

# The Frequency of Technology Usage in Relation to Work Productivity Among College Students

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## Abstract

The proliferation of technology, particularly the ubiquitous presence of devices such as laptops, smartphones, and tablets, has led to a surge in the usage of social media platforms among college students. In the contemporary landscape, work productivity is a multifaceted construct influenced by various factors including compensation, work-life balance, internet utilization, motivation, and service-oriented profit chains. As organizations increasingly prioritize strategies to enhance employee productivity, understanding the nexus between technology usage and work productivity becomes imperative. This study endeavors to investigate the correlation between technology usage and work productivity among college students engaged in part-time employment. A sample of 164 participants currently enrolled in academic pursuits and concurrently employed was examined. Utilizing Pearson's correlation analysis at a significance level of 0.01, the relationship between technology usage and work productivity was assessed. Additionally, regression analysis was employed to explore the potential impact of social media usage on work productivity.

**Keywords:** Technology Usage, Work Productivity, College Students

## 1. Introduction

According to Boyd and Ellison (2007), social media is a web-based tool used to create social networks and relationships between people who have similar histories, interests, and lifestyles. The increase in the number of accessible devices, such as laptops, smartphones, and tablets, is driving the spread of social media (Facebook, SnapChat, Twitter, WhatsApp, and Instagram, among others). People have many options to communicate electronically with these digital gadgets, regardless of geographical and temporal restrictions (Junco, 2012; Nadkarni & Hoffman, 2012; Powell, 2009). Since it has taken on multiple dimensions, the concept of employee productivity is not new in the realm of management (Palmer & Dean, 1973; Adeinat & Kassim, 2019).

It is currently linked to a number of variables, including pay, work-life balance, internet usage, internet motivation, and service profit chains. Organizations these days are more focused on finding ways to boost worker productivity (Burke and Hsieh, 2006; Yunus and Ernawati, 2017). Digital media, sometimes referred to as "New Media," is the creation and distribution of material via computers, mobile devices (such as blogs, e-books, and video games), and other physical forms like hard drives and flash memory sticks that are facilitated by the internet. Certain academics would rather define digital media in comparison to "analog," "mass media" in opposition to "new media," and so forth. Linking digital media to earlier interactive machines and media, the history of digital media recounts the evolution of computers

from glorified calculators to gadgets that are revolutionizing human communications, entertainment, and creative production (Demuyakor 2020).

Digital media, also referred to as new media, is the modern world's "lovebird." Many channels can be used to transmit messages intended for a big audience. Print and electronic media are two major forms of media employed in today's globe. Books, newspapers, and magazines are examples of print media; radio, television, computers, billboards, banners, posters, direct mail, and social media are examples of electronic media.

The term "digital media" mostly refers to the blending of several media types with computers. Although the phrase is most often used synonymously with multimedia, it more precisely describes electronic media that use digital codes as opposed to analog signals (Omenugha, 2018). According to John (2021), Media usage, also referred to as media consumption or media diet, is all about how people engage with different forms of media. This includes both information and entertainment sources, and encompasses activities like: reading books, magazines, and articles, watching television shows and movies, listening to the radio and podcasts, using social media and other online platforms. Researchers are interested in various aspects of media usage, including: The amount of time people spend consuming different media, the types of devices they use to access media, the locations where they consume media, the impact of media on their thoughts, feelings, and behaviors.

According to Al-Menayes (2015), Digital media has had a significant impact on traditional media, including print newspapers, magazines, and television, by revolutionizing the creation, distribution, and consumption of information. The rise of social media and online platforms is one of the primary ways that new digital media has impacted traditional media. These platforms have made it possible for people and businesses to create and distribute information to a worldwide audience while frequently getting around more established gatekeepers like editors and broadcasters. Additionally, new visual communication mediums including digital graphics, video, and animation have grown in popularity as a result of digital media. These media have grown in popularity among viewers because they provide more immersive and engaging experiences (Mohammad Alzubi, 2022).

## 2. Review of Literature

While looking at the connection between computer use and productivity in the manufacturing and service sectors of France data was compared on workplace computer use gathered at the employee level in 1987, 1991, and 1993 with data on firm productivity, capital intensity, and average wage accessible at the company level (Greenana & Mairesse, 2000). Coherent and convincing evidence was found that the computer impacts on productivity are indeed positive and that the returns to the firm should at least be in the same range as the returns to the other types of capital, despite the fact that the measure of firm computer use is subject to significant sampling errors (Greenana & Mairesse, 2000)). Overall, the results of Greenana and Mairesse's study point to the fact that computer use increases productivity in French businesses. This is a significant discovery since it implies that firms can spend money on computers to increase productivity and profitability (Greenana & Mairesse, 2000). It is crucial to remember that the study's conclusions are based on data from France during the late 1980s and the beginning of the 1990s. Since then, as technology has grown and our methods of working have changed, it's probable that the relationship between computer use and productivity has shifted (Jiang et al., 2021).

In their paper from 2021 titled "Personal use of technology at work: a literature review and a theoretical model for understanding how it affects employee job performance," (Jiang et al., 2021) review the body

of knowledge on 'Personal Use of technology at work' (PUTW) and offer a theoretical framework for comprehending how PUTW affects employee job performance. The authors outline four fundamental aspects of PUTW behavior that can affect how well workers accomplish their jobs: i) The amount of mental work needed to participate in PUTW activities is known as the cognitive load. ii) The level of excitement or stimulation felt while participating in PUTW activities. iii) Timing: The period of time during which PUTW actions take place. iv) How frequently and for how long PUTW activities are conducted. According to the authors, the impact that these four characteristics have on executive attention can affect job performance. A set of cognitive abilities known as executive attention enable us to concentrate, organize, and regulate our thoughts and behaviors.

We are more likely to make mistakes, become distracted, and struggle to finish activities when executive attention is worn out. (Jiang et al., 2021). According to the authors' model, PUTW tasks that have a high cognitive demand, a high arousal level, and/or a high frequency or duration are more likely to exhaust executive attention and have a detrimental effect on work output. In contrast, PUTW activities with low cognitive load, low arousal level, and/or low frequency/duration are less likely to exhaust executive attention and may even improve job performance by giving employees a break from their task or aiding in their recharge (Jiang et al., 2021).

In a sample of US college students, the study by Lepp, Barkley, and Karpinski (2015) discovered a substantial inverse association between cell phone use and academic achievement. When other characteristics including demographics, self-efficacy, and high school GPA were taken into account, the researchers discovered that students who used their cell phones more frequently were more likely to have lower GPAs. Cell phone use can be distracting, which may be one explanation for this finding. Students may be tempted to check their phones for text messages, social media updates, or other notifications when they are attempting to study or concentrate on their coursework. Their ability to concentrate and learn efficiently may be affected by this.

Another argument is that excessive cell phone use can prevent you from getting enough sleep. Prior to going to sleep, many students use their phones, which can disrupt their sleep. Lack of sleep can have a number of negative effects, such as making decisions, having trouble focusing, and having trouble remembering things. The study's authors came to the conclusion that using a cell phone can hurt academic achievement. They advised pupils to avoid using their phones right before night and during study sessions (Siew et al., 2017).

Using a sample of students from a Malaysian tertiary institution, Siew and colleagues (2017) looked into the relationship between smartphone use and academic achievement. According to the report, there is a clear link between smartphone use and academic achievement. This indicates that students' GPAs were often worse when they used their smartphones more frequently. The study also discovered a connection between students' smartphone usage and their academic success. Students who used their smartphones to access online resources or finish homework, for instance, had a tendency to have higher GPAs than those who used them for social media or gaming or other non-educational activities. The researchers came to the conclusion that although utilizing cell phones for educational purposes can lessen the harmful effects of smartphone use on academic performance there is a need for assessing and The research done by Abdelhamid (2023) discusses the positive and negative effects of social media on academic performance, mental health, and productivity. Social media can be used to form study groups and share educational resources. However, social media can also lead to distraction and missed deadlines if not managed effectively. The paper suggests that universities implement digital skills training and policies to help

students use social media responsibly. Ali-Hassan and colleagues (2015) explored the mechanism by which social media can influence team creative performance. They investigated how social media use can affect knowledge management and team creative efficacy, which in turn influences team creative performance. The study found that social media can be a useful tool to enhance team creativity. However, the effectiveness may depend on how well the three dimensions (social, cognitive, and hedonic use) of social media are utilized. Social use can help team members develop a shared understanding of each other's expertise. Cognitive use can help deepen knowledge among team members. Hedonic use, while seemingly for entertainment, can also facilitate knowledge sharing through informal interactions. These findings suggest that a well-rounded approach to social media use, incorporating all three dimensions, is most beneficial for team creative performance.

Cai and colleagues (2018) examined how psychological factors may act as a moderator in the association between agility performance and the use of enterprise social media (ESM); a private social network that companies utilize to let staff members connect, share material, and learn about company updates. It looks at whether and how using ESM improves agility performance (i.e., resilience, proactivity, and adaptability). The study concludes that the correlations between ESM usage and the three agility performance measures are mediated by psychological factors such as psychological meaningfulness, psychological availability, and psychological safety.

Put another way, by influencing these psychological states, ESM use can increase worker agility. The term "psychological meaningfulness" describes how employees view the importance and value of utilizing ESM in their work. The belief held by employees regarding their capacity, availability, and resources to utilize ESM effectively is reflected in their psychological availability. Psychological safety is the sense of security that employees have when they share ideas and information via ESM without worrying about being made fun of or disciplined. The study's overall findings indicate that, while ESM can be a useful tool for improving employee agility, its success depends on helping workers develop these favorable psychological environments.

According to Dey and colleagues (2022), teenagers' academic lives are negatively impacted by the negative characteristics of social media. This implies that although social media can be a useful educational tool, some of its drawbacks may impair academic achievement. It's crucial to remember that the authors of this study ignored any potential advantages of social media in education in favor of concentrating solely on its drawbacks. Students' use of social media and academic achievement were found to be negatively correlated in a case study conducted at Kurukshetra University in India (Dhiman, 2022). According to the study, most students had smartphones and were regular users of social media, accessing the sites mostly through them and devoting up to three hours a day to them (Dhiman, 2022). These results imply that social media use may have a role in students' poorer academic performance.

According to the survey (Dumford et al., 2023), college students' perceptions of their own and their friends' social media usage differ. Men were typically found to think that they and other people use social media less than women do. This implies that, in comparison to women, men may undervalue the amount of time they spend on social media and that of their friends. The study also investigated the discrepancy in perceptions between peers' and one's own self-reported usage of social media. Many variables could be to blame for this, including social desirability bias, which is the tendency for people to present themselves in a more positive light, or the fact that people are more conscious of their own use of social media than they are of how much their peers use it.

According to the Uses and Gratifications Theory (UGT), people utilize media to satisfy particular needs. This means that when it comes to social media, workers may use it for social media-oriented usage or work-related purposes (work-oriented usage). Work-oriented usage can increase productivity by promoting information sharing and collaboration. While social media use can boost job happiness, it might not have a direct impact on productivity. The efficiency of communication is impacted by media characteristics, according to Media Synchronicity Theory (MST). Transmission speed, parallel processing, symbol variety, rehearsal ability, and reprocessing ability are the five essential media qualities that are identified. These attributes impact a medium's suitability for various communication activities.

Although the essay emphasizes the asynchronous nature of social media communication, it does not directly apply MST to social media use. This implies that response times may be delayed, which may affect how effectively it performs on particular activities (Ali et al., 2019). According to Jong and colleagues (2021), social media, when utilized wisely, can be a helpful tool for increasing productivity at work. By establishing clear guidelines and encouraging staff members to utilize social media for work-related objectives, managers can help encourage the usage of social media for work-related purposes.

A study was conducted at a university in Saudi Arabia encompassing 300 female students who were enrolled in the university out of which 97% of students use social media on multiple platforms. Academic use, on the other hand, was negligible (1%), while social and recreational uses predominated (35% for conversing and 43% for browsing). The majority (57%) said they were addicted to social media. There was a negative correlation between this with the experiences of students: 52% said it interfered with learning, 66% preferred social media over studying, and 74% used these platforms during spare time. Sleep was also impacted; 46% of people went to bed later than midnight, and 39% did so between 1 and 2 am. Of those who did go to bed later, 68% blamed social media use for their tardiness. Lastly, unfavorable effects on social connections with family and friends were noted by 59% of students (Kolhar et al., 2021).

The usage of social media for professional reasons in the insurance business is covered in the document. It examines the benefits and drawbacks of using social media in this particular situation. According to the report, workers of all ages utilize social media for business-related activities. It also emphasizes how employees utilize social media for work for both utilitarian (useful) and hedonistic (enjoyment-oriented) reasons. Surprisingly, the study discovered a link between social media use and productivity at work (Leftheriotis & Giannakos, 2014). A functional shared knowledge system (TMS) has been associated with improved project performance, according to research on new product development teams. The study investigates the ways in which certain TMS features affect two forms of learning: exploring new information and exploitatively using preexisting knowledge. It's interesting to note that the research indicates that teams need to mix both learning styles to get the greatest outcomes. Put another way, improved project outcomes result from a robust TMS in conjunction with both utilizing current knowledge and investigating novel concepts (Li & Huang, 2013).

The use of social media and its effects on students' academic performance in higher education are discussed in a study done by Owusu-Acheaw and Larson (2015). According to the study, kids who spend a lot of time on Facebook and other social networking sites get lower scores as a result. A positive correlation appears to exist between increased social media usage and decreased academic achievement.

### 3. Method

#### Statement of the problem

Although this group uses technology almost exclusively, there isn't any actual data linking it to higher levels of productivity at work. Investigating the frequency of technology use and its relationship to work productivity among employed college students between the ages of 17 and 25 is therefore crucial. Determining the type and degree of this link is essential to developing tactics that effectively increase productivity in both professional and academic contexts.

#### Variables of the study

**Work productivity:** It is described in the Endicott Work Productivity scale manual as the degree to which a person is able to perform their work duties in a timely and efficient manner and it is multidimensional and includes the following dimensions: time management, efficiency, accuracy, initiative, cooperation, and attendance (Endicott, 1990).

**Technology usage:** It is as measured on a 10-point Likert scale created by the Media and Technology Usage Scale, is the self-reported frequency of using a particular technology. Very little usage is indicated by a score of 1, while very high usage is indicated by a score of 10 (Rosen et al., 2013).

#### Objectives of the study

- To know if there is significant relationship between work productivity and frequency of technology usage
- To know if there is an effect of frequency of technology usage on the work productivity of college students.

#### Hypothesis

- $H_{01}$ : There is no significant relationship between work productivity and frequency of technology usage.
- $H_{02}$ : There is no effect of frequency of technology usage on the work productivity of college students

#### Sample Distribution

The sample consisted of 165 students currently pursuing an undergraduate/postgraduate course in a university/college in India. The age group consisted of anyone between the ages of 17 to 25 years. The sample was selected using convenient sampling. The population of this study consisted of students who were pursuing their undergraduate or their postgraduate studies and were simultaneously having part time jobs and those who fell between the ages of 17 to 25. Students who did not have a part time job were excluded.

#### Research Design

This research has a quantitative research approach. The data collection for the study was carried out through convenient sampling and was conducted through the online mode. The scales were compiled in a Google form and shared with the participants through online platforms. Due consent was taken prior to the taking of the questionnaires, and they were also informed about their right to withdraw.

#### Tools used for the study

**Media and Technology Usage and Attitudes Scale (MTUAS):** This scale measures the frequency of technology usage. This scale includes 44 items which comprise 11 subscales: Smartphone Usage (9 items), General Social Media Usage (9 items), Internet Searching (4 items), E-Mailing (4 items), Media Sharing (4 items), Text Messaging (4 items), Video Gaming (3 items), Online Friendships (2 items), Online

Friendships (2 items), Facebook Friendships (2 items), Phone Calling (2 items) and TV Viewing (2 items) (Rosen et al., 2013).

**Endicott Work Productivity Scale (EWPS):** Its is a self-report questionnaire that measures the impact of illness or injury on work productivity. It is a 25-item questionnaire that assesses four components of work productivity: Attendance: The number of hours worked and the days lost due to illness or injury are both considered attendance. Work quality: The capacity to accomplish tasks accurately and quickly. Performance capacity: The capacity to carry out duties at work to the best of one's ability. Personal factors: A person's health or injury's effect on their social, mental, physical, and emotional well-being are personal aspects (Endicott & Nee, 1997).

### Procedure of the study

The participants were briefed about the study and the variables of the study. If they were willing to participate in the study, they were given the google form and informed consent was taken before filling out the form. If the participant met the criteria for the study, they continued to fill out the questionnaire.

### Ethical considerations

Informed consent was taken of the participant. Care was taken to not reveal any information of the participant.

## 4. Results

This study examines the association between a population of working college students, aged 17 to 25, and their frequency of technology use and productivity at work. Online surveys were used to collect data in order to gain insight into these characteristics. Using regression and correlation analysis, the study aims to measure the influence of one variable on the other in this population and identify meaningful relationships between the frequency of technology use and job productivity. By means of a thorough statistical analysis, this study aims to further the scholarly conversation regarding the relationship between the productivity levels of college students who work part-time and their patterns of technology use. The goal of the study is to shed light on these dynamics in order to help policymakers, companies, and educational institutions optimize productivity measures that are specifically designed to meet the requirements and conditions of this particular demographic.

**Table 1**  
*Descriptive statistics*

	Mean	Standard deviation
Work productivity	11.9756	9.40170
Social media usage	212.2561	50.94947

The mean work productivity score for participants was 11.98. The scores of the scale ranged from on a 0 to-50 scale. The interpretation of scores on the tool is as follows: 0-20 as a high productivity, 20-40 as moderate productivity, 40 and above as low productivity. Considering the mean of work productivity 11.9, it can be said that, on average, the current participants have a moderate level of work productivity. This

indicates that no participants achieved the maximum possible score, and the observed deviation ( $SD = 9.40$ ) highlights differences in work productivity from the mean across the sample. The scores of the social media usage scale ranged from between 44 to 440. The potential usage range fell between 83 to 351. Considering the mean of social media usage, 212.26, it can be said that, on average, the current participants have a moderate level of social media usage. This indicates that no participants achieved the maximum score possible and the observed deviation ( $SD = 50.94$ ) highlights the differences in social media usage from the mean across the sample.

**Table 2**  
*Bivariate Correlations between Work Productivity and Social Media Usage*

	Work productivity	Social media usage
Work productivity		
Social media usage	.264**	

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

A Pearson correlation analysis revealed a positive relationship between work productivity and social media usage, ( $r = .264, p < .01; n = 198$ ). This finding suggests that higher levels of social media usage are associated with slightly increased work productivity among the study participants. The statistical significance of this result at the .01 level indicates that the observed association is unlikely to have occurred by chance, thus providing evidence of a significant relationship between the variables. However, the magnitude of the correlation coefficient (.264) denotes a weak relationship. This implies that while there is a statistically significant positive association, the effect size is small, suggesting that social media usage explains only a small portion of the variability in work productivity. Therefore, other factors not examined in this study may have a more substantial impact on work productivity.

**Table 3**  
*Regression results using Lifelong Learning as criterion*

Model	Unstandardized coefficients	Standardized coefficients	Sig.	95.0% Confidence Interval for B		Model Fit
	B	Beta		Lower Bound	Upper Bound	R <sup>2</sup> = .070
(Constant)	1.634		.593	-4.393	7.660	Adjusted R <sup>2</sup> = .064
Social Media Usage	.049	.264	.001	.021	.076	F(1, 162) = 12.141; p = .001

Note. Dependent variable: work productivity



A simple linear regression analysis was conducted to examine the impact of social media usage on work productivity. The results, presented in Table 1, indicate that social media usage significantly predicted work productivity, ( $\beta = .264, p < .01$ ), explaining 7% of the variance in work productivity ( $R^2 = .070$ ). For each one-unit increase in social media usage, work productivity is expected to increase by .070 units, holding all other variables constant. The confidence interval for the effect of social media usage on work productivity (.021- .076) provides a range within which we are 95% confident the true effect size lies. Although the effect size is not large, it is notable, especially considering the multitude of factors that can influence work productivity.

## 5. Discussion

The analysis of the study reveals that the increase in social media usage would lead to higher work productivity among college students. This is supported by a large number of available literature. In the study it was found that a movement in the workforce mix toward skilled people is linked to the rising use of information technology, and this trend is positively correlated with company productivity (Krueger & Summers, 1988). Information technology investment and productivity growth are positively correlated, according to a number of empirical studies conducted in a variety of industries and organizational contexts. It has been demonstrated that information technology adoption increases organizational performance, creativity, and efficiency, which boosts productivity results. Research indicates that companies that use information technology resources strategically tend to be more productive since new technologies allow for more efficient resource allocation and streamlined operations (Krueger & Summers, 1988) Research on how information technology affects productivity has frequently shown that in order to fully realize productivity benefits, complementary investments in organizational procedures, technological infrastructure, and human capital are necessary (Brynjolfsson & Yang, 1996). According to a study by Franke (1987), there may be a correlation between the rise in IT use and a change in employment toward skilled individuals. They also discover data suggesting a favorable correlation between company productivity and these shifts in the makeup of the workforce. Celebi and Terkan (2020) say that participants' work performance increased, when social media frequency of usage increased in the workplace.

According to the research done by Moqbel et al. (2013) , most students use social media networking sites to meet their learning objectives. Among undergraduate students, YouTube is the social media platform that they use the most. Having spent the last three years on social networking sites, the majority of students believe that these platforms are user-friendly. Students that use social media more frequently are able to communicate with others, increase their academic performance, and hone their writing and reading abilities. Most students use social media networks for an hour every day. Students use social networking websites on laptops, smartphones, and desktop PC's, based on the collected data, one may draw the conclusion that while social media helps most participants with their academic experience, they still need to exercise self-control and time management. Otherwise, pupils' use of social media will have a detrimental impact on their academic achievement. According to the findings, social networking site use may be a new method for people to balance their work and personal lives, which benefits firms rather than contributing to presenteeism only (Moqbel et al., 2013).

## 6. Summary and conclusion

Significant connections are found in the study, which examines the effect of technology use on work productivity among hired college students in India, ages 17 to 25. But its limited scope leaves out jobless people and ignores different gender dynamics and cultural differences, so it should be interpreted cautiously and calls for more inclusive sampling techniques. In conclusion, the study set out to determine how college students, ages 17 to 25, who were spread across India who were involved in part time jobs, used technology to be more productive at work. With the use of questionnaires to gather data, the study found that participant productivity at work and technology use were positively correlated.

## 7. Implications

The study highlights the positive correlation between technology use and workplace productivity, particularly among college students balancing multiple jobs. It advocates for companies to invest in technology and training to optimize efficiency. Additionally, it stresses the importance of considering ethnic diversity in research sampling to ensure representative results and highlights the significance of accounting for cultural and gender dynamics in interpreting findings. Future research should employ expanded sampling techniques and nuanced methodologies to navigate cultural and demographic variations effectively, recognizing the impact of societal expectations on technology usage and productivity.

## 8. Limitations and suggestions for future studies

Those not enrolled in postsecondary education are not included in the study because it only focuses on employed college students. Generalizability is hampered by disregarding the various educational backgrounds and cultural variances throughout Indian areas. Results should be interpreted cautiously, as larger sample sizes are required to provide thorough understanding of gender inequalities.

## References

1. Abdelhamid, M. (2023). Impact of Social Media Usage on College Student Academic Performance, Mental Health, and Productivity. [https://www.researchgate.net/publication/372572505\\_Impact\\_of\\_Social\\_Media\\_Usage\\_on\\_College\\_Student\\_Academic\\_Performance\\_Mental\\_Health\\_and\\_Productivity](https://www.researchgate.net/publication/372572505_Impact_of_Social_Media_Usage_on_College_Student_Academic_Performance_Mental_Health_and_Productivity)
2. Adeinat, I. M., & Kassim, N. M. (2019). Extending the service profit chain: the mediating effect of employee productivity. *International Journal of Quality & Reliability Management*, 36(13). <https://doi.org/10.1108/IJQRM-03-2018-0064>
3. Aguenza, B. B., Al-Kassem, A., & Som, A. P. M. (2012). Social Media and Productivity in the Workplace: Challenges and Constraints. Undefined. <https://www.semanticscholar.org/paper/Social-Media-and-Productivity-in-the-Workplace%3A-and-Aguenza-Al-Kassem/2675378a78c682793b8e9ff235be302b88051233>
4. Akakandelwa, A., & Walubita, G. (2018, October 19). (PDF) Students' Social Media Use and its Perceived Impact on their Social Life: A Case Study of the University of Zambia. ResearchGate. [https://www.researchgate.net/publication/328389136\\_Students](https://www.researchgate.net/publication/328389136_Students)
5. Al Rahmi, W. M., & Othman, M. S. (n.d.). The Impact Of Social Media Use On Academic Performance Among University Students: A Pilot Study. *Journal of Information Systems Research and Innovations*.

6. Al-Menayes, J. J. (2015). (PDF) Social Media Use, Engagement and Addiction as Predictors of Academic Performance. *International Journal of Psychological Studies*, 7, 86. <https://doi.org/10.5539/ijps.v7n4p86>
7. Ali, A., Wang, H., & Khan, A. N. (2019). Mechanism to enhance team creative performance through social media: A Transactive memory system approach. *Computers in Human Behavior*, 91, 115–126. <https://doi.org/10.1016/j.chb.2018.09.033>
8. Ali-Hassan, H., Nevo, D., & Wade, M. (2015). Linking dimensions of social media use to job performance: The role of social capital. *The Journal of Strategic Information Systems*, 24(2), 65–89. <https://doi.org/10.1016/j.jsis.2015.03.001>
9. Alzahrani, S., & Bach, C. (2014). Impact of Social Media on Personality Development. *International Journal of Innovation and Scientific Research*, 3(2), 111–116. <https://ijisr.issr-journals.org/abstract.php?article=IJISR-14-121-13>
10. Bresnahan, T. F., Brynjolfsson, E., & Hitt, L. M. (2002). Information Technology, Workplace Organization, and the Demand for Skilled Labor: Firm-Level Evidence. *The Quarterly Journal of Economics*, 117(1), 339–376. <https://www.jstor.org/stable/2696490>
11. Brynjolfsson, E., & Yang, S. (1996, January 1). Information Technology and Productivity: A Review of the Literature (M. V. Zelkowitz, Ed.). ScienceDirect; Elsevier. <https://www.sciencedirect.com/science/article/abs/pii/S0065245808606440>
12. Burke-Smalley, L. A., & Hsieh, C. (2006). Optimizing fixed and variable compensation costs for employee productivity. *International Journal of Productivity and Performance Management*, 55(2). <https://doi.org/10.1108/17410400610641726>
13. Cai, Z., Huang, Q., Liu, H., & Wang, X. (2018). Improving the agility of employees through enterprise social media: The mediating role of psychological conditions. *International Journal of Information Management*, 38(1), 52–63. <https://doi.org/10.1016/j.ijinfomgt.2017.09.001>
14. Celebi, S. I., & Terkan, R. (2020). Social Media and Employee Productivity at Workplace. *International Review of Management and Marketing*, 10(6), 37–41. <https://doi.org/10.32479/irmm.10806>
15. Demuyakor, J. (2020). Opportunities and Challenges of Digital Media: A Comprehensive Literature Review of Ghana. *SSRN Electronic Journal*, 2(2). <https://doi.org/10.2139/ssrn.3576045>
16. Dey, C., Tandon, M., & Soni, R. (2022). An Analysis of the negative impact of social media use on academic performance of adolescents. *International Journal of Health Sciences*, 6(S6), 4155–4168. <https://doi.org/10.53730/ijhs.v6nS6.10580>
17. Dhiman, B. (2022). Use and Impact of Social Media on Academic Performance of Kurukshetra University Students: A Case Study. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4212827>
18. Dumford, A. D., Miller, A. L., Lee, C. H. K., & Caskie, A. (2023). Social media usage in relation to their peers: Comparing male and female college students' perceptions. *Computers and Education Open*, 4(2666-5573), 100121. <https://doi.org/10.1016/j.cao.2022.100121>
19. Endicott, J., & Nee, J. (1997). Endicott Work Productivity Scale (EWPS): a new measure to assess treatment effects. *Psychopharmacology Bulletin*, 33(1), 13–16. <https://pubmed.ncbi.nlm.nih.gov/9133746/#:~:text=The%20total%20score%20is%20based>
20. Franke, R. H. (1987). Technological revolution and productivity decline: Computer introduction in the financial industry. *Technological Forecasting and Social Change*, 31(2), 143–154. [https://doi.org/10.1016/0040-1625\(87\)90046-1](https://doi.org/10.1016/0040-1625(87)90046-1)

21. Greenana, N., & Mairesse, J. (2000). Computers And Productivity In France: Some Evidence. *Economics of Innovation and New Technology*, 9(3), 275–315. <https://doi.org/10.1080/10438590000000011>
22. Harter, J. (2017, April 12). The right culture: not just about employee satisfaction. Gallup.com; Gallup. <https://www.gallup.com/workplace/236366/right-culture-not-employee-satisfaction.aspx>
23. Jiang, H., Siponen, M., & Tsohou, A. (2021). Personal use of technology at work: a literature review and a theoretical model for understanding how it affects employee job performance. *European Journal of Information Systems*, 4, 1–15. <https://doi.org/10.1080/0960085x.2021.1963193>
24. John, W. (2021). Media Consumption and its Effects. [Www.hilarispublisher.com](http://www.hilarispublisher.com). <https://www.hilarispublisher.com/open-access/media-consumption-and-its-effects-85852.html>
25. Jong, D., Chen, S.-C., Ruangkanjanases, A., & Chang, Y.-H. (2021). The Impact of Social Media Usage on Work Efficiency: The Perspectives of Media Synchronicity and Gratifications. *Front. Psychol.*, 12. <https://doi.org/10.3389/fpsyg.2021.693183>
26. Junco, R. (2012). Too much face and not enough books: The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. *Computers and Education*, 58(1), 162–171. <https://doi.org/10.1016/j.compedu.2011.08.004>
27. Kolhar, M., Kazi, R. N. A., & Alameen, A. (2021). Effect of social media use on learning, social interactions, and sleep duration among university students. *Saudi Journal of Biological Sciences*, 28(4), 2216–2222. <https://doi.org/10.1016/j.sjbs.2021.01.010>
28. Krueger, A. B., & Summers, L. H. (1988). Efficiency Wages and the Inter-Industry Wage Structure. *Econometrica*, 56(2), 259. <https://doi.org/10.2307/1911072>
29. Leftheriotis, I., & Giannakos, M. N. (2014). Using social media for work: Losing your time or improving your work? *Computers in Human Behavior*, 31, 134–142. <https://doi.org/10.1016/j.chb.2013.10.016>
30. Lepp, A., Barkley, J. E., & Karpinski, A. C. (2015). The Relationship Between Cell Phone Use and Academic Performance in a Sample of U.S. College Students. *SAGE Open*, 5(1), 215824401557316. <https://doi.org/10.1177/2158244015573169>
31. Lerner, D., Amick, B. C., Rogers, W. H., Malspeis, S., Bungay, K., & Cynn, D. (2001). The Work Limitations Questionnaire. *Medical Care*, 39(1), 72–85. <https://doi.org/10.1097/00005650-200101000-00009>
32. Li, Y.-H., & Huang, J.-W. (2013). Exploitative and exploratory learning in transactive memory systems and project performance. *Information & Management*, 50(6), 304–313. <https://doi.org/10.1016/j.im.2013.05.003>
33. Logaraj, M., Madhupriya, V., & Hegde, S. K. (2014). Computer Vision Syndrome and Associated Factors Among Medical and Engineering Students in Chennai. *Annals of Medical and Health Sciences Research*, 4(2), 179–185. <https://www.ajol.info/index.php/amhsr/article/view/112152>
34. Mark, G., & Volda, S. (2012, May 7). Email “vacations” decrease stress, increase concentration. UCI News. <https://news.uci.edu/2012/05/07/email-vacations-decrease-stress-increase-concentration/>
35. Mohammad Alzubi, A. (2022). Impact of New Digital Media on Conventional Media and Visual Communication in Jordan. *Journal of Engineering, Technology, and Applied Science*, 4(3), 105–113. <https://doi.org/10.36079/lamintang.jetas-0403.383>

36. Moqbel, M., Nevo, S., & Kock, N. (2013). Organizational members' use of social networking sites and job performance: An exploratory study. *Information Technology & People*, 26(3), 240–264. <https://doi.org/10.1108/ITP-10-2012-0110>
37. Nam, T. (2013, December). *Technology Use and Work-Life Balance*. ResearchGate; Springer Verlag. [https://www.researchgate.net/publication/260081749\\_Technology\\_Use\\_and\\_Work-Life\\_Balance](https://www.researchgate.net/publication/260081749_Technology_Use_and_Work-Life_Balance)
38. Omenugha, N. O. (2018). The Utilization of Digital Platforms for Marketing in the Nigerian Entertainment and Media (E&M) Industry: Prospects and Challenges. *Case Studies in Business and Management*, 5(1), 60. <https://doi.org/10.5296/csbn.v5i1.13240>
39. Owusu-Acheaw, M., & Larson, A. (2015). Use of Social Media and its Impact on Academic Performance of Tertiary Institution Students: A Study of Students of Koforidua Polytechnic, Ghana. <https://files.eric.ed.gov/fulltext/EJ1083595.pdf>
40. Palla, I. A., & Sheikh, A. (2021). Impact of social media on the academic performance of college students in Kashmir. *Information Discovery and Delivery*, 49(4), 298–307. <https://doi.org/10.1108/IDD-06-2020-0061>
41. Palmer, W. W., & Dean, C. C. (1973). Increasing employee productivity and reducing turnover. *Training & Development Journal*, 27(3), 52–54. <https://psycnet.apa.org/record/1973-30150-001>
42. Priyadarshini, C., Dubey, R., Kumar, Y. L. N., & Jha, R. (2020). Impact of Social Media Addiction on Employees' Wellbeing and Work Productivity. *The Qualitative Report*, 25(1), 181–196. <https://nsuworks.nova.edu/tqr/vol25/iss1/12/>
43. Read “Preparing for the Revolution: Information Technology and the Future of the Research University” at NAP.edu. (n.d.). In [nap.nationalacademies.org](http://nap.nationalacademies.org). <https://nap.nationalacademies.org/read/10545/chapter/3>
44. Rosen, L. D., Whaling, K., Carrier, L. M., Cheever, N. A., & Rokkum, J. (2013). The Media and Technology Usage and Attitudes Scale: An empirical investigation. *Computers in Human Behavior*, 29(6), 2501–2511. <https://doi.org/10.1016/j.chb.2013.06.006>
45. Siew, F., Hassan, C., Nor, M., Ain, N., & Malek, A. (2017). The Relationship Between Smartphone Use and Academic Performance: A Case of Students in a Malaysian Tertiary Institution [1]1Centre of Language Studies and Generic Development, Universiti. *Malaysian Online Journal of Educational Technology*, 5(4). <https://files.eric.ed.gov/fulltext/EJ1156718.pdf>