Social Media Implications and Collaborative Learning for University Students in Multan, Pakistan

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Abstract

The fundamental objective of this research is to highlight the influences of addiction to social media networks on the learning outcomes achieved by university students. Social media has inclusion of all the online platforms (websites or technology services) enabling its users to generate, dispense, and exchange the desired content. To identify key trends and patterns in data, descriptive statistics (frequency counts, percentages, graphs) and inferential statistics (Chi-square test) is applied. This research focused on insights from previously published studies to probe the association between social media obsession and educational achievements of the university students. The study findings showed that a significant number of university students in Multan, Pakistan being in the grip of social media's addiction which consequently had a negative influence on their learning achievements. This aims to hold a symmetry for social media exposure and the students' educational responsibilities securing a smooth path to the future success.

Key Words: *Social Media, Learning Outcomes, Online Platforms, Exchange Content, Frequency Counts, Chi-square*

1. Introduction

The pervasive use of social media networking like Facebook, Twitter, Instagram, and Snapchat has improved the way university students interact, access information, and communicate. While social media outputs are remarkable, its impact on students' education (including many other aspects of their lives) has raised significant concerns to guarantee their future exploration. Social media platforms and websites facilitate the world with a digital landscape where their users can generate and share ideas with others.

It is prominent that by utilizing the online networks, individuals can expand their social connections, and participate in virtual communities bringing together people from all over the world. A broad-range spreading usefulness by several Social Bookmarks like YouTube Featuring serves as an important factor in predicting students' learning outcomes(when searching social networking for the E-learning purpose" (Habes, Salloum, Alghizzawi, & Mhamdi, 2019)

Now a days, social networks have emerged as a global scope of interest for many researchers: [Al-Rahmi, W., Othman, M. S., & Yusuf, L. M. (2015). Barton, B. A., Adams, K. S., Browne, B. L., & Arrastia-Chisholm, M. C. (2021). Boahene, K. O., Fang, J., & Sampong, F. (2019). Amin, Z., Mansoor, A., Hussain, S. R., & Hashmat, F. (2016). Social technologies like video watching, media exchange, exploring internet and games significantly influenced students' future career (Goet, 2022)]. Social media platforms provide a plenty of educational resources to students to tap into a vast variety of information including academic pages by reputable institutions and industries. Social media also entertains students with access to a rich informative content, an educational ecosystem, expert insights, and academic communities.

The key aim of this study is to understand the association between addictions to social media networks and achieved learning outcomes of the university students by analyzing the variations with certain factors like gender, age, and their exposure to Facebook, Twitter, Whatsapp or any other platform. Based on the procedures followed to prepare the literature review by (Habes, M., Alghizzawi, M., Khalaf, R., Salloum, S. A., & Ghani, M. A. (2018). The relationship between

social media and academic performance: Facebook perspective. *Int. J. Inf. Technol. Lang. Stud,* *2*(1), 12-18. A partial literature review has been prepared, aligning with the study.

The study's methodology and findings are presented in the following sequence: Section 2 displays the relevant literature review. Section 3 represents the use of social media networks by university students graphically. In section 4, Conclusion and recommendation are given.

2. Literature Review

The first social networking site SixDegrees.com emerged in 1997 introducing the features like personal profiles, news commentary, and text messaging. In 2003, MySpace.com took the scene by transforming the way users share information, news, and personal content. Social media websites' influence has been profound, affecting not only online communities, but also the broader social, political, cultural, and religious landscape thus altering the fabric of modern life.

A study conducted by Asemah, Okpanachi, and Edegoh (2013) at Kogi State University in Anyigba, Nigeria explored the influence of social media and undergraduate students' educational achievement. Based on the information processing by media equation theory, the study exhibited a significant negative correlation between social media usage and educational behavior. Students use Facebook frequently recognizing as the most popular social media network. The findings revealed that students prioritize academic engagement and limit their social media use thus optimizing their academic outcomes.

Despite detrimental effects of social media, many students spend a significant amount of time on platforms like Twitter, Facebook, and Instagram (Hasnain, Nasreen, & Ijaz, 2015). Social media networks having both positive and negative aspects, yet its regular use is prevalent among students. Numerous studies have investigated the influence of social media addiction on the educational career of students, revealing a significant correlation between the two. This research aims to find the association between social media addiction and leaning achievements by students in Pakistan. While social media exhibits a negative connotation for some, it is also found as a valuable tool for acquiring knowledge and social skills beyond the academic environment (Wang, Chen, & Liang, 2011)

Research by Giunchiglia et al. (2018) highlights the vulnerability of students to social media and smartphones, which have been shown to negatively impact academic performance. Previous studies basically presented the addictive aspects of smartphones (social media) or relied on self-

reported surveys. In contrast, the SmartUnitn project pioneered a novel approach by combining smartphone data and time diaries to monitor students' activities and interactions. By analyzing logs of social media apps on students' smartphones and correlating them with academic credits and grades, the study revealed the detrimental effects of social media usage, identified distinct patterns of influence, and underscored the importance of regulating smartphone use in academic environments.

The correlation between addiction to social media specifically like YouTube features and students' learning capabilities was examined by a study of Habes et al. (2019) in Jordan. This research proposed a novel model to find association between social bookmarks (YouTube) and usefulness of their usage on the academic career. Data was collected from 360 students at Yarmouk University in Jordan through an electronic questionnaire. The results unveiled the significance of predictors when utilizing social media for e-learning purposes for students' academic performance.

3. Material and Methodology

This study collected data through E-questionnaire from 250 respondents in Multan, Pakistan. After explaining the study objectives and obtaining consent, participants were invited to complete the study questionnaire. The questionnaire had six sections. For graphical representation of data, a bar chart having angular bars is shown for the comparison of different divisions. Further a (circular diagram) pie chart displayed the data segments as scaled according to the relative proportion of each division. For statistical analysis of data, the chi-square test (a statistical tool to identify whether a significant relationship exists between two categorical variables) is applied. As a non-parametric test, it doesn't assume a specific distribution of the data. This test analyzes a contingency table (or cross-tabulation table) to compare the actual observed frequencies with the frequencies expected if the variables were independent.

4. Student's Addictiveness to Social Network and Academic Performance

The graphical representation for the demographic section is given: the first category is representing the age-wise distribution of two age groups (15-20, 20-25). The 2nd category shows the distribution of individuals based on their marital status (single or married). The gender-wise

distribution of participants in the bar-chart is shown in the 3rd category (male or female). A clear consensus among participants is found as 226 of the total 250 respondents recognized the harmful influence of social media's addiction on their educational career. This is contrasting to the small number of participants who were neutral (5), disagreed (13), or strongly disagreed (6).
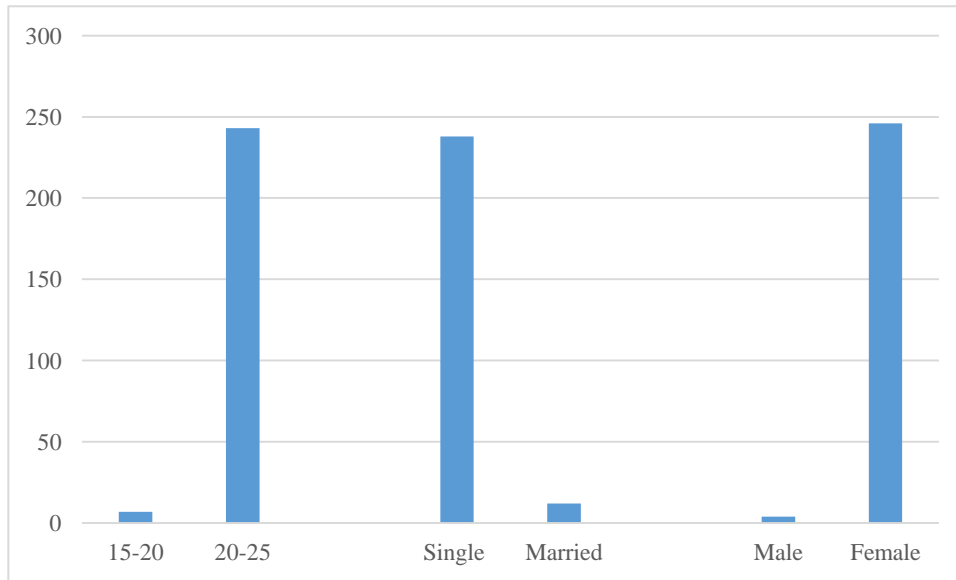

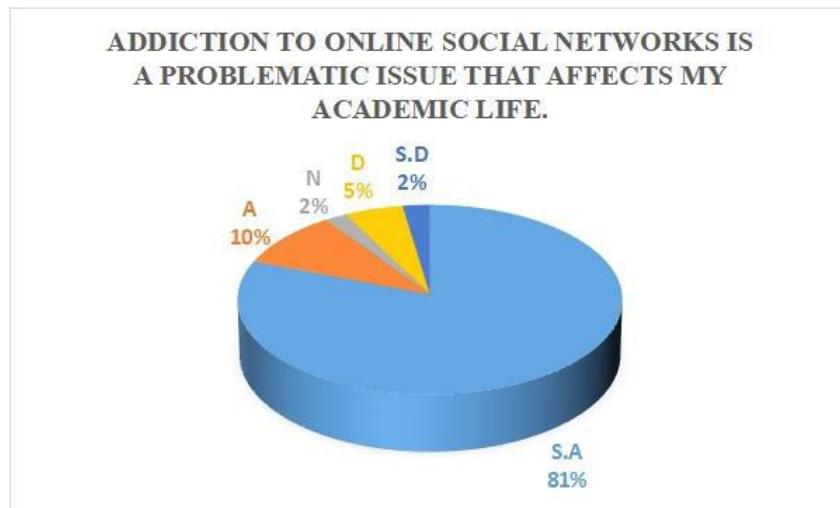**Figure 1: The Distribution of Respondents in Demographic Section.**

Figure 2: Addiction to Online Social Networks Negatively Affecting Academic Performance
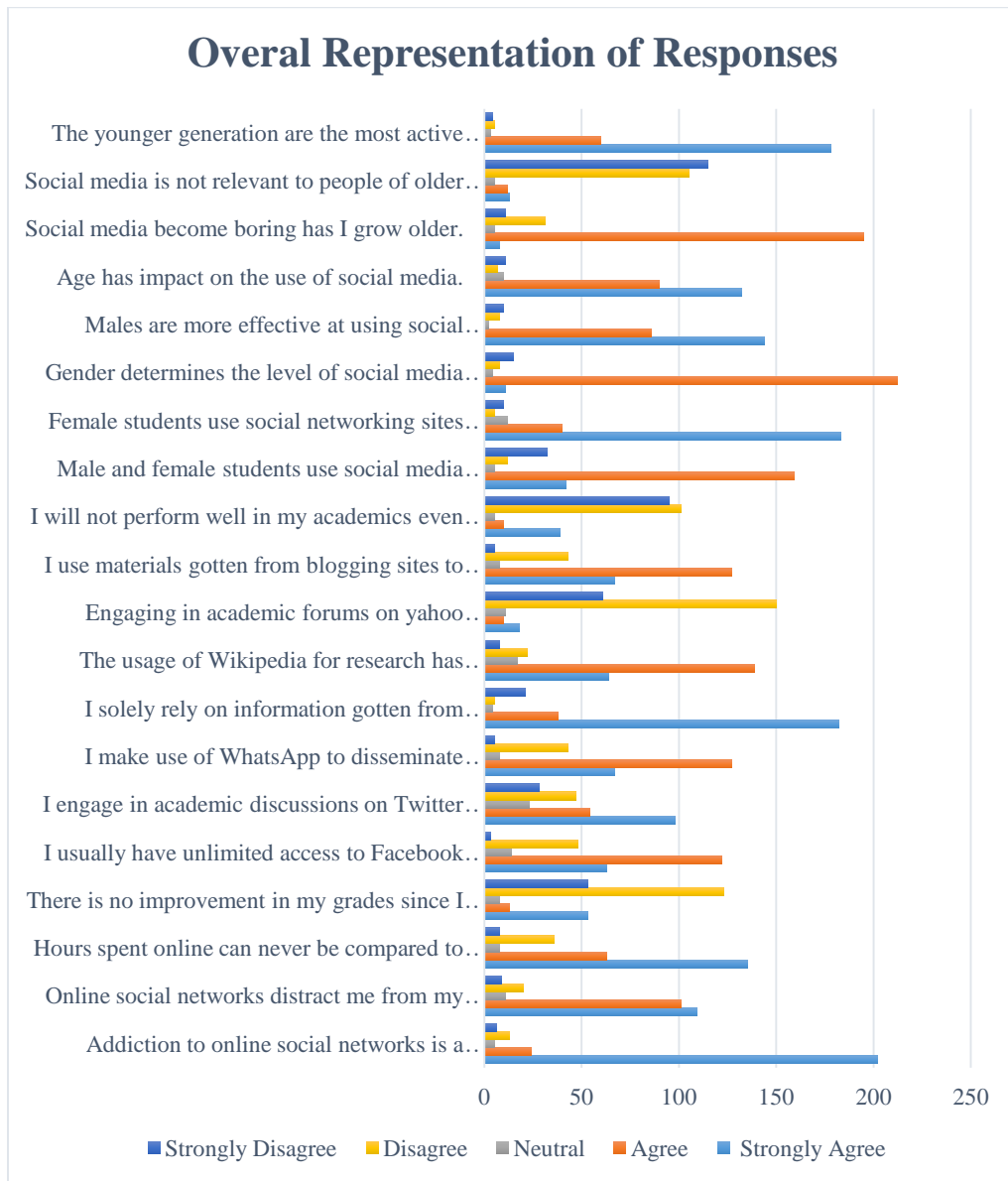
Figure 3: Overall Representation of Responses

A high proportion of strong agreement among responses suggested the gravity of the issue with highlighting the need for effective interventions or strategies to mitigate its effects on academic outcomes. These findings are depicted above in Figure 1, 2, and 3 respectively.

Table 1: **Gender-Wise Social Networking usage is a Problematic Issue affecting**

Student's Education

	Value	df	Asymp. Sig.
Pearson Chi-Square	0.966	4	0.0315

Table 2: Knowledge sharing Sites Effectively Complemented What I have been Taught in Class.

	Value	df	Asymp. Sig.
Pearson Chi-Square	51.394	4	0.0023

Table 3: Engagement in Academic Discussions on Twitter improved Grades.

	Value	df	Asymp. Sig.
Pearson Chi-Square	3.463	4	0.032

The numerical results are displayed above in Table 1, 2, and 3 respectively which are found to be significant after analyzing the association between gender and a) Excessive use of social networking hinders academic achievements b) Engaging in academic discussions on Twitter and its positive impact on the learning outcomes c) Complementing traditional teaching methods widely through online content from Knowledge sharing sites.

4. Key Takeaways, Conclusions, and Future Directions

4.1 Key Findings

The incorporation of technology into educational settings has become a focal point of interest for many researchers (Habes, M., Alghizzawi, M., Khalaf, R., Salloum, S. A., & Ghani, M. A. (2018). Barton, B. A., Adams, K. S., Browne, B. L., & Arrastia-Chisholm, M. C. (2021). Boahene, K. O., Fang, J., & Sampong, F. (2019). Amin, Z., Mansoor, A., Hussain, S. R., & Hashmat, F. (2016). Al-Rahmi, W., Othman, M. S., & Yusuf, L. M. (2015). This research has increasingly explored the relationship between social media exposure and learning achievement

by the university students in Multan, Pakistan. Social media has become a fundamental element of students' daily interactions, offering several benefits like communication, information sharing, and entertainment. This study surveyed 250 students via E-questionnaire to collect data. The results based on various graphical representations and statistical analyses (pie charts, bar charts, frequency counts, and chi-square tests) revealed that online social network addiction significantly hinders academic performance. While participants acknowledged the distractions caused by social media, they also emphasized the need for effective time management and self-regulation. Moreover, the findings showed mixed opinions on the impact of Facebook on academic performance, with some agreeing that unlimited access negatively affects grades, while others disagreed. Additionally, the results highlighted the perceived benefits of using Twitter for academic discussions WhatsApp for knowledge sharing among classmates. Notably, gender and age played a significant role in shaping students' awareness about the social media's influence on their education, including addiction, distractions, study habits, and the effectiveness of various platforms for learning.

4.2 Study Recommendation and Implications for Practice

In the age of digital connectivity, social media is revolutionizing the way we connect, share information, and communicate. This research examined the role of social media's addiction on the learning outcomes of university students in Multan, Pakistan. Guided by five research questions, the study utilized a simple random sampling technique to select 250 students. A five-point Likert scale E-questionnaire was based on responses from these participants. The findings revealed that a significant number of students are addicted to social media platforms, which negatively affects their learning. To address this issue and explore several areas for further understanding regarding its impact on individuals and society the researcher recommend:

- Utilizing social media for learning objective

- Creating new online hubs to expand and foster academic community.

- To set a balance proper monitoring fixed by teachers and parents about social media excessive exposure by students.

By implementing these recommendations, students can avoid setbacks in their learning activity to maintain a suitable symmetry between social media usage and educational responsibilities.

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