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Impact of Digital Distractions on Time Management Skills among Pokhara University Undergraduate Business Students in Kathmandu

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Abstract

This study examines the impact of digital distractions on time management skills among Pokhara university undergraduate business students in Kathmandu. Time management skills is the dependable variables. The independent variables are multitasking, social media usage, self-regulation, friends circle and device usage. The study is based on primary data with 155 respondents. To achieve the purpose of the study, structured questionnaire is prepared. The correlation coefficients and regression models are estimated to test the significance and the Impact of digital distractions on time management skills among Pokhara university undergraduate business students in Kathmandu.

The study showed that multitasking is positively correlated to time management skills. It means that increase in multitasking aspect of digital distractions leads to increase in positive time management skills. Likewise, social media usage is positively correlated to time management skills. It implies that digital distraction using social media results to increases in the time management skills. Similarly, self-regulation has a positive relationship with time management skills indicating that increase in the self-regulation aspect leads to increase in time management skills. Furthermore, friends circle has a positive relationship with time management skills. It implies that better friend circle leads to increase in time management skills. Likewise, device usage is positively correlated to the time management skills indicating that higher the device usage, higher will be the time management skills.

Keywords: time management, social media usage, digital distractions, multitasking, device usage, friends circle, self- regulation

1. Introduction

Digital distractions refer to interruptions or disturbances caused by digital devices, such as smartphones, computers, and tablets, that divert attention away from tasks or activities. The concept of digitalization encompasses the societal change processes driven by new technological solutions, enabling new businesses, new opportunities, and completely new movements in society (Gulliksen, 2017). The introduction of mobile devices such as smartphones, tablets and wearables, and social media platforms such as Facebook, WhatsApp, Twitter, Snapchat and Instagram, the availability of media solutions and content has dramatically increased (Aagaard, 2015).

Winter *et al.* (2010) examined effective e-learning, multi-tasking, distractions and boundary management by graduate students in an online environment. The study found that this may have implications for students' and tutors' appropriation of Web 2.0 technologies for

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educational purposes and that further research into online boundary management may enhance understanding of the e-learning experience. Davies *et al.* (2002) examined on enhancing independent time-management skills of individuals with mental retardation using a palmtop personal computer. The study found that to prompting software to increase independence in the performance of vocational and daily living tasks by individuals with mental retardation.

Self-regulated learners (SRLs) set learning goals, make plans, and actively organize the environment in a way to maximize their learning by monitoring and regulating their cognition, motivation and behaviors during learning; and they also reflect on the process (Zimmerman, 1990). According to Zimmerman (1989), Self-regulated learning (SRL) is defined as a learning process in which the learners are metacognitively, motivationally and behaviorally active participants.

The study found that SRL is positively associated with motivation, academic performance, learning, achievement (Brady *et al.,* 2021). Han and Yi's (2019) found the smartphone usage in college classrooms. The study found that college students higher levels of smartphone self-efficacy, as they used smartphones as learning tools for online learning, facilitating their interaction with friends and multitasking.

Gebre *et al*. (2014) found students' cognitive and social engagement in technology-rich classrooms is significantly related to their professors' views of effective teaching. Deil-Amen *et al.* (2015) found that the need for colleges and universities to provide adequate technology, technology support, and instructor training time. Siraj *et al.* (2015) found Malaysian medical students at a public university that reported high internet usage also reported higher academic performance

Chen *et al.* (2014) asserted that technology can have both positive and negative impacts on student learning. David *et al*. (2015) found that the frequency and attention as distinct measures of media multitasking. Zimmerman (1986) defined the self-regulated learner as one who is a contemporary educational technology, 2022 contemporary educational technology, metacognitive, motivationally, and behaviorally active participant in their own learning.

Digital distraction is defined as any distraction that is digital, i.e. mobile communication technology that may potentially interfere with a participant's attention on a primary task (Dörner & Edelman, 2015). Aivaz and Teodorescu (2022) examined on college students' distractions from learning caused by multitasking in online vs. face-to-face classes. The study addressed that there is an important gap in the existing literature on digital distraction in the college classroom. Limniou (2021) examined the effect of digital device usage on student academic performance. The study found that the importance of reconsidering the teaching delivery process so as to avoid students' escapism using devices during lecture theatres due to their engagement level and lecture norm pressures. The study found that the relations between homework distraction and other variables such as homework quality, expectancy, value, effort, online learning strategies, and completion in online learning environments (Tsai, 2009).

Perez-Juarez *et al*. (2023) examined students' digital distractions from the Point of view of higher education. The study found that the impact of technology on students

identifying the main digital distractors, especially during the development of laboratory classes in university campuses. McCoy (2020) analyzed the digital distractions in the classroom: student classroom use of digital devices for non-class related purposes. The study found that many college students use mobile devices for academic purposes but were concerned about their potential for distraction. Nath *et al.* (2015) explored an empirical study of the factors that influenced in-class digital distraction among university students. The study found that younger students tended to be more distracted in the classroom.

Mokhtari *et al.* (2015) examined distracted multitasking among college students. The study indicated that the amount of time that college students spend on the Internet does not seem to interfere with the time they report spending on other core activities. Charnigo and Barnett (2007) examined the impact of a digital trend on academic libraries. The study found that librarians were overwhelmingly aware of and moderately knowledgeable about Facebook. Gillespie *et al*. (2012) examined cognitive function and assistive technology for cognition. The study concluded that ATC have been used to effectively support cognitive functions relating to attention, calculation, emotion, experience of self, higher level cognitive functions (planning and time management) and memory.

Pagani *et al.* (2016) explored the impact of digital skills on educational outcomes. The study found that the relationship between ICT skills and school performance varies widely by parental background, academic achievement and school-type. Selwyn (2016) explored university students' negative engagements with digital technology. The study found that the relations between people and technology, shaped by the social, cultural, economic and political relations that inform these interactions. Wang *et al.* (2015) found that digital device distractions may be minimized by imposing multitasking behaviors in classrooms that can more strategically allocate students' cognitive resources. Deil-Amen *et al.* (2015) found that the need for colleges and universities to provide adequate technology, technology support, and instructor training time.

The potential positive consequences from adopting mindfulness activities include heightened awareness, improved attention, and increased levels of observing thoughts, feelings, and perceptions (Snippe *et al*., 2015). Hinsch and Sheldon (2013) found that a reduction in Facebook use, which could be a consequence of Digital Detoxing, could lead to a decrease in procrastination. The study found that SRL is positively associated with motivation, academic performance, learning, achievement (Brady *et al.,* 2021).

Pintrich's (2000) found the SRL model as a theoretical framework espousing both the challenges that are faced at each of the four phases: forethought, planning and activation; monitoring, control and reaction and reflection. While there are numerous benefits of technological devices for college students' learning, it is undeniable that digital distraction has also become a prevalent intrusion in the college classroom and on college learners' learning and studying (Aaron & Lipton, 2018).

In the context of Nepal, Neupane (2017) stated that technology helps create a community of practice acquire language proficiency, advance critical and problem-solving skills, increase their engagement, retention, and obtain higher academic achievement. (Laudari & Maher,2019) identified several barriers to learning in developing contexts including lack

of support, limited ICT infrastructure, insufficient funds and lack of proper plan to integrate technology in education.

Neupane (2021) found that students faced challenges in learning with different pedagogical practices of their teachers, learning digital technology, and financial constraints to purchase more convenient devices and connecting internet services, especially in rural and semi-urban areas. Parajuli and Linkha (2020) found that students in Nepal faced academic challenges such as course commencement delays, limited access to library resources, and limited teaching learning activities because of Covid-19.

The above discussion reveals that the empirical evidences vary greatly across the studies concerning the impact of digital distractions on time management skills. Though there are above mentioned empirical evidences in the context of other countries and in Nepal, no such findings using more recent data exist in the context of Nepal. Therefore, in order to support one view or the other, this study has been conducted.

The main purpose of the study is to analyze the impact of digital distractions on time management skills among Pokhara university undergraduate business students in Kathmandu. Specifically, it examines the impact of multitasking, social media usage, self-regulation, friends circle and device usage on time management skills in Kathmandu.

The remainder of this study is organized as follows. Section two describes the sample, data and methodology. Section three presents the empirical results and the final section draws the conclusion.

2. Methodological aspects

The study is based on primary data. The data were gathered from 155 respondents through questionnaire. The respondents' views were collected on multitasking, social media usage, self-regulation, friend's circle and device usage on time management skills in Kathmandu. The study is based on descriptive and causal comparative research designs.

The Model

The model estimated in this study assumes that time management skills depends on digital distractions. The dependent variables selected for the study is time management skills. Similarly, the selected independent variables are multitasking, social media usage, self-regulation, friends circle and device usage Therefore, the model takes the following form:

$$TMS = \beta_0 + \beta_1 MT + \beta_2 SMU + \beta_3 SR + \beta_4 FC + \beta_5 DU + e$$

Where,

TMS=Time management skills

MT=Multitasking

SMU=Social media usage

SR=Self-Regulation

FC=Friends circle

DU=Device usage

Multitasking was measured using a 5-point Likert scale where respondents were asked to indicate the responses using 5 for strongly disagree and 1 for strongly agree. There are 5 items and sample items include "I believe that multitasking affects my ability to prioritize tasks effectively.", "I believe that reducing multitasking would improve my time management skills significantly" and so on. The reliability of the items was measured by computing the Cronbach's alpha ($\alpha = 0.789$).

Social media usage was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 5 for strongly disagree and 1 for strongly agree. There are 5 items and sample items include "Social media use significantly impacts my ability to manage my time effectively.", "When I spend more time on social media, I find it harder to prioritize tasks" and so on. The reliability of the items was measured by computing the Cronbach's alpha ($\alpha = 0.799$).

Self-Regulation were measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 5 for strongly disagree and 1 for strongly agree. There are 5 items and sample items include "I am able to regulate my social media usage to prioritize important tasks effectively "I actively manage my online interactions to avoid distractions that hinder my productivity", and so on. The reliability of the items was measured by computing the Cronbach's alpha ($\alpha = 0.830$).

Friends circle was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 5 for strongly disagree and 1 for strongly agree. There are 5 items and sample items include "My friends circle plays a role in helping me manage my time better despite digital distractions", "My friends circle significantly contributes to improving my time management skills in the face of digital distractions" and so on. The reliability of the items was measured by computing the Cronbach's alpha ($\alpha = 0.833$).

Device usage was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 5 for strongly disagree and 1 for strongly agree. There are 5 items and sample items include "I spend excessive time on digital devices, leading to difficulties in managing my time effectively.", Using digital devices often interrupts my planned tasks or activities, causing delays in completing them", and so on. The reliability of the items was measured by computing the Cronbach's alpha ($\alpha = 0.809$).

Time Management skills was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 5 for strongly disagree and 1 for strongly agree. There are 5 items and sample items include "Digital distractions significantly impede my ability to effectively manage my time", "I believe I could improve my time management by reducing digital distractions", and so on. The reliability of the items was measured by computing the Cronbach's alpha ($\alpha = 0.809$).

The following section describes the independent variables used in this study along with hypothesis formulation.

Multitasking

Bannister and Remenyi (2009) stated that it is commonly assumed that multitasking is a more effective way of working than the traditional single task approach. Media multitasking examined mainly for its negative impact on cognitive performance and functions, such as academic performance (Junco, 2012). Multitasking refers to the simultaneous pursuit of two or more relatively independent tasks, with at least one of the tasks involving media (Sanbonmatsu *et al.,* 2013). Shih (2013) found no significant correlation between media multitasking and a range of psychosocial well-being factors, including emotional positivity, sociability, and impulsivity. Wang and Tchernev (2012) found that students sacrificed performance on cognitive tasks for emotional and entertainment gains by engaging in media multitasking activities. Shih (2013) found no significant correlation between media multitasking and a range of psychosocial well-being factors, including emotional positivity, sociability, and impulsivity. Based on it, this study develops the following hypothesis:

H_1: There is a positive relationship between multitasking and time management skills.

Social media usage

Social media usage refers to the activities, interactions, and engagements that individuals or organizations undertake on social media platforms. Gonzales and Hancock (2011) showed that selective self-presentation using social media sites like Facebook can have a positive influence on self-esteem, especially when the individual selectively self-presents by editing information about the self. The study also found that about two-thirds of the students reported using electronic media while in class, studying, or doing homework (Jacobsen, & Forste, 2011). The relationship between Facebook and well-being appears to become positive over the college years, possibly because upper-class students use Facebook to connect socially with their peers and participate in college life (Kalpidou *et al*., 2011). The study pointed to positive relationships between social networking site usage and college student engagement (Heiberger & Harper, 2008). Based on it, this study develops the following hypothesis:

H_2: There is a positive relationship between social media usage and time management skills.

Self-regulation

Self-regulation refers to the ability to monitor, control, and manage one's thoughts, emotions, behaviors, and actions in various situations. According to Zimmerman (1989), Self-regulated learning (SRL) is defined as a learning process in which the learners are metacognitively, motivationally and behaviorally active participants. Self-regulated learners (SRLs) set learning goals, make plans, and actively organize the environment in a way to maximize their learning by monitoring and regulating their cognition, motivation and behaviors during learning; and they also reflect on the process (Zimmerman, 1990). The study examined the relationship between SRL and achievement have been conducted, which revealed that SRL is a significant predictor of academic success (Skibbe *et al.,* 2018). Based

on it, this study develops the following hypothesis:

H_3: There is a positive relationship between self-regulation and time management skills.

Friends circle

A friend's circle refers to a group of individuals who share a social connection based on mutual interests, values, activities, or experiences. Manski (1993) stated that the relationship between an individual's behavior and other group member's behavior comes from three diverse effects. The finding showed that peer's relationship influences academic performance of students. The study showed that problems in self-regulation of learning, which refer to problems in planning, monitoring and reflecting on one's own learning, are related to students' experiences of exhaustion at the beginning of their university studies (Heikkilä *et al.,* 2012). The study showed that peer learning may promote first-year students self-regulation skills by enhancing students' ability to monitor and reflect on their own learning (De Backer *et al.*, 2015). The study showed that students who set high demands on themselves particularly experience study-related exhaustion (Dickinson and Dickinson, 2015). Based on it, this study develops the following hypothesis:

H_4: There is a positive relationship between friend's circle and time management skills.

Device usage

Device usage refers to the extent and manner in which individuals interact with electronic devices such as smartphones, tablets, computers, and other digital gadgets. Learning on mobile devices, which is termed as mobile learning (m-learning) is defined as the use of mobile technologies in educational activities (Sharples, 2013). Mobile learning (or m-learning), which means learning through mobile devices (such as smart mobile phones, tablet PCs and E-ink Book devices), is changing the education landscape by offering learners the opportunity to engage in asynchronous, ubiquitous instruction (Hyman, 2014). The relationships between free time management skills and smartphone addiction risk in university students. The correlational pattern seeks to establish the presence of a meaningful relationship between two or more variables via statistical tests of correlation (Creswell, 2012). The study adopting mobile technologies in higher education could create powerful opportunities to access information anytime and anywhere to perform authentic activities in the context of students' learning (Martin, 2013). Mobile leaning is gradually becoming a research field with multidisciplinary participation, cross-field and multi-topic integration, as well as a key issue in the field of educational technology (Wang & Wang, 2013). Based on it, this study develops the following hypothesis:

H_5: There is a positive relationship between device usage and time management skills.

3. Results and discussion

Correlation analysis

On analysis of data, correlation analysis has been undertaken first and for this purpose, Kendall's Tau correlation coefficients along with mean and standard deviation has

been computed and the results are presented in Table 1.

Table 1

Kendall's Tau correlation coefficients matrix

This table presents Kendall's Tau correlation coefficients between dependent variable and independent variables. The correlation coefficients are based on 155 observations. The dependent variable is TMS (Time management skills). The independent variables are MT (multitasking), SMU (social media usage), SR (self-regulation), FC (friends circle) and DU (device usage)

variables	Mean	S.D.	TM	MT	SMU	SR	FC	DU
TM	1.620**	0.537**	1					
MT	1.711**	0.586**	0.631**	1				
SMU	1.628**	0.550**	0.568**	0.622**	1			
SR	1.713**	0.625**	0.671**	0.643**	0.588**	1		
FC	1.784**	0.674**	0.665**	0.683**	0.553**	0.723**	1	
DU	1.722**	0.587**	0.663**	0.646**	0.579**	0.661**	0.677**	1

Notes: The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.

Table 1 shows Kendall's Tau correlation coefficients between the variables. The study shows that multitasking is positively correlated to time management skills. It means that increase in multitasking aspect of digital distractions leads to increase in positive time management skills. Likewise, social media usage is positively correlated to time management skills. It implies that social media usage by the digital distractions to increase in the time management skills. Similarly, self-regulation has a positive relationship with time management skills indicating that increase in the self-regulation aspect leads to increase in time management skills. Furthermore, friends circle has a positive relationship with time management skills. It implies that better friend circle leads to increase in time management skills. Likewise, device usage is positively correlated to the time management skills indicating that higher the device usage, higher will be the time management skills.

Regression analysis

Having indicated Kendall's Tau correlation coefficients, the regression analysis has been carried out and the results are presented in Table 2. More specifically, it presents the regression results of multitasking, social media usage, self-regulation, friend's circle and device usage with time management skills in Kathmandu.

Table 2

Estimated regression results of multitasking, social media usage, self-regulation, friend's circle and device usage on the effect of digital distractions in Kathmandu

The results are based on 155 observations using linear regression model. The model is $TM = \beta_0 + \beta_1 M + \beta_2 SMU\ \beta_3 SR + \beta_4 FC + \beta_5 DU + \varepsilon$, where the dependent variable is TMS (Time management skills). The independent variables are Mt (multitasking), SMU (Social media usage), SR (Self- Regulation), FC (Friends circle) and DU (Device usage).

Model	Intercept	Regression coefficients of					Adj. R_bar^2	SEE	F-value
		MT	SMU	SR	FC	DU			
1	0.414 (4.848)**	0.705 (14.944)**					0.591	0.343	223.316
2	0.473 (5.042)**		0.705 (12.895)**				0.518	0.372	166.273
3	0.509 (6.128)**			0.649 (14.250)**			0.567	0.353	203.066
4	0.535 (6.745)**				0.608 (14.631)**		0.580	0.347	214.075
5	0.344 (4.380)**					0.741 (17.165)**	0.656	0.314	294.636
6	0.235 (2.767)**	0.476 (7.879)**	0.351 (5.444)**				0.655	0.315	147.373
7	0.159 (2.018)	0.367 (6.263)**	0.190 (2.897)**	0.307 (5.599)**			0.713	0.287	128.311
8	0.158 (2.027)	0.294 (4.357)**	0.206 (3.154)**	0.212 (2.996)**	0.608 (14.631)**		0.719	0.284	99.444
9	0.105 (1.428)	0.185 (2.751)**	0.146 (2.343)	0.163 (2.431)	0.084 (1.245)	0.309 (4.699)**	0.754	0.266	95.154

Note:

i. Figures in parenthesis are t-values.
ii. The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.
iii. Time management skills is the dependent variable.

Table 2 shows that the beta coefficients for multitasking are positive with time management skills. It indicates that multitasking has a positive impact on time management skills. This finding is similar to the findings of Evans Wang & Tchernev (2012). Likewise, the beta coefficients for social media usage concerns are positive with time management skills. It indicates that social media usage has a positive impact on time management skills. This finding is consistent with the findings of (Jacobsen, & Forste, 2011). Moreover, the beta coefficients for self-regulation are positive with time management skills. It indicates that self- regulation has a positive impact on time management skills. This finding is similar to the findings of (Zimmerman, 1990). Further, the beta coefficients for friend's circle are positive with time management skills. It indicates that friends circle has a positive impact on time management skills. This finding is consistent with the findings of (De Backer *et al.*, 2015). Likewise, the beta coefficients for device usage are positive with time management skills. It indicates that device usage has a positive impact on time management skills. This finding is similar to the findings of (Ciampa, 2014).

4. Summary and conclusion

This study can provide valuable insights on career adaptability and how it can affect student's performance. Digital distractions, primarily from electronic devices such as smartphones, tablets, and computers, significantly impact time management skills. These distractions increase cognitive load, making it difficult to focus on a single task due to constant interruptions from notifications, emails, and social media. Understanding the impact of digital distractions and implementing these strategies can enhance time management skills, improving productivity and efficiency in both personal and professional contexts.

This study attempts to examine the impact of digital distractions on time

management skills in Kathmandu valley. The study is based on primary data collected with 155 respondents.

The study showed that multitasking, social media usage, self-regulation, friends circle and device usage has positive relationship with the time management skills.The study also concluded that the most influencing factor is Friends circle followed by Self-regulation that explains time management skills in Kathmandu valley.

References

Aagaard, J., 2015. Media multitasking, attention, and distraction: a critical discussion. *Phenomenology and the Cognitive Sciences* 14 (4), 885-896.

Aivaz, K. A., and D. Teodorescu, 2022. College students' distractions from learning caused by multitasking in online vs. face-to-face classes: A case study at a Public University in Romania. *International Journal of Environmental Research and Public Health* 19(18), 1-16.

Bannister, R., and D. Remenyi, 2009. Multitasking: The uncertain impact of technology on knowledge workers and managers. *Electronic Journal Information Systems Evaluation,* 12(1), 1-12.

Brady, A. C., Y. E., Kim, and J. Cutshall, 2021. The what, why, and how of distractions from a self-regulated learning perspective. *Journal of College Reading and Learning* 51(2), 153-172.

Charnigo, L., and P. Barnett-Ellis, 2007. Checking out facebook. com: The impact of a digital trend on academic libraries. *Information technology and libraries* 26(1), 23-34.

Chen, L., R. Nath, and R. Insley, 2014. Determinants of digital distraction: A cross-cultural investigation of users in Africa, China and the U.S. *Journal of International Technology and Information Management* 23(3), 145- 171.

Ciampa, K., 2014. Learning in a Mobile Age: An Investigation of Student Motivation. *Journal of Computer Assisted Learning* 30(1), 82-96.

David, P., J. H. Kim, J. S. Brickman, W. Ran, and C. M. Curtis, 2015. Mobile phone distraction while studying. *New Media and Society* 17(10), 1661-1679.

Davies, D. K., S. E. Stock, and M. L. Wehmeyer, 2002. Enhancing independent time-management skills of individuals with mental retardation using a palmtop personal computer. *Mental Retardation* 40(5), 358-365.

Davis III, C. H., R. Deil-Amen, C. Rios-Aguilar, and M. S. González Canché, 2015. Social media, higher education, and community colleges: A research synthesis and implications for the study of two-year institutions. *Community College Journal of Research and Practice* 39(5), 409-422.

De Backer, L., H. Van Keer, and M. Valcke, 2015. Promoting university students' metacognitive regulation through peer learning: the potential of reciprocal peer tutoring. *Higher Education* 70(3), 469–486.

Dickinson, M. J., and D. A. G. Dickinson, 2015. Practically perfect in every way: can reframing perfectionism for high-achieving undergraduates' impact academic resilience? *Studies in Higher Education* 40(10), 1889–1903.

Dörner, K., and D. Edelman, 2015. What 'digital' really means. Retrieved May 22, 2019, *journal of Digital Distractions* 39(5), 409-422.

Flanigan, A. E., and S. Titsworth, 2020. The impact of digital distraction on lecture note taking and student learning. *Instructional Science* 48(5), 495-524.

Gebre, E., A., Saroyan, and R. Bracewell, 2014. Students' engagement in technology rich classrooms and its relationship to professors' conceptions of effective teaching. Br J Educ Technol British *Journal of Educational Technology* 70(3), 83-96.

Gillespie, A., C. Best, and B. O'Neill, 2012. Cognitive function and assistive technology for cognition: A systematic review. *Journal of the International Neuropsychological Society* 18(1), 1-19.

Gonzales, A. L., and J. T. Hancock, 2011. Mirror on my Facebook wall: Effects of exposure to Facebook on selfesteem. *Cyberpsychology, Behavior, and Social Networking* 14(1–2), 79–83.

Gulliksen, J. 2017. Institutionalizing human-computer interaction for global health. *Global Health Action.* 10(1), 1-7.

Halubanza, B., S. Kadakwiza, and J. Mulenga, 2023. Distracted minds and declining grades: Unveiling the detrimental effects of digital distraction on student academic performance. *Association of Public Universities and Colleges* 3(1), 27-36.

Han, S., and Y. J. Yi, 2019. How does the smartphone usage of college students affect academic performance? *Journal of Computer Assisted Learning,* 35(1), 13-22.

Heiberger, G., and R. Harper, 2008. Have you Facebooked astin lately? In R. Junco and D. M. Timm (Eds.), Using emerging technologies to enhance student engagement. *New Directions for Student Services* 124(1), 19–35.

Heikkilä, A., K. Lonka, J. Nieminen, and M. Niemivirta, 2012. Relations between teacher students' approaches to learning, cognitive and attributional strategies, well-being, and study success. *Higher Education* 64, 455–471.

Herman, R. L., 2017. Letter from the editor-in-chief: Digital distractions. *The Journal of Effective Teaching,* 17(2), 1-4.

Hinsch, C., and K. M. Sheldon, 2013. The impact of frequent social internet consumption: Increased procrastination and lower life satisfaction. *Journal of Consumer Behaviour* 12(1)*,* 496–505.

Hyman, J. A., M. Moser, and L. N. Segala, 2014. Electronic reading and digital library technologies: Understanding learner expectation and usage intent for mobile learning. *Educational Technology Research and Development* 62, 35- 52.

Jacobsen, W. C., and R. Forste, 2011. The wired generation: Academic and social outcomes of electronic media use among university students. *Cyberpsychology, Behavior, and Social Networking*, 14(5), 275–280.

Junco, R., 2012. In-class multitasking and academic performance. *Computers in Human Behavior* 28(6), 2236-2243.

Kalpidou, M., D., Costin, and J. Morris, 2011. The relationship between Facebook and the well-being of undergraduate college students. *Cyberpsychology, Behavior and Social Networking*, 14

(4), 183-189.

Laudari, S., and D. Maher, 2019. Barriers of ICT Use in EFL teacher education courses in Nepal: An activity-theory perspective. *Journal of NELTA,* 24(1) 77–94.

Limniou, M. 2021. The effect of digital device usage on student academic performance: A case study. *Education Sciences* 11(3), 1- 121.

Manski, C. F., 1993. Identification of endogenous social effects: The reflection problem. *The Review of Economic Studies* 60(3), 531-542.

Martin, F., and J. Ertzberger, 2013. Here and now mobile learning: An experimental study on the use of mobile technology. *Computers and Education* 68(1), 76-85.

McCoy, B. R., 2020. Gen Z and digital distractions in the classroom: *Student Classroom Use of Digital Devices for Non-Class Related Purposes*, 116(1), 1-35.

Mokhtari, K., J., Delello, and C. Reichard, 2015. Connected yet distracted: Multitasking among college students. *Journal of College Reading and Learning* 45(2), 164-180.

Nath, R., L. Chen, and L. Muyingi, 2015. An empirical study of the factors that influence in-class digital distraction among university students: a US–Namibia cross-cultural study. *Information Resources Management Journal (IRMJ)* 28(4), 1-18.

Neupane, B., 2021. University students' perceptions of online learning during COVID-19 pandemic. *International Journal of Multidisciplinary Perspectives in Higher Education* 6(2), 30-49.

Neupane, M., 2017. Shall we bend to blending learning? How? *Journal of NELTA* 22(1), 53–67.

Pagani, L., G., Argentin, G., M. Gui and L. Stanca, 2016. The impact of digital skills on educational outcomes: evidence from performance tests. *Educational Studies* 42(2), 137-162.

Parajuli, K. R., and T. R. Linkha, 2020. Teachers understanding towards COVID-19: A case of Dhankuta Multiple Campus, Dhankuta, Nepal. Rupantaran: *A Multidisciplinary Journal* 4(1), 82-99.

Pérez-Juárez, M. Á., and J. M. González-Ortega Aguiar-Pérez, 2023. Digital distractions from the point of view of higher educatnts. *Sustainability* 15(7), 60-64.

Pintrich, P. R., 2000. The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, and M. Zeidner (Eds.), *Handbook of Self-Regulation* 20(8),451-502.

Sanbonmatsu, D. M., D. L., Strayer, N., Medeiros-Ward and J. M. Watson, 2013. Who multi-tasks and why? Multi-tasking ability, perceived multi-tasking ability, impulsivity, and sensation seeking. *PLoS One* 8(1) 210-300.

Selwyn, N. 2016. Digital downsides: Exploring university students' negative engagements with digital technology. *Teaching in Higher Education* 21(8), 1006-1021.

Sharples M. 2013. Mobile learning: Research, practice and challenges. *Distance Education in China* **3**(5), 5-11

Shih, S.I., 2013. A null relationship between media multitasking and well-being. *Journal of Multitasking of Time Management* 8*(*5), 1-72.

Siraj, H. H., A. Salam, N. A. B., Hasan, T. H., Jin, R. B., Roslan, and M. N. B. Othman, 2015. *Internet usage and academic performance*: A study in A Malaysian Public University. *International Medical Journal* 22(2), 83-86.

Skibbe, L. E., J. J., Montroy, R. P., Bowles, F. J. Morrison, 2018. Self-regulation and the development of literacy and language achievement from preschool through second grade. *Early Childhood Research Quarterly* 46, 240-251.

Snippe, E., I., Nyklíček, M. J., Schroevers, and E. H. Bos, 2015. The temporal order of change in daily mindfulness and affect during mindfulness-based stress reduction. *Journal of Counseling Psychology* 62(2), 106–114.

Tsai, M. J., 2009. The model of strategic e-learning: Understanding and evaluating student e-learning from metacognitive perspectives. *Journal of Educational Technology and Society* 12(1), 34-48.

Wang, Y. M., and J. Wang, 2013. Research status and future trends of china's mobile learning in recent 20 Years. *Modern Distance Education Research* 10(1), 49-55.

Wang, Z., and J. M. Tchernev, 2012. The "myth" of media multitasking: reciprocal dynamics of media multitasking, personal needs, and gratifications. *Journal of Communication* 62(3), 493-513.

Wang, Z., M., Irwin, C., Cooper, and J. Srivastava, 2015. Multidimensions of media multitasking and adaptive media selection. *Human Communication Research* 41(1), 102–127.

Winter, J., D., Cotton, J., Gavin, and J. D. Yorke, 2010. Effective e-learning? Multi-tasking, distractions and boundary management by graduate students in an online environment. *Effective e-learning* 18(1), 71-83.

Zimmerman, B. J., 1986. Development of self-regulated learning: Which are the key subprocesses? *Contemporary Educational Psychology* 16(1), 307-313.

Zimmerman, B. J., 1989. A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology* 81(3), 329-339.

Zimmerman, B. J., 1990. Self-regulated learning academic achievement: An overview. *Educational Psychologist* 25(1), 3-17.