for the fitness of a model was considered acceptable. Model fit indices of the current study are mentioned in the table below.

TABLE III
MODEL FIT INDICES

<table>
<thead>
<tr>
<th>Model</th>
<th>NPAR</th>
<th>CMIN</th>
<th>df</th>
<th>p</th>
<th>CMIN/df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>41</td>
<td>53.423</td>
<td>30</td>
<td>.005</td>
<td>1.781</td>
</tr>
<tr>
<td>Saturated model</td>
<td>65</td>
<td>000</td>
<td>0</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>Independence model</td>
<td>20</td>
<td>324.919</td>
<td>.45</td>
<td>.000</td>
<td>7.220</td>
</tr>
</tbody>
</table>

Table 3 reflects the fitness numerical value which is a summary of the suggested model. According to statistical analysis of the collected data, the (number of the parameter was also noted. NPAR value was 41, the calculated value of CMIN (minimum discrepancy) was and the degree of freedom was 30. Furthermore, the values of other parameters were as under; The calculated value of CMIN was 1.781 and P- value .005. The obtained CMIN value represented the discrepancy between the unrestricted sample covariance matrixes. All the above-reflected values in Table 3 endorsed the accuracy of the recommended model. All reflected values were within the range of recommended threshold (See Table 1).

TABLE IV
BASELINE COMPARISON

<table>
<thead>
<tr>
<th>Model</th>
<th>NFI</th>
<th>RFI</th>
<th>IF</th>
<th>TLI</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>.836</td>
<td>.753</td>
<td>.921</td>
<td>.874</td>
<td>.916</td>
</tr>
<tr>
<td>Saturated model</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence model</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>
NFI or Normed Fit Indices have been the practical criterion of the model. The NFI and CFI value ought to be within the range of 0 -1.00. These values were derived by doing a comparison of the hypothesized model. Originally the value ≥ 90 was considered significant for the goodness of a model but the revised cutoff value has been declared 0.95 (See Table 2).

Based on the Normed Fit Indices and confirmatory value of the social media model (.836 and .916), respectively the model can be declared as a good fit as per the revised threshold.

**TABLE V**
ROOT MEAN SQUARE ERROR OF APPROXIMATION (RMSEA)

<table>
<thead>
<tr>
<th>Model</th>
<th>RMSEA</th>
<th>LO90</th>
<th>HI90</th>
<th>PCLOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>.063</td>
<td>.034</td>
<td>.090</td>
<td>.209</td>
</tr>
<tr>
<td>Independence model</td>
<td>.177</td>
<td>.159</td>
<td>.195</td>
<td>.000</td>
</tr>
</tbody>
</table>

RMSEA or Root Mean Square Error of Approximation is a set of fit statistics of a model. RMSEA is also termed as the badness of a fit index currently acknowledged as a revealing criterion in the covariance of structural modeling. The inconsistency, measured by RMSEA can be explained as the degree of freedom, reflecting the sensitivity of numbers of the estimated parameter in the model. The estimated value ≤.05 specified a good fit and the value ≤ .08 presented a reasonable error of approximation in the model. RMSEA of the social media model in this study was .063, which indicated that it was a good fit.

**TABLE VI**
INTERCEPT (GROUP NUMBER1-DEFAULT MODEL)

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>p</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>YT4</td>
<td>3.870</td>
<td>.075</td>
<td>51.745 ***</td>
<td></td>
<td>par_17</td>
</tr>
<tr>
<td>YT3</td>
<td>3.620</td>
<td>.091</td>
<td>39.688 ***</td>
<td></td>
<td>par_18</td>
</tr>
<tr>
<td>YT2</td>
<td>3.720</td>
<td>.091</td>
<td>40.710 ***</td>
<td></td>
<td>par_19</td>
</tr>
<tr>
<td>YT1</td>
<td>3.560</td>
<td>.089</td>
<td>40.126 ***</td>
<td></td>
<td>par_20</td>
</tr>
<tr>
<td>TT3</td>
<td>3.720</td>
<td>.087</td>
<td>42.542 ***</td>
<td></td>
<td>par_21</td>
</tr>
<tr>
<td>TT2</td>
<td>3.440</td>
<td>.086</td>
<td>39.803 ***</td>
<td></td>
<td>par_22</td>
</tr>
<tr>
<td>TT1</td>
<td>3.510</td>
<td>.091</td>
<td>38.784 ***</td>
<td></td>
<td>par_23</td>
</tr>
<tr>
<td>CP3</td>
<td>3.640</td>
<td>.079</td>
<td>45.920 ***</td>
<td></td>
<td>par_24</td>
</tr>
<tr>
<td>CP2</td>
<td>3.900</td>
<td>.070</td>
<td>55.861 ***</td>
<td></td>
<td>par_25</td>
</tr>
<tr>
<td>CP1</td>
<td>3.610</td>
<td>.104</td>
<td>34.829 ***</td>
<td></td>
<td>par_26</td>
</tr>
</tbody>
</table>
FIGURE 1. Social media model

FIGURE 2. Covariance among constructs
The above model reflects that various social sites viz Tick Talk, U Tube, and cell phone significantly affect the learning habits of the students irrespective of their age or level of their education. Even though social media sites have badly and negatively influenced the study habits and academic performance of students they have also influenced their ability to socialize with each other. Excessive use of these sites and addiction could devastate the youth’s career of the youth if not properly controlled and supervised by the parents and teachers.

IV. CONCLUSION

The current study aimed to identify the negative influence of social media sites on university students. Through the finding, it was apparent that social media has played a vital role in the learning habits and academic performance of the respondents. It was also observed that the students habitually used social media to communicate between friends and families which become a prime reason to devastate their learning habits. Moreover, it was also confirmed that social media has become a part of their daily life routine, especially the contemporary generation which is born in today’s global world. Student depends on it for various positive sites such as research work and contacts with old friends and getting in the loop of what was happening around the globe.

A. RECOMMENDATIONS

1. The students are required to get training in social media to use it as a tool of service to minimize, the waste of time on frivolities such as chatting, cyberstalking, and other irrelevant and useless engagement.

2. Keeping in mind the rapid innovation of social media, higher education institutions must review its approach and should incorporate social media technology into a teaching-learning experience to strengthen teachers’-learners’ communication. Social media has flourished with benefits like sharing information and ideas, improving reading and writing skills, job information, and global political, economic, and social changes.

3. Higher education institutions should throw light on the positive and destructive effects of social networking sites on students' academic and social learning. Even so, the orientation session is organized regarding the benefits and demerits of using social media sites for their self-development.

4. Universities should arrange seminars to provide awareness to students regarding the good and worst aspects of using social networking sites.

5. Universities should set up, and mingle interactive learning tools to link them with various research databases to make social media align with students’ research requirements.

6. Those who are intense abusers should moderate their social media sites to dissemble addiction and maintain a balance between their off and online lives time.

REFERENCES


