



University Students' Perceptions of Digital Distractions in Erbil, Iraq: Insights and Strategies

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Abstract: Digital devices are popular among learners due to their ease of accessing information and help keep in contact. This leads to frequent usage of digital devices that can lead to distraction or a shift in attention by possible notifications, videos, messages, and so on. University students specifically may struggle with keeping focus and continuing tasks because their devices draw attention away. This research presents learners' awareness regarding their device usage and the effects they experience. It works to gain comprehension of digital distractions' impact on learners' focus and functionality. Also, it aims to find strategies to reduce digital distractions to improve learning. The quantitative, cross-sectional descriptive survey method was chosen to gain insight into the digital distractions of learners. A Google Forms questionnaire was used to collect data from 170 learners attending Tishk International University- Erbil and Catholic University in Erbil. Through findings, it was found that digital distractions did present an issue for focus and grades of the participants. Most participants shared that audio alerts and text messages were the device features that were the most distracting. Common strategies to help manage these distractions were explored. Silencing sounds and keeping the device in another area were the most helpful strategies to maintain productivity. Overall, digital distractions were present among learners of these universities. These distractions did not overly harm their educational efforts but did cause hindrances in productivity.

Keywords: *Digital Devices, Distractions, Students, Perceptions, Universities*

1. Introduction

1.1 Background

Modern devices and technology have developed significantly, which has made accessing information and apps for various academic, social, and communicative purposes easy (Kumar, 2023). This has prompted a rise in the use of devices in various aspects including academics, which can pose an issue for maintaining focus. Digital distraction is a modern challenge faced by students and educators throughout the learning process (McGarr, 2024).

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It consists of having attention diverted from a task or a process towards notifications, apps, and other distractions. Working on technological devices during lectures or studying is beneficial to deepen knowledge but features like notifications, messages, socials, and apps can be difficult to resist and break their productive streak (Unser, 2017). Hence, exploring students' perspectives towards digital distractions effects on academic life is essential in assisting them to maintain proper usage and scholarly focus. Moreover, knowledge of coping strategies to limit digital devices' effects on focus is essential for higher education learners. Digital distractions pose obstacles for maintaining the flow of productivity because of their ability to easily shift focus to unproductive social or entertaining sources (Jarrahi, Blythe, & Goray, 2023). This means that the chime of a device has enough power to direct university students' interest towards checking and scrolling through non-academic content. Furthermore, it harms learners' comprehension of the course material and leads to greater effort and time being spent on finishing tasks. These distractions lead to slower productivity, weak retention of lecture content and skills, ineffective time management, and academic deterioration. After all, learners lacking willpower to avoid digital distractions will find themselves facing hardships; hence, highlighting the effects and coping strategies will ensure support in sustaining academic progress.

1.2 Purpose Statement

The purpose centers on understanding pupils' perspectives and aiding them in being aware of the influence digital devices have on academic life and having knowledge of coping strategies that can be applied to maximize pupils progress while limiting hindrance. Even though previous studies have investigated digital well-being, it has not gone in depth on higher education learners' awareness, nor does it specify coping strategies they possibly incorporate. Moreover, university learners from Tishk International University-Erbil and Catholic University in Erbil from stages 1 to 4 are the contributors of this study. The quantitative method was selected, and a survey was used to collect data and insight. Furthermore, the learners of these universities are being educated using modern methods and tools that incorporate devices with learning. Hence, gaining perspectives from these learners using devices can aid us in understanding the depth of struggle learners face when trying to stay on task.

1.3 Research Questions

1. What are the learners' perspectives regarding digital distractions effects?
2. How aware are learners regarding the frequency of being digitally distracted?
3. What are some coping strategies that learners are using to combat digital distractions and maintain focus?

1.4 Aim

This research's aim is to gain insight into university learners' awareness and views regarding digital distractions. It explores students' frequency of using digital devices and the purpose of accessing the devices within academic settings or study time, and the effect it has on their life. Furthermore, popular strategies will be highlighted through learners' responses to indicate favored methods to redirect attention and maintain productivity.



1.5 Hypothesis

University learners perceive digital distractions as an obstacle to maintaining focus on academics and continuous productivity.

1.6 Theoretical Framework

This study works to explore learners' perspectives and awareness towards digital devices while engaging in educational journeys. This explains how these distractions influence focus and academic engagement among learners. Regardless of digital distractions being studied globally, research on university students in Erbil, Iraq is limited specifically on their perceptions and experiences. Most existing studies focus on the frequency and outcomes of distractions rather than students' insights. This gap justifies exploring both students' perceptions and strategies to handle digital distractions in the local context.

2. Literature Review

2.1 Digital Distraction

According to the Merriam-Webster Dictionary (n.d.), distractions are when something shifts or takes focus from another thing. Device is equipment created to be used for a certain reason or to complete a job. Digital distraction is the diversion of focus from work or duties by digital devices. This usage of devices prompts a loss of focus and decrease in productivity (Sana, Weston, & Cepeda, 2013). Distractions prompt the focus of students to alternate between learning to unrelated activities. This means they alternate between tasks while the instructional and the educational process are occurring (Kostic & Randelovic, 2022). Digital devices are constantly used by university learners within various aspects of their lives. Nowadays, these learners use various devices for educational, communicative, and entertainment purposes including tablets, computers, and smartphones. Digital technology and university life are presently greatly connected within the educating process, which includes email, websites, applications, and facility provided management systems (Selwyn, 2016). These devices are helpful to the educational journey because students can use them to deepen comprehension; however, a majority often engage in unrelated activities (Aaron & Lipton, 2018). Interestingly, Tindell and Bohlander (2012) shared that approximately 92% of students had gotten distracted by their devices and began messaging while attending the lesson. According to Kostic and Randelovic (2022), mobile phones are seemingly the greatest focus shifting devices; however, for learners attending lectures it was laptops. In general, mobile phones are frequent sources of digital distractions because of their ability to access all types of media and applications. Additionally, students attending a lecture may use their laptops for educational or lesson reasons but can possibly be diverted from tasks by something as simple as notification.

Furthermore, Liu and Gu (2020) state that digital distractions are where focus is shifted from educational or occupational duties through technological devices and applications, including social apps, browsing, and messaging. In turn, this harms attention and hinders educational progress and causes the mind to work harder. People simultaneously use various devices, such as laptops, phones, and televisions that contain numerous apps and notifications that grasp attention and breaks focus patterns. This constant process of focus then distraction happens repeatedly. Moreover, students face great hardship trying to concentrate on work while frequently getting badgered by alerts and texts on their devices (Aaron & Lipton, 2018).



Technology can cause persistent pressure on students to remain connected and aware of the activities on their devices. It prompts a loss of ability in learners to concentrate and handle particular tasks without disruptions (Perez-Juarez, Gonzalez-Ortega & Aguir-Perez, 2023). Modern technological distractions within lessons consist of interruptions from calls and texts or redirection by social apps for non-educational and entertaining motives (Cheong, Shuter, & Suwinyattichaiorn, 2016). It causes shifts and disruptions to learners' focus and overall is a concern for their scholarly growth performances (Awodiji & Baluka, 2023). The improper usage of technological devices for non-academic activities has grown to be a global occurrence. Hence, this indicates that around the world difficulties regarding concentration, learning, and productivity are being experienced due to distractions stemming from digital device usage.

2.2 Factors Causing Digital Distractions

Digital distractions are prompted by external and internal factors. External aspects consist of sounds and notifications; however, internal aspects focus on thinking and cognitive disturbances. These factors diminish attention span, decrease academic performance, decline learning progress, and defers or blocks scholarly success (Mondal, 2024). According to Mondal (2024), key factors that distort studying and increase distractions are gaming applications, notifications, socials. Moreover, the emotional state of university students is a factor. Students with anxiety or depression use digital distractions to soothe themselves from intense emotions of discomfort and pressure. They use digital devices and distractions as an escape and comfort zone from reality pressures; although, this can lead to extensive usage and time spent on these distractions. Digital distractions to cope with these feelings can result in procrastination, not fulfilling tasks, not studying, reaching academic standards, and device addiction (Wang, Salisbury-Glennon, Dai, Lee, & Dong, 2022). Another factor that leads to digital distractions being common in university learners' lives is fears of missing out or wanting to stay updated. This can be seen when an individual worries about not being connected to the latest updates or information; hence, they can be seen repeatedly viewing their devices especially for socials (Al-Furaih & Al-Awidi, 2021). Learners are continuously distracted due to notifications because of the desire to be informed and valued by classmates. Consequently, university learners can be consumed with thoughts of missing out and this can prompt them to be continuously digitally distracted especially if they are meant to be working on tasks or assignments (Koessmeier & Buttner, 2021). Thus, a lack of discipline towards devices could lead these learners to neglecting priorities regarding their academics (Wang et al., 2022). This shows that in order to stay connected and attain information learners are likely busy themselves with their devices rather than focus on necessary tasks, which can lead to a break in learning and productivity.

Furthermore, multitasking contributes towards digital distractions. A majority of university students consider themselves to be capable multitaskers able to successfully handle multiple things at once while having limited time. Yet, previous studies presented that concentration, productivity, and focus duration lessen because of multitasking using devices (Aagaard, 2021; Liu, 2022). These interruptions of concentration are usually connected to unsatisfactory academic performance (Aivaz & Teodorescu, 2022). Motivation is a factor that determines if a learner will place their attention in their course content or engage in distracting devices activities. Low motivation usually causes difficulty in maintaining pace during a task and can contribute towards seeking online interests. According to Wang et al. (2022), learners who have insufficient motivation, engagement, or interest in the content are more susceptible to engaging in



digital distractive behaviors. Less motivation influences a learner's unwillingness to actively participate in the learning process and properly use devices for focused tasks. Lastly, social media is a digital distraction that has great potential to cause people to shift focus easily away from productive tasks. Research has presented that students are not able to maintain constant attention on activities like studying. Often, within 6 minutes of working, they find themselves shifting to social media and interacting with notifications when received (Rosen, Carrier, & Cheever, 2013; Pielot, Church, & De Oliveira, 2014).

2.3 Impacts on Learners

Flanigan and Babchuk (2022) state digital distractions have prevailed significantly nowadays because of the all-encompassing quality of technologies. Hence, this presents people with an extensive challenge of keeping cognitive focus and attention on productiveness and away from digital distractions. Within academics, digital distraction can disturb learners' ability to concentrate while attending lessons, study groups, or discussions, which possibly hampers their educational achievement negatively. Correspondingly, in a working atmosphere technological distraction can decrease output and damage the work process. Research shared that digital distractions can greatly influence cognitive aptitudes. Based on Rosen, Carrier, & Cheever's (2013) work, it was observed that students who studied and kept their focus on their learning material performed significantly better than those who were studying and constantly using social apps simultaneously. According to Selwyn (2016) findings, distractions, diversions, shifting from task, and procrastination were effects brought on by digital devices that higher education students had to encounter while working. The Internet's unrestricted range is usually accredited for digital devices distracting learners and raising their tendency to redirect their concentration away from productivity. Short interruptions to the working or studying process because of external events including notifications or texts lead to a break in focus, slower working pace, and the tasks being poorly completed (Brumby, Janssen, & Mark, 2019; Rosen et al., 2013). Learners engaged in switching between digital devices and educational activities can lead to less understanding and learning (Brady et al., 2022). This indicates that digital distractions influence not only mental attention but capacity to properly complete tasks because of a loss of continuous thinking process.

Kostic and Randelovic (2022) expressed that going off-task could cause inadequate or unsatisfactory material adaptation, reading understanding, and scores. This shows that a break in comprehension or attention towards a task can impair their awareness or skills regarding the activities. Based on Levine et al. (2012) usage of digital technologies for multiple purposes could prompt excessive mental load, which causes decreased understanding, critical thinking aptitude, and recollection. Students' daily uses of devices for off-tasks or multitasking were seen to perform worse compared with those who refrain from going off-task and continued focusing on being productive (Perez-Juarez et al., 2023). This can be attributed to the amount of focus that the students put into their academics that enabled deeper understanding and ability versus those who split time between the material and devices, which may cause less knowledge enrichment. Dietz and Henrich (2014) research shared that students who texted while attending a lecture performed worse in a quiz than the other students who kept attention on learning. According to Nabung (2024), low scores, less understanding, and weak retention are the impact that students present when participating in distractive technological activities while learning. Comparably, Junco and Cotten (2012) presented that an excess of technological media multitasking is correlated with a reduced scholarly



performance and greater frequencies of distraction faced by students. Therefore, it is essential that learners manage their digital usage to ensure that they allot substantial time to enrich their knowledge and develop their capabilities.

2.4 Potential Coping Strategies

Digital Distraction is a serious struggle that individuals encounter due to the constant attention drawing features of devices and applications. Strategies are available to manage digital distractions to ensure focus and productivity are properly maintained. According to Carrier et al. (2015) and Kushlev, Proulx, and Dunn (2016), silencing notifications, putting devices away, and closing browsing pages that display things like social media can be helpful strategies in reducing distractions. Correspondingly, Koessmeier and Buttner (2021) found that putting devices in silent mode, not allowing notifications, setting the device in another location, and managing external distractions were favored strategies. Also, the participants of this research did share some less common strategies of deleting applications or accounts to stop distractions. Lyngs et al. (2019) placed hundreds of interventions under 4 categorizations that focus on influencing users to not engage in digital distractions. The categorizations titles consist of blocking or removal, tracking, goals, and rewards or penalties. Blocking or removal centers on completely stopping or greatly limiting access to distractive sites and applications. Removing site elements that significantly provoke distractions like news or suggestions can support the prevention of distractions and strengthen users' ability to consciously make choices. Moreover, the strategy of tracking has individuals observe their usage of digital devices and activities to determine when they have exceeded usage. This makes users responsible for their activities and has them refocus themselves to engage in tasks. Goals strategy is helpful to keep individuals on task and have them constantly recall the objectives they are working towards and possibly gain rewards. Rewards or penalties involve individuals gaining rewards when stopping or avoiding digital distractions or face penalties, which provides a motivation to maintain determination (Lyngs et al., 2019). These strategies support users in being conscious of their digital usage and ensure that productivity and purpose are maintained.

Furthermore, digital detox is a possible coping method that focuses on intentionally limiting the usage of screens and devices to lessen excess communication and over usage of digital tools. It is a solution to lessen the adverse influence of device usage on areas, such as our welfare or relationships (Radtke, Apel, Schenkel, Keller, & von Lindern, 2022). Digital detox does not focus on blocking communicative technology usage, but it works to make people more mindful and intentional when accessing technology. It is the endeavor to spend short or extended time away from digital sources and limit using technological devices and tools (Syvertsen & Enli, 2020). This strategy works to have users manage digital overuse and retain control over their technological activities to enhance well-being and productivity. Within educational settings, there are three recommended self-regulated learning strategies by Anthonysamy et al. (2020) to help students lessen digital distractions. Personal regulation is the initial strategy that involves learners comprehending the influence of digital distraction on their productivity and determining to only use technology for proper activities. Next, behavior regulation focuses on observing and judging oneself. This strategy has students track the amount of time spent on devices for non-productive activities and apply supportive re-focusing steps to abstain from getting digitally distracted. The final coping method is environmental regulation that works to limit distractions through enactive encounters and shaping



surroundings. Students take action to remove or distance devices like smartphones from their vicinity when engaging in academic activities. This uses the idea that not having devices in surroundings can help people avoid situations that prompt distractions. These three strategies work to make individuals aware and in control of their digital usage to maintain proper behavior. Therefore, digital distractions can be hard to resist, but there are various strategies that can help maintain attention and productivity.

3. Methods

3.1 Design

The focus of this research was to attain pupils' perspective regarding digital distractions and how it affects them. This perspective was gathered through quantitative, cross-sectional descriptive survey design. Data were collected once from a sample of university students using a structured questionnaire to describe the level and frequency of digital distraction, without manipulating any variables. The tool of the survey was created to compile statistical findings focusing on digital distractions. This method was chosen to gather responses because of the capacity to effectively gain information from a multitude of respondents from various universities.

3.2 Setting and Participants

The participants were students attending two universities in Erbil during 2024 to 2025. The two selected universities were Tishk International University- Erbil and Catholic University in Erbil. A total of 170 participants from stages 1 to 4 filled the survey regarding their perspectives on digital distractions. Responses from female pupils (121) were greater than male (49). Tishk International University-Erbil students provided 91 responses while Catholic University in Erbil provided 79. Six departments participated in the survey, which were the English Language Teaching Department, Computer Education Department, Biology Education Department, Pharmacy Department, Medical Laboratory Science Department, and Nursing Department. The participants were students from:

- Fifty-seven participants from the English Language Teaching Department
- Thirty-four participants from the Computer Education Department
- Thirty participants from the Biology Education Department
- Twenty-three participants from the Pharmacy Department
- Seventeen participants from the Medical Laboratory Science Department
- Nine participants from the Nursing Department

The majority (153) of the learners were between the ages of 17-23 while the others (17) were around 24-30 years old. The participants all owned some type of device(s) like smartphones, laptops, computers, and iPads. These devices are brought to be used or applied during lectures for tasks like note taking, searching, and activities. The collection of answers from volunteers was conducted to ensure anonymity, randomness, and objectivity.



3.3 Tool

Data was collected using a structured, self-administered questionnaire created in Google Forms and distributed to university students via online link. This tool was used to learn about students' experience with digital distraction, the effects on them, and popular strategies to manage it. It was used to explore learners' perspectives and experiences with devices and maintain productivity/focus especially during academic activities. Moreover, the responses were completed by participants voluntarily and anonymously. There were nineteen questions focusing on digital distractions and they were designed as multiple-choice questions. Moreover, Google Forms automatically arranged the collected responses to compute percentages and frequencies to sum up learners' information and replies to the questions. The figures were formed using Google Sheets to physically display main results and descriptive analysis was conducted to understand the patterns. Concentration was placed on interpreting the findings to understand contributors' tendencies and common trends through their answers. The questions used were shaped using research conducted by Aivaz and Teodorescu (2022) and wording was refined to fit the local university context and the study aim of describing levels/frequencies of digital distraction. They were influenced by results discovered by Neiterman and Zaza (2019) whose work focused on learners and educator perspectives of using technology for other tasks when in a classroom.

The questionnaire was pilot tested with 10 university students to check item clarity, completion time, and usability of the Google Form. Based on their feedback, minor revisions were made to wording and response options before the main data collection. Also, data quality was controlled through Google Forms settings such as required items and structured response options. Responses were reviewed for missing/incomplete entries, potential duplicates, implausible completion times, and inconsistent response patterns, and records not meeting predefined criteria were excluded prior to analysis. Furthermore, many books and articles were used to identify effective and focused questions regarding digital distractions so the data collected would share a clear understanding of learners' perspectives and awareness.

3.4 Ethical Considerations

Ethical approval was obtained from the Research Ethics Committee of the universities involved before data collection. Participation was voluntary and anonymous. Furthermore, no identifying information was collected, and participants could stop at any time without penalty. Data were stored securely and used only for research purposes.

4. Results

4.1 RQ1: What are the learners' perspectives regarding digital distractions effects?

To address research question one, students reported their perspectives on the effects of digital distraction by indicating the main advantages and disadvantages of using digital devices for non-course activities during class, identifying the life domain most affected by digital distraction, and describing how they feel when they do not have access to digital devices.

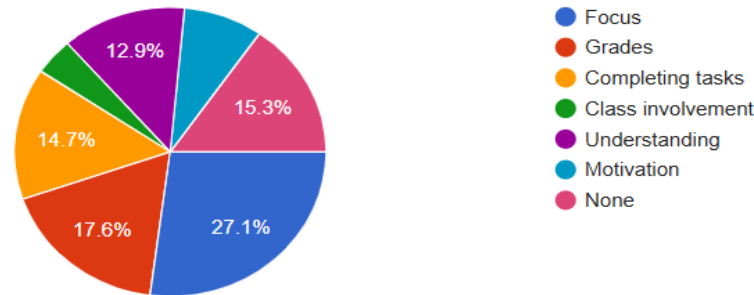


Figure 1: What part of your life do you think is the most affected by digital distractions?

The specific academic area that digital distractions affect in learners' lives was inquired. Focus had the highest selection from pupils (27.1%) and was the life aspect most affected. 17.6% of pupils picked grades, none had 15.3%, and 14.7% chose completing tasks. Understanding had 12.9%, motivation had 8.2%, and 4.1% of pupils picked class involvement.

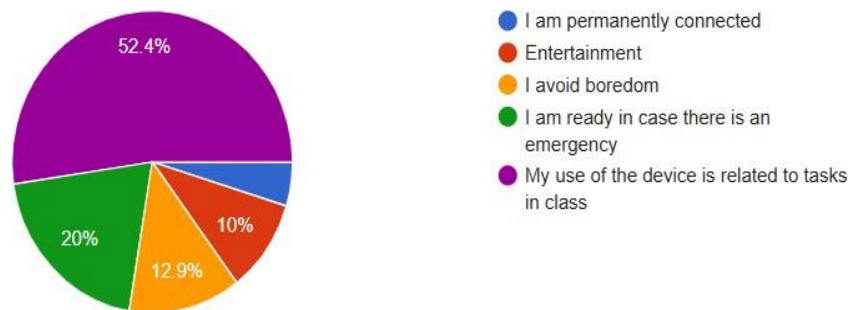


Figure 2: What is the main benefit of using your digital devices during class for reasons not related to school?

The survey question investigated students' thoughts regarding the main benefit of using your digital devices during class. The option of my usage of devices relates to tasks in class had the most substantial percentages of 52.4%. The choice of I am ready in case there is an emergency received 20%, while I avoid boredom was picked by 12.9%. Lastly, entertainment received 10% while lowest percentage was I am permanently connected with 4.7%.

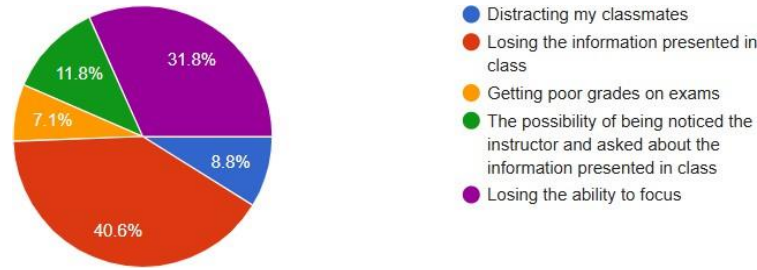


Figure 3: What is the main disadvantage of using your digital devices during class for reasons not related to school?

The main disadvantage of using your digital devices during class for reasons not related to school was explored. The option of losing the information presented in class received the highest percentage 40.6%. The second highest (31.8%) was losing the ability to focus. Moreover, the possibility of the instructor noticing and asking about the information presented and instructed had 11.8% from learners. Moreover, distracting my classmates was chosen by 8.8% of contributors. The least chosen option (7.1%) was getting poor grades on exams.

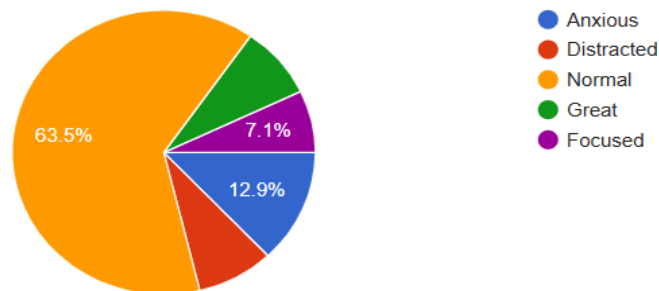


Figure 4: How do you feel when NOT having access to digital devices?

Pupils were asked regarding the feeling they have while not having devices. The options provided were Anxious, Distracted, Normal, Great, and Focused. 63.5% picked normal and 12.9% chose anxious. Distracted and Great both received 8.2% of respondent selection.

4.2 RQ2: How aware are learners regarding the frequency of being digitally distracted?

To address research question two, students reported their digital device use and distraction frequency, including hours spent on digital devices, the frequency and percentage of class time spent on non-course device use, the main reasons for off-task use, self-rated level of distraction during class and while studying, and the extent to which notifications interrupt their focus.

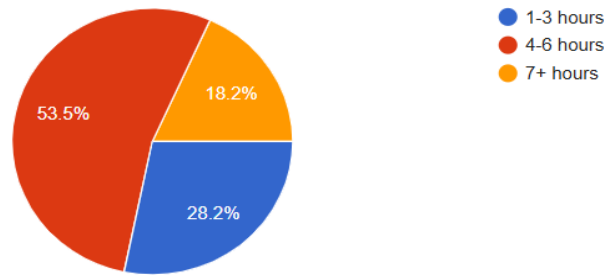


Figure 5: How many hours do you spend on digital devices?

The question of how many hours a day learners use digital devices was inquired in the survey. The options provided for the respondents were 1-3 hours, 4-6 hours, and 7+ hours. A majority (53.5%) of the respondents selected 4-6 hours as the duration of time spent on devices. 28.2% shared that they spend 1-3 hours using digital devices and 18.2% selected the option of 7+ hours.

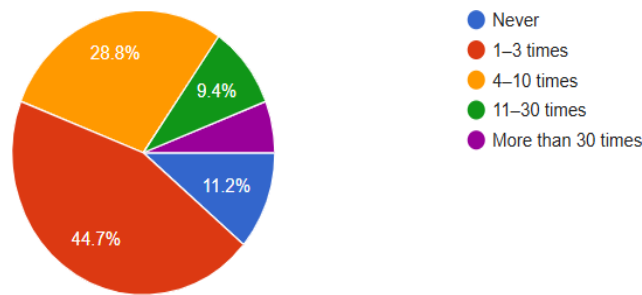


Figure 6: In a typical school day, how often do you use digital devices (smartphone, laptop, computer) in your classes for other than course-related activities (i.e., sending messages, surfing the Internet, checking or posting on social media)?

The frequency of pupils using their devices for unrelated tasks while in classes was inquired. The options provided to the respondents were Never, 1-3 times, 4-10 times, 11-30 times, more than 30 times. The option 1-3 times received the highest percentage of 44.7%. The second highest (28.8%) picked was 4-10 times. Never was picked by 11.2% while 11-30 times was chosen by 9.4% of contributors. The lowest option chosen (5.9%) was more than 30 times.

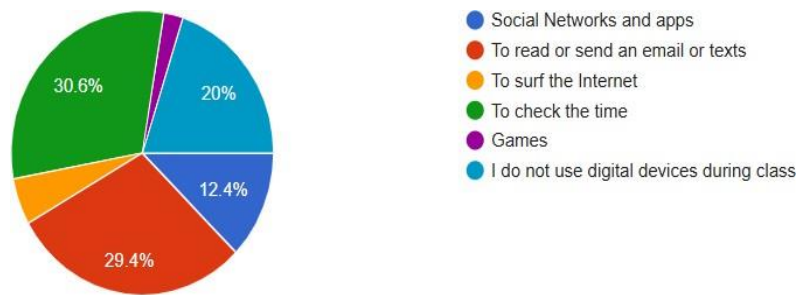


Figure 7: If you use a digital device during class for tasks that are not related to school, what is the main reason?

The study investigates the main reason why students use their devices during the lesson for unrelated activity. The option to check the time received the highest percentages of 30.6%. The second highest was to read or send an email or texts received 29.4%. I do not use digital devices during class was picked by 20%. Using social media networks and apps received 12.4% while surfing the internet was chosen by 5.3% of contributors. Lastly, the option chosen the least was Games with 2.4%.

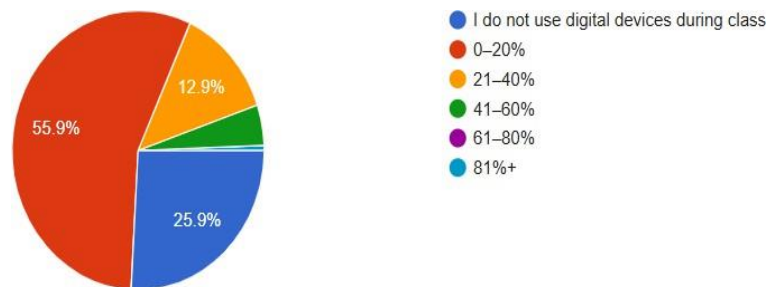


Figure 8: If you use digital devices during class for tasks that are not related to school, approximately what percentage of the class time do you allocate to using your digital devices?

The frequency of pupils using digital devices during class for unrelated activities was explored. The options provided consisted of I do not use digital devices during the class, 0-20%, 21-40%, 41-60%, 61-80%, and 81%+. The option of 0-20% received the highest percentage of 55.9%. The second highest that received 25.9% was I do not use digital devices during class, while 21-40% received 12.9% while the choice 41-60% picked by 4.7% of pupils. The option with the lowest percentage was 81%+ with 0.6%.

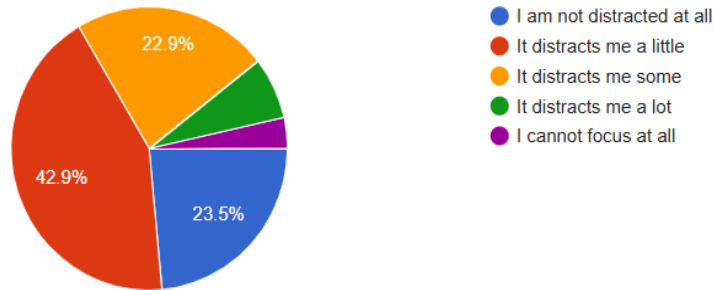


Figure 9: How distracted are you when you use a digital device in class for reasons not related to school?

The degree of distraction faced when using digital devices in the class for reasons not related to school was questioned. A majority (42.9%) chose it distracts me a little, while not distracted at all received 23.5%. Moreover, 22.9% of pupils picked it distracts me some and 7.1% picked it distracts me a lot. The lowest percentage with 3.5% was I cannot focus at all.

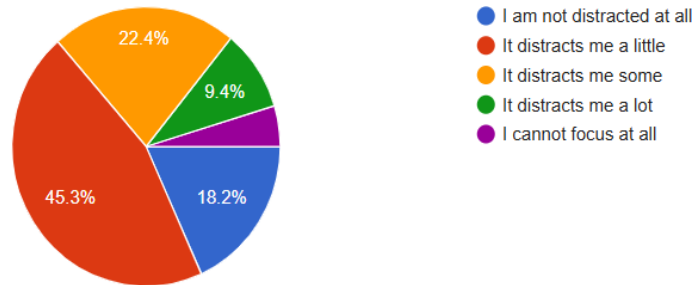


Figure 10: How distracted are you when using digital devices during tasks or studying?

An inquiry was made into how distracted pupils are when using digital devices while studying or doing tasks. It distracts me a little had the highest percentage (45.3%), while It distracts me some received 22.4%. Furthermore, 18.2% chose I am not distracted at all and It distracts me a lot received by 9.4%. Lastly, I cannot focus at all had the lowest percentage with 4.7%.

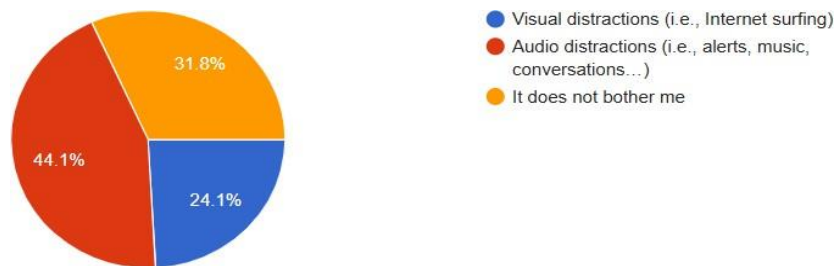


Figure 11: What type of distraction bothers you the most during class?

The question of the type of distraction bothering learners the most during class was inquired in the survey. Audio distraction received the highest percentages with 44.1%, while it does not bother me was picked by 31.8% of participants. Finally, visual distraction was the lowest with 24.1%.

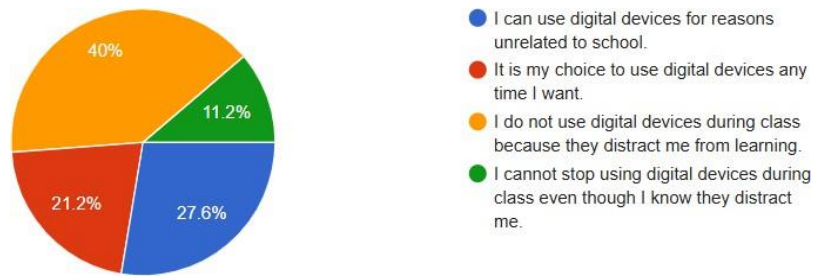


Figure 12: Which of the following statements best describes your use of digital devices for other than course-related activities?

Respondents were questioned regarding their thoughts on their use of digital devices for activities unrelated to course content. 40% of pupils chose not to use digital devices during class because it was distracting. 27.6% chose that they can use devices for reasons unrelated to school, while 21.2% selected the choice is theirs to use devices whenever they want. The least amount of pupils (11.2%) chose that they are not able to stop using devices in class even being aware that they are distracting.

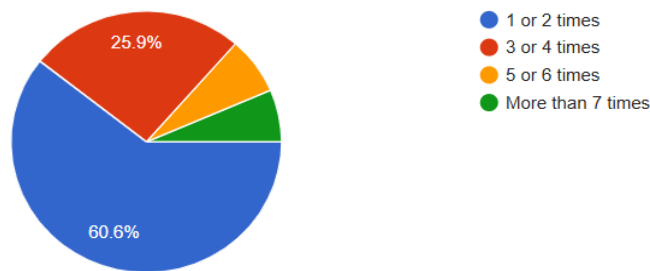


Figure 13: How often do notifications distract you while focusing on a task?

The regularity of learners being distracted by notifications when focusing on tasks was explored. The option 1 or 2 times received 60.6%, 3 or 4 times was picked by 25.9%, 5 or 6 times had 7.1%, and 6.5% of pupils chose more than 7 times.

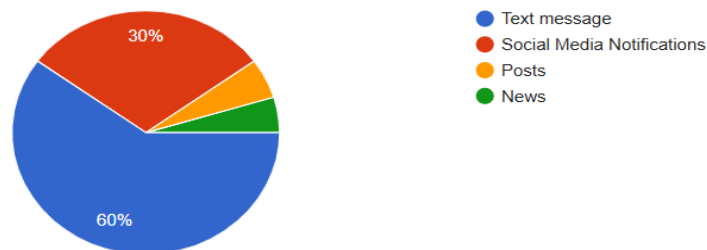


Figure 14: What type of notifications distract you the most?



The notifications that distracted pupils the most were questioned. The option text message gained the most selections with 60% and social media notifications had 30%. The remaining two choices had the lowest selection with news receiving 4.7% and posts having 5.3%.

4.3 RQ3: What are some coping strategies that learners are using to combat digital distractions and maintain focus?

To address research question three, students identified the strategies they use to minimize digital distractions; responses were summarized to show the most commonly used coping strategies among participants.

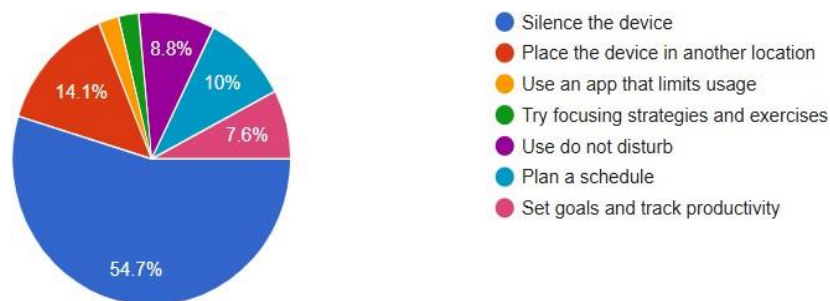


Figure 15: What strategy do you use to minimize digital distractions?

The strategy used to lessen distractions was explored and 54.7% chose the option silencing devices. Place devices in another location had 14.1% and 10% of pupils picked to plan a schedule. 8.8% selected use do not disturb while 7.6% set goals and tracked productivity. The option to use an app that limits usage had 2.9%. Lastly, try focusing strategies and exercises was chosen by 2.3% of contributors.

5. Discussion

Distractions can be caused by multiple things, but devices are a major modern culprit that shift learners' focus. Digital devices provide the ability to use or do many things like communicate with others, use social media, gain information, and so on. Hence, simple things like a text message or notifications can instantly draw focus and stop productivity. It has become a recurring issue among pupils that affects learners' activity in the class, understanding, development, and grades. This likely happens among university learners because they constantly receive content, messages, and notifications when engaging in academics. Therefore, this study explored learners' views of digital distractions and the extent that it impacts their focus, productivity, and academics.

Within this research, social media notifications were the second most common type of distraction that affected university learners. This suggests that notification alerts are a trigger for losing focus, so reducing social media notifications during class and study time may help decrease digital distraction. Comparatively, based on research by Surji and Surji (2024), they gathered data from 2 separate academic years and student groups. It showed that the 2022 groups in person communication ability suffered due to social media whereas the 2016 group found that it influenced their grades. In this study, participants shared



that they used devices for tasks relating to the class topics. Seemiller (2017) discovered that his participants also greatly use their devices to access class related content while learning. This indicates that pupils believe their device usage mainly centers on learning content when in class. Aagaard (2021) through observations and interviews with learners he gathered that closing the computer and using digital self-control tools were preventative distractive methods that some students use or have previously applied. Similarly, the survey for this research did have the strategies of using apps to limit device usage ability. It was found to be the least popular option among respondents, and the most chosen option was to silence the device, which keeps students more focused because they do not hear notifications. According to Selwyn (2016) research, the participants were conscious that digital technology significantly provided a continual source for being distracted with just a touch and that it usually was not helpful in increasing interest in scholarly tasks. Interestingly, the largest percentage of learners in this current research shared that using digital technologies during class, tasks, or studying only causes little distractions, which suggests that many students perceive their device use as manageable; however, it still supports encouraging practical self-control strategies to prevent distraction from increasing in more demanding learning situations. This presented a similarity in opinion amid the respondents of this study and that of Selwyn (2016) regarding the extent of distractions digital technologies prompted.

In this research, text messages and social media were the most common distraction. Notifications and entertainment were the main reason for a small number of students. Cho (2016) similarly shared that texting and social media were used a lot but differed regarding entertainment because his research found it to be very popular. These studies showed that devices can provide various sources of distractions and the most common was texting. Moreover, grades were the second highest part of Erbil university students' lives influenced by digital distraction based on data. Similarly, Patil, Brown, Ibrahim, Myers, Brown, Khan, and Callaway (2019) results showed students were affected negatively by digital distractions and got lower grades on assignments. Social networks and apps were used by only 12.6% in this present study and the majority used devices to check the time. Aivaz and Teodorescu (2022) did a study on digital distractions of Romanian college learners. A majority of the students shared that they used their devices 4-10 times during class to mostly look at the time or reply/send messages and emails. Also, these learners viewed audio sounds from devices as the most distracting.

Correspondingly, this study's learners had similar responses regarding the reason they use devices during classes and audio sounds being distracting. Contrastingly, the respondents shared that they only used their devices 1-3 times during lessons for non-academic related activities. This displays common usage of digital devices by many learners and the differences in reported frequencies of accessing devices. Furthermore, Agarwal, Bishesh, Bansal, and Kumari (2021) shared that usage of social media is frequently done in the classroom and greatly distracts attention and affects grades. In this research, silenced devices were the most effective strategy used to reduce digital distractions. Showing that learners use the idea that not hearing alerts contributes towards maintaining progress. Similarly, Koessmeier and Buttner (2021) found that silencing the device was frequently and mainly used to reduce distractions by their participants. This makes using silent mode an effective method used by participants of these two research to help avoid excessive breaks or attention shifts. Lastly, through this study, the participants shared that they felt neutral regarding not having access to their digital devices, which suggests that many students may not experience strong discomfort when disconnected and makes it more feasible to encourage short device-free periods



during class and focused study. A study by Wilcockson, Osborne, and Ellis (2019) shared that lack of access improves mood, sleep, and stress levels but did cause some boredom in their participants and urges to get access.

5.2 Limitations

The generalization of the data was a limitation due to the surveying of only one city within Iraq and two private universities. There may be differences among the digital habits, protocols, and academic environments of pupils from other cities and universities. Moreover, self-reported bias can affect response accuracy because of personal, external, and social factors. Another limitation could be present because of the possible culture or institution diversities that universities may have that can make digital distractions vary in effects. Different departments have different policies and requirements regarding digital usage. This prompts certain learners to interact or be exposed to digital devices more than others and might influence the frequency of distractions for some majors than others. Additional investigations using a larger sample and involving measures like tracking time for device usage can supply greater information.

6. Conclusion

Digital distraction has become a prevailing issue towards productivity and attention. People use their phones and other devices while working or completing tasks. The development of devices, applications, and websites has caused a permanent alteration to attention span, focus, and continuous working ability. The multitude of options and information on devices causes learners difficulty in sticking to a page or task without changing to another. This is especially true for students who must manage various courses and large workloads while using devices. After all, students that use their devices in the class realize they miss a lot of information like content, homework, and instructions. The appeal of using different devices in the class plus the sound of notifications causes their attention to shift and they become curious, which is a very common issue among learners. Therefore, students are aware of their distraction and have strategies to manage focus within this digitally led world. This research has collected data about digital distraction in two universities within Erbil, Iraq. The survey worked to gain insight into learners being distracted from different devices and apps like cell phones or notifications. Also, it focused on how distracted learners are, how it affects them educationally, and what coping strategies are available. Interestingly, notifications that took away students' attention most frequently were from texts. Device notifications make students curious about what they received especially while doing a task or learning, which causes a break in focus and information retention.

Silencing devices were the strategy used most to minimize distraction by pupils. This is helpful because students will not hear it or become curious since no sound was heard to alert them. Moreover, losing the information presented in class is the main disadvantage of using devices during class for non-learning related tasks. Students become less active in the class because they are more active on the device. This means their listening is not focused and that their learning is not in progress since the student's attention is on non-academic information. Overall, the discoveries showed that the pupils of these two universities are aware that devices can be distractive. However, most have shared that it provides a little distraction while working on academic related situations or tasks. These learners have presented the frequency of their device usage while learning at university to be low, but that audio distractions are most attention



shifting. Hence, it was found that pupils generally had a positive outlook on their device usage and management but did admit that it affected their grades and focus. Based on their perception, it was determined that digital distractions were not a big enough obstacle to harm their academics or productivity efforts. Overall, the study shows that students' perceived distraction was not extreme, yet it remains relevant enough to justify targeted awareness and coping support. These results are a starting point to design appropriate strategies to protect attention during learning.

Recommendations:

- Future research can use observations or interviews to get real time reactions from the participants about digital distractions.
- Attention span and triggers can be studied to understand why students have the unconscious urge to reach for devices while being productive.
- Comparing digital distractions among different departments to understand the degree of distractions.

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