Analysis of the Motives for Using Smartphone Applications and their Impact on Academic Achievement Among Ajman University Students: An Analytical Field Study

Mustafa Hameed Al-Taei[1*], Najih Rajih Al-Salihi[2], Sami Al-Qatawneh[3] and Abdellateef Abdelhafez Alqawasmi[4]

[1*]College of Mass Communication, Ajman University, UAE
[2]Department of Education, College of Arts, Humanities, and Social Sciences, University of Sharjah, Sharjah, UAE
[3]Department of Education, College of Arts, Humanities, and Social Sciences, University of Sharjah, Sharjah, UAE
[4]College of Education, Al Ain University, Al Ain, UAE
E-mail: [1]m.kadhem@ajman.ac.ae, [2]nalsalhi@sharjah.ac.ae, [3]salqatawneh@sharjah.ac.ae, [4]abdellateef.alqawasmi@aau.ac.ae
ORCID: [1]https://orcid.org/0000-0003-3272-8015, [2]https://orcid.org/0000-0002-8807-4527, [3]https://orcid.org/0000-0003-0728-6761, [4]https://orcid.org/0000-0002-6127-131X

Abstract - **Smartphones, with the multitude of tasks can perform, have become everyday items for college-age consumers. This study was initiated to address concerns that the use of technology is leading to distractions and a lack of focus, according to the researchers. The purpose of this study was to investigate the social and psychological factors influencing college students' heavy application use that may result in digital addiction. This was descriptive research, which used a survey to collect data. A solid structured questionnaire was distributed randomly to 150 male and female students from a stratified random sample. Subjects: Ten different schools of Ajman University were chosen for this study. A number of essential outcomes were generated from the survey. Smartphones are king, with more than half (54.0%) of poll respondents saying they use them. Less use of new and old media than before. Most cohort members, 73.3%, had a stable family background in that they lived with both their parents. It was observed that an essential proportion of the sample (46.7%) did not use any software or program. They would not do that, so it left them with a combination of some. Entertainment was the primary motive for being there: specifically, games, movies, and interacting socially. This represented the majority of answers. Instagram was, in and of itself, the place to go. Twenty-four-point 6 % of the participants indicated that interaction with people from diverse cultures, where there may be more flexible societal norms, was their most important social reason. Avoiding blame and the subsequent anger or disapproval from their loved ones was the overarching psychological motivation, being cited in 24.66 % of cases. The findings indicate that there are no statistically significant differences in how men and women used the system.**

Keywords: Smartphones, Mobile Applications, Social Motives, Psychological Motives, Motive Analysis, Digital Addiction

I. INTRODUCTION

The application on Smartphones has emerged as one of the most effective elements in defining human lifestyles, and more so the youth, within the last twenty years. Smartphones have become an inseparable part of daily life, serving as key tools for receiving information, learning, and exchanging experiences (Alsalhi et al., 2021; Maqbool et al., 2024). These applications offer an opportunity to explore other cultures, engage in various social interactions, and access numerous sources of entertainment. Within these platforms, real-time images of the world are witnessed—one portraying affluence and lavishness, the other depicting the mundane, low-end, and decadent aspects of life (Alrashedi et al., 2024). They built a 24-hour space in which the youth and older people interrelate, which has never been witnessed in history that such an integrated and comprehensive space exists. As much as smartphones have advantages, such as relieving loneliness, spending time having fun, and increasing knowledge, they pose a significant challenge to societies in different development phases (Al-Afridawi & Rasool, (2022); Nassar et al., 2025). The challenges are hazardous to university students who are currently being prepared to become the leaders of their communities (Eltahir et al., 2021; Nazirova et al., 2025). It is not only the time that many youths find hard to manage, but also the fact that they are unable to derive any value from these platforms without risking their education and career opportunities. It is known that prior research has found that excessive smartphone uses among higher education students, especially in classes, is linked to poor academic achievement (Akrami et al., 2023). Namely, an overview of smartphone use and academic performance established the negative correlation between excessive

smartphone use and academic performance. Considering them, the present study aims to fill a literature gap in the field of studying the hidden motives that encourage university students to use smartphone applications too often without thinking of the consequences on time management (Ringo, 2025). The proposed research will help to reveal the social and psychological intentions of using smartphones and investigate their impact on the educational context in Arab communities.

Research Problem

The study problem is raised from observed signs met during teaching in some Arab universities over the last years. The more one examines public and widespread concerns on campus, the most striking come to mind are the correlation between falling academic efficiency and the growth of smartphones, as well as the significant time spent by Arab university students in communication with programs or applications inside them. This has left all sorts of unanswered questions demanding biological responses as to what type of things it is likely to do to the future in particular and society as a whole in general.

Significance of the Study

The significance of the present study is to help fill in this gap, namely, in the analysis of reasons for smartphone overuse, and it correlates with undergraduate students' academic performance (Al-Qatawneh et al., 2019). It also situates broader societal implications of these phenomena and stresses the importance of developing adequate digital policies for shaping and controlling the use of digital communication technologies, as well as outlining steps and finding solutions designed to offset their negative impact on young people's future.

Research Objectives

The study was designed to achieve the following objectives:

- To examine the extent and preferred times of engagement of young people with smartphone applications.

- To identify the platforms, programs, and applications most frequently used by university students.

- To analyse the relationship patterns between Smartphone use and the decline in university students' academic performance (Hakimi et al., 2024).

- To analyse the social motives driving university students to engage with smartphone programs and applications.

- To analyse the psychological motives underlying university students' engagement with smartphone programs and applications.

Research Questions

Scientific sources on research methodology indicate that achieving research objectives may be approached through questions, hypotheses, or both, depending on the nature and requirements of the study. Accordingly, this research adopts the following questions:

- What is the extent of engagement and the preferred times for university students' use of smartphone programs and applications?

- Which platforms do university students prefer for following programs and applications on smartphones?

- Is there a relationship between increased time spent on these programs and applications and the decline in university students' academic performance?

- What are the social factors contributing to the increased time university students spend using smartphone programs and applications?

- What are the psychological and social motives that drive university students to engage intensively with smartphone programs and applications?

Research Variables

- Independent Variable: Motives for smartphone use among university students.

- Dependent Variable: Academic achievement levels of university students.

The paper is structured in the following way: Section 1: Introduction gives the background about the importance of smartphones in the life of university students, stating the purpose of the study, the research objectives, and questions. Section 2: Literature Review deals with the past research on the use of smartphones, its social and psychological effects, and associated theoretical models. Section 3: Research Methodology describes the descriptive research design, sampling methods, survey tool and statistical analyses. Section 4: Results and Discussion, reports on the patterns of smartphone use, social and psychological motivations, and effects on academic performance, which is backed by the use of statistics. Section 5: Conclusion, draws conclusion about the main findings, recommendations on how to promote productive use of smart phones, and future of research. Lastly, Section 6: References contains the reference list of all used works and literature.

II. LITERATURE REVIEW

Recent studies have continued to emphasize the adverse effect of smartphone usage on university students, specifically, their performance at school (Hashemi et al., 2024). Smartphones, as much as they are part of life, have been found to cause distractions, which reduce the concentration of students on their education. A single study

examined how smartphone addiction is related to academic performance, and found that there is a negative association, especially when it comes to male students. The research has shown that the usage of more than five hours per week is a problem among students, and to be able to deal with addiction effectively, it is essential to understand different definitions of smartphone use. In another study, the authors focused on the interaction between smartphone addiction and the academic success of students and their stress levels (Al Tai et al., 2024). The study revealed a high positive relationship between academic motivation and stress related to the students, and the social and family contexts are instrumental in creating the relationship between addiction and academic performance. It was found that the addiction to smartphone apps, including social networks, can impair the concentration of students on educational activities, and external factors, including family, age, and living conditions, can affect the intensity of the addiction (Elareshi et al., 2024).

Subsequent studies also confirm the unfavorable relationship between smartphone use and academic performance, as smartphones have been shown to be beneficial in academic support but mainly result in distraction at the expense of academic concentration. Sure, students did not realize the degree of this influence, which can be explained by the fact that it is hard to accept the negative consequences of the overuse of smartphones on academic performance (Yu et al., 2022). When conducted on the length of smartphone use and its influence on academic performance, a study revealed that although the effect is slight, it is also not significant with the use of glasses. Lengthy bouts of smartphone use typically resulted in schooling disturbance, which, again, means that the issue of smartphone usage should be comprehended through the lens of the academic performance of students (Alderbashi, 2024).

Lastly, research concerning the cognitive and psychological impact of smartphone usage revealed that students who lacked access to smartphones in a classroom had a better perception of lecture material and were less anxious than those who had unlimited access. These results highlight the overall effects of excessive smartphone use and its adverse impact on the academic and cognitive well-being of students (Yousfani et al., 2024). All these studies demonstrate a general picture of the adverse effects of smartphone addiction, especially in the academic setting. The available literature is chronically keen on highlighting adverse effects on the academic achievement and psychological well-being of students, which also contributes to the necessity of investigating the reasons for using a smartphone. It is this lack of knowledge that this paper seeks to fill by looking at the reasons behind smartphone use and its direct effect on the educational performance of students in higher education institutions (Tin et al., 2024). The results of these experiments are added to the existing research body, as it can be concluded on the complexities of smartphone usage and its influence on education, therefore, spelling out the necessity to intervene and enhance the management of digital consumption in students.

Theoretical Framework of the Research

Fig 1 shows, the motives of the digital world are fundamental to perceive, as society and social pressure determine the actions. When conducting research on smartphone use and addiction among university students, the study should be based on theories that justify the reasons and effects of adopting these behaviors. The major theories that guide this study are:
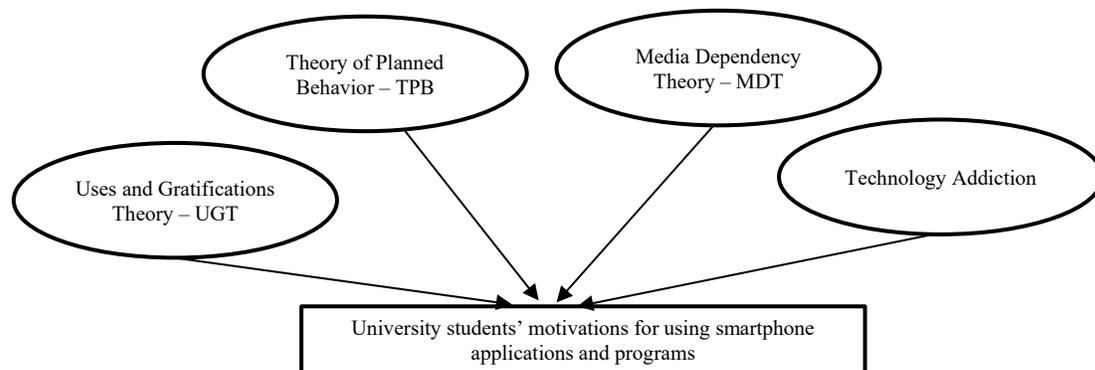

Fig.1 Hypothetical Model On The Motivation Of University Students To Use Smartphone Applications And Programs

- **Uses and Gratifications Theory:** This theory tests the reasons why people are attracted to a particular medium so as to address psychological and social needs. In due course, it has grown to encompass research of the way the media, including smartphones, discusses these requirements. Smartphone applications can be employed by university students to fulfill different cognitive, behavioral, psychological, or social drives (Al-Rawashda et al., 2024).

- **Theory of Planned Behavior:** According to this theory, the attitude towards the behavior of people is explained by their capacity to evaluate the content of the media, social control, and the perceived ease of actions. It assists in examining how the intentions to use smartphone apps are made by the students pegged on

the social pressures and difficulties with the view to adopt positive positions towards the content and behaviors (Cao & Tian, 2022).

- **Theory of Media Dependency:** The media dependency theory holds that individuals depend on the media to help them satisfy their personal needs for information and entertainment. With the development of digital technologies, university students resort to smartphones more and more. The theory is also applicable, especially when analyzing the behavior of students regarding the use of smartphones, as it emphasizes how students use media to communicate, market, and build their identities by being cautious of overindulging or using it in ways that are unprofitable or unacceptable.

- **Theory of Technological Addiction:** The theory centers on the way too much communication with digital devices, such as smartphones, can result in compulsive actions that resemble addiction. It points out the way that having access to engaging content all the time can leave room to indulge in addictive behaviors, especially in young people, which can impede the development process and be socially and health-threatening. Smartphones are viewed as devices that can satisfy psychological and social needs; however, excessive use of these devices may have adverse consequences unless they are used wisely.

All these theories provide a great deal of understanding of the factors of using smartphones among university students, particularly in the UAE and Arab universities. They also focus on the psychological, social, and cognitive needs, roles, and social pressures in directing the research design, questionnaire construction, and results interpretation.

Key Research Concepts

- **Motives of Smartphone use:** These are the psychological, social, and cognitive motivations that help university students to use smartphone applications to achieve educational and mental interests. During the use of the media, behavior is guided by goal-oriented purposes (Akram & Yassir, 2024).

- **Smartphone Applications:** Smartphone applications are programmers that are used on both Android and iOS smartphones, enabling users to participate in educational, entertaining, informative, communicative, and time management activities. Academic events and education platforms, as well as the entertainment industry, are now all governed by such apps as components of life in universities.

- **Academic Achievement:** This is the knowledge, skills, and experience attained by the students, which helps them to achieve success in the labor market. GPA, grades, and standardized test scores are often used as metrics of academic success amongst students and also to measure institutional goals (Kazu & Yalçin, 2022).

- **Addiction to Smartphones and their Applications:** Smartphone addiction is defined by the use of apps compulsively, excessive use, and inability to manage time and behavior. This has adverse effects on academic performance, including spending too much time on apps, being distracted, and having a bad mood upon quitting (Han, 2025).

- **Digital Communication and Interaction:** This is the exchange of information, experiences, and multimedia over digital platforms through which real-time communication, video conferencing, and exchange of audio and video is provided across distinctions.

III. RESEARCH METHODOLOGY

Method Section This part provides the methodology of the research and includes its type, scope, population, sampling procedures, survey instruments, instrument design, tests of validity and reliability, ethical information used to conduct this study, and statistical treatments (Yousfani et al., 2024).

Type of Research

Descriptive research design is a standard method used in examining social and behavioral studies. Descriptive studies are represented using instruments like questionnaires, interviews, observation, and content analysis in addition to different forms of surveys (e.g., communication media surveys and audience surveys). Based on the research goals, the questionnaire was selected to be the primary instrument for measuring smartphone users. The audience survey methods are especially relevant for the sample of university students who make use of their smartphones and application.

Research Boundaries

The study scope can be stated as follows:

- **Thematic boundary:** Thematic analysis of the motives of smartphone application use and their impact on academic success among students of the Ajman University.

- **Temporal boundary:** the year 2024-2025.

- **Spatial boundary:** Ajman University, United Arab Emirates.

Research Population

The study is population-based and comprises students in Ajman University, which consists of ten colleges that span various specializations. Ajman University is home to a multicultural student community from 250 countries which places it among the best international universities (Ajman University, 2023. This broad cross-section adds to the credibility of the results. Simple random sampling helped to eliminate bias and improve reliability and validity, as every learner had an equal opportunity of being part of the sample).

Sampling Procedures: Type, Size, and Method

The research adopted a stratified sampling technique using simple random sampling. One hundred and fifty students were recruited, representing multiple disciplines, ages, years of study, nationalities, socioeconomic status (SES), and family income. The sample size was based on some references of similar studies with samples that were smaller and greater.

Fifteen students were randomly selected from each of the ten colleges in order to achieve representative samples: Media, Law, Sciences and Humanities, Business Administration, Engineering, Design and Architecture, Dentistry, Medicine, Pharmacy, and Nursing. The final sample size was, then, 150 students who all answered the questionnaire.

Field Procedures

Fieldwork followed systematic steps:

Instrument Design

A structured questionnaire was used; it consisted of three parts: (1) demographic characteristics of participants; (2) patterns, types, and duration of smartphone utilization, and (3) motives/reasons for use, along with likely impact on academic achievement.

- **Validity:** Ten experts in media, sociology, and psychology critiqued the survey. All items were verified as valid by eight experts, and two persons proposed minor modifications to the language for better understanding. The overall face validity is 80%, which is acceptable to conduct the study.

- **Construct Validity:** Exploratory factor analysis was carried out to explore the relationship between items and theoretical dimensions. Below are items with r<. 40 were excluded, and others who had above the cut-off score remained, which indicated good construct validity of the scale.

- **Reliability:** The reliability of the instrument was estimated on a pilot sample consisting of 30 students. Cronbach's Alpha coefficient was between. 81 to. 88 interbrains, with an overall coefficient of. 89, indicating the reliability level of the scale.

Ethical Considerations

The study was in accordance with the guidelines set down by the Helsinki Declaration of Ethical Principles at all stages. Participants were made aware of the study objectives, that it was for academic purposes, and their participation was voluntary. The secured informed consent and guaranteed confidentiality by coding the responses the researcher-maintained impartiality in data collection, analysis, and reporting.

Statistical Treatments

The collected data were analysed using several statistical techniques, including percentages, arithmetic means, standard deviations, and Chi-square tests.

IV. RESULT & DISCUSSION

General Characteristics of the Sample

The demographic characteristics of the respondents are presented in TABLE I.

TABLE I CHARACTERISTICS OF THE STUDY SAMPLE

Variable	Category	Frequency	Percentage
Gender	Male	65	43.3%
	Female	85	56.6%
	Total	150	100%
Academic Year	First Year	48	32.0%
	Second Year	23	15.3%
	Third Year	33	22.0%
	Fourth Year	46	30.6%
	Total	150	100%
Nationality	Citizen	49	32.6%
	Arab Expatriate	87	58.0%
	Foreign Expatriate	14	9.3%
	Total	150	100%
Monthly Income	5–10k AED	93	62.0%
	11–15k AED	27	18.0%
	16k+ AED	30	20.0%
	Total	150	100%
Living Status	With Both Parents	114	76.0%
	With Father Only	11	7.3%
	With Mother Only	21	14.0%
	Other	4	2.6%
	Total	150	100%

The data analysis reveals that 56.6% of respondents were female, and this is probably because they are more prevalent in the university; thus, social and economic duties often deprive men of their education, hence, more women in Arab universities. The proportion of individuals in their fourth year was 32.0% of the sample, and 30.6% of the sample were in their first year, as university admissions are growing due to the rising living standards in the UAE. The Arab (58.0) and UAE nationals (32.6) and non-Arab foreigners (9.3) constituted a majority of the participants because of the common language, culture, and religion.

In terms of income, 62.0% of the respondents represented households that earned between 5,000 and 10,000 AED, which has a higher socioeconomic status than citizens of the UAE. The 20.0% comprised highly qualified expatriates mostly in high-paying industries, and 18.0% were Arabs. The majority (76.0%) of students lived with both parents, 14.0% lived with the mother alone, 7.3% lived with the father alone, and 2.6% lived in other setups, which included grandparental and solo living. The fact that dual-parent households are ordinary is an indication of the social, cultural, and religious beliefs in Arab societies.

TABLE II DEVICES PREFERRED BY RESPONDENTS ACCORDING TO LIVING SITUATION

Device	With Both Parents (Freq / %)	With Father Only (Freq / %)	With Mother Only (Freq / %)	Other (Freq / %)	Total (Freq / %)	Mean	Std. Dev.	Chi-Square
Smartphone	61 (40.66%)	6 (4.0%)	11 (7.33%)	3 (2.0%)	81 (54.0%)	20.25	24.71	42.80
Computer	9 (6.0%)	1 (0.66%)	2 (1.33%)	0 (0.0%)	12 (8.0%)	3.00	3.56	6.40
iPad	11 (7.33%)	1 (0.66%)	3 (2.0%)	0 (0.0%)	15 (10.0%)	3.75	4.11	5.67
More than one device	33 (22.0%)	3 (2.0%)	5 (3.33%)	1 (0.66%)	42 (28.0%)	10.50	14.36	15.13
Total	114 (76.0%)	11 (7.33%)	21 (14.0%)	4 (2.66%)	150 (100%)	–	–	69.99

TABLE II shows, the findings revealed a clear link between participants' smartphone usage and their living conditions, such as living with both parents, only the mother, the father, or other arrangements. Smartphones became the most demanded gadget, with 54 %of students declaring their preference for smartphones. Next, 28 %stated their preference for computers and iPads. Smartphone use was the highest among students who live with both their parents (73.3%), implying that students living in stable families have a high chance of using smartphones. The chi-square test revealed that there is a significant relationship between living conditions and preference for the device (2 = 69.99, p < 0.001). Also, the standard deviation and average values showed that smartphones and other products had a larger standard deviation in comparison to computers or the iPad, which indicates a larger range of use. The studies found that students from stable family backgrounds have better access to and use of innovative communication devices compared to those from unstable or broken families, who have less exposure. As a result, students facing challenging family circumstances may require additional social and economic support.

TABLE III PREFERRED TIME PERIODS FOR FOLLOWING SMART APPLICATIONS ACCORDING TO ACADEMIC YEAR

Time Period	First Year (Freq / %)	Second Year (Freq / %)	Third Year (Freq / %)	Fourth Year (Freq / %)	Total (Freq / %)
Morning	3 (6.25%)	2 (8.69%)	2 (6.06%)	3 (6.52%)	10 (6.7%)
Noon	2 (4.16%)	1 (4.34%)	4 (12.12%)	1 (2.17%)	8 (5.3%)
Evening	10 (20.83%)	4 (17.39%)	5 (15.15%)	10 (21.73%)	29 (19.3%)
Late Night	14 (29.16%)	9 (39.13%)	10 (30.30%)	13 (28.26%)	46 (30.7%)
All Periods	19 (39.58%)	7 (30.43%)	12 (36.36%)	19 (41.30%)	57 (38.0%)
Total	48 (100%)	23 (100%)	33 (100%)	46 (100%)	150 00(%)

TABLE III shows, the results showed that half of the respondents (50.0%) preferred downloading and using smartphone applications at night or late at night, which had an impact on students' learning. In contrast, smartphone usage was lowest in the morning (6.7%) and midday (5.3%), with a standard deviation of 1.18, indicating moderate diversity in preferences. Statistical analysis (χ^2 = 5.78, d.f. = 12, p = 0.927) has found no meaningful differences between the desirable duration of smartphone use and the academic year of the students, which promotes the claim that the usage of smartphones at night is typical of all students, irrespective of the year of study and the level of their research. The mean score was also high, 3.88, which also underscored the preference to use in the evening and late hours, which could be explained by a lack of studies, an attempt to find privacy, and the decreased level of control at this time.

TABLE IV DAILY HOURS SPENT FOLLOWING SMART APPLICATIONS ACCORDING TO HOUSEHOLD INCOME

Daily Hours	5–10k AED (Freq / %)	11–15k AED (Freq / %)	16k+ AED (Freq / %)	Total (Freq / %)	Mean	Std. Dev.	Chi-Square
1–3 hours	19 (12.7%)	10 (6.7%)	10 (6.7%)	39 (26.0%)	1.90	0.85	2.19
4–6 hours	35 (23.3%)	8 (5.3%)	11 (7.3%)	54 (36.0%)	2.05	1.70	2.26
7 or more hours	39 (26.0%)	9 (6.0%)	9 (6.0%)	57 (38.0%)	2.00	1.60	5.27
Total	93 (62.0%)	27 (18.0%)	30 (20.0%)	150 (100%)	5.95	4.15	9.72

TABLE IV shows, the information displayed that smartphone apps were used by 38.0% of the respondents seven or more hours per day, and more than half (56%) of students belonged to a family with a monthly income of 5,00010,000 AED, indicating that the middle- and low-income groups are more intensive users. A large proportion of the participants (36.0%) said that they spent 4-6 hours a day on the apps, whereas the smallest group (26.0%) spent 1-3 hours. This trend shows that students with high incomes pay less attention to smartphone apps. A chi-square test also demonstrated that household income and the usage of apps have a statistically significant association ($2 = 9.72$, $p < 0.05$), which also indicates that students with lower incomes have a higher probability of using smartphones extensively. The results further showed that high usage of smartphones by low-income earning students is usually motivated by entertainment and time-killing reasons at the expense of academic performance, which supports the topicality of this study in dealing with educational challenges surrounding the excessive use of smartphones.

TABLE V PLATFORMS FOLLOWED BY THE SAMPLE ACCORDING TO RESPONDENTS' GENDER

Platform Type	Males (n, %)	Females (n, %)	Total (n, %)	Mean	Std. Dev.
Facebook	7 (4.66%)	10 (6.66%)	17 (11.33%)	8.12	2.12
Instagram	11 (7.33%)	22 (14.66%)	33 (22.00%)	16.5	7.78
YouTube	9 (6.00%)	11 (7.33%)	20 (13.33%)	10.0	1.41
WhatsApp	6 (9.23%)	8 (5.33%)	14 (9.33%)	7.0	1.41
Twitter	7 (4.00%)	7 (4.66%)	14 (9.33%)	7.0	0.00
More than one	25 (16.66%)	27 (18.00%)	52 (34.66%)	26.0	1.41
Total	65 (43.33%)	85 (56.66%)	150 (100%)		

TABLE V, the research findings suggested that using more than one platform is the most popular among them (34.66%), and this shows their preference for different social media platforms. This pattern was also mirrored for Instagram (22.00%, SD = 7.78) , and a gendered variation emerged between males and females using the platform. YouTube came next (13.33%), and Facebook ranked third (11.33%). Below are WhatsApp and Twitter, both of which scored similarly (9.33%). The Chi-square test (p = 0.83 > 0.05) shows that males and females had no significant difference in platform preference, which means gender is not a factor affecting students' platform of choice.

TABLE VI TYPES OF PROGRAMS AND APPLICATIONS FOLLOWED BY THE SAMPLE ACCORDING TO LIVING SITUATION

Type of Program/Application	With Parents (n, %)	With Father (n, %)	With Mother (n, %)	Other (n, %)	Total (n, %)	Mean	Std. Dev.
Games	16 (10.7%)	2 (1.3%)	3 (2.0%)	1 (0.7%)	22 (14.7%)	5.5	6.8
Movies & Series	20 (13.3%)	3 (2.0%)	7 (4.7%)	0 (0.0%)	30 (20%)	7.5	8.1
Chat & Communication	11 (7.3%)	2 (1.3%)	8 (5.3%)	1 (0.7%)	22 (14.7%)	5.5	3.8
Educational & Self-development	12 (8.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	12 (8.0%)	3.0	5.2
More than one	55 (36.7%)	4 (2.7%)	3 (2.0%)	2 (1.3%)	64 (42.7%)	16.0	23.6
Total	114 (76.0%)	11 (7.3%)	21 (14.0%)	4 (2.7%)	150 (100%)		

TABLE VI shows, the findings revealed that 42.7 %of the participants favored the use of more than one app over single apps, as recreational activities (games, movies, and chatting) were the most referred to among the reasons as to why people use their smartphones, which comprised a slightly lower percentage of 47.4%. Conversely, only 8.0% of participants used educational and self-development apps, and this means that smartphones are more of an entertainment application than an educational one. The highest mean and standard deviation were found for users who engaged with multiple apps (16.0 ± 23.6), reflecting significant variability in simultaneous usage. Movies and series had a mean of 7.5 ± 8.1, while games and chatting both had a mean of 5.5, with games showing more variability (SD = 6.8 vs. 3.8 for talking). Educational apps had the lowest mean (3.0 ± 5.2), indicating the least interest in using smartphones for academic purposes.

TABLE VII NATIONALITY OF PROGRAMS AND APPLICATIONS FOLLOWED BY RESPONDENTS ACCORDING TO RESPONDENTS' NATIONALITY

Program/App Nationality	Citizens (n, %)	Arab Expatriates (n, %)	Foreign Expatriates (n, %)	Total (n, %)	Mean / Std. Dev.
Local	17 (34.7%)	18 (20.7%)	1 (7.1%)	36 (24.0%)	12.00 / 9.29
Arab	12 (24.5%)	26 (29.9%)	1 (7.1%)	39 (26.0%)	13.00 / 10.15
Foreign	9 (18.4%)	14 (16.1%)	12 (85.7%)	35 (23.3%)	11.67 / 1.70
All	11 (22.4%)	29 (33.3%)	0 (0.0%)	40 (26.7%)	13.33 / 14.57
Total	49 (100%)	87 (100%)	14 (100%)	150 (100%)	

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TABLE VII shows, the Citizens preferred local applications (34.7%), Arab expatriates used Arab applications the most (29.9%), and foreign expatriates primarily followed foreign applications (85.7%). These findings are mainly attributable to cultural and linguistic differences. Arab expatriates were the most likely to watch (33.3%), while others did not, showing how limited interest in local/ Arab content was among foreigners. Chi-square test has also been applied (χ^2 = 35.41, df = 6, p < 0.05), which revealed a statistically significant association of the respondents' nationality with the types of applications pursued. The most excellent mean and variance were obtained for all programs (13.33 ± 14.57), followed by Arab applications, while the smallest one appeared in foreign applications, due to the greater homogeneity of their users.

TABLE VIII REASONS FOR FOLLOWING PROGRAMS AND APPLICATIONS ON SMARTPHONES

Reason	Agree (n, %)	Neutral (n, %)	Disagree (n, %)	Mean / Std. Dev.
Easy to carry	15 (10.0%)	3 (2.0%)	2 (1.33%)	2.65 / 0.65
To maintain privacy	27 (18.0%)	6 (4.0%)	3 (2.0%)	2.67 / 0.65
Sense of independence	26 (17.33%)	2 (2.0%)	2 (1.33%)	2.80 / 0.55
Easy to hide	3 (2.0%)	4 (2.66%)	3 (2.0%)	2.00 / 0.82
Substitute for friends	21 (14.0%)	5 (3.33%)	2 (1.33%)	2.68 / 0.60
Opportunity to meet new friends	18 (12.0%)	4 (2.66%)	4 (2.66%)	2.54 / 0.77
Total	110 (73.33%)	24 (16.0%)	16 (10.66%)	

TABLE VIII shows, the results indicated that 73.33% of the participants had motives in following smartphone apps, 16.0% did not have such motives, and 10.66% neither agreed nor disagreed with the statements given to them. The most frequently given reasons were privacy (18.0%), autonomy (17.33%), substitution for friends (14.0%), and a new way for meeting people (12.0%). Smaller reasons were ease of carrying (10.0%) and concealability (2.0%). They scored the highest for independence (2.80 ± 0.55) and considered it an important motivation. Privacy and the use of replacement friends were also rated high (≈ 2.67–2.68). In contrast, ease of concealment had the lowest mean (2.00 ± 0.82) with no significant reason for use. Chi-square tests uncovered differences in motivations, especially for independence, but ease of hiding did not vary significantly. TABLE XI shows, the findings on social motivations revealed that the primary reason for smartphone use was exposure to other cultures with fewer social constraints (24.66%), with men (32.30%) showing a higher priority than women (18.82%). The second most common reason was living a different virtual life (20.66%), followed by escaping from family and social problems (18.66%), and academic workload (18.0%).

TABLE XI SOCIAL MOTIVES FOR FOLLOWING SMARTPHONE PROGRAMS AND APPLICATIONS BY GENDER

Social Motives	Male (n, %)	Female (n, %)	Total (n, %)	Mean	Std. Dev.	Chi-Square	Rank
Escaping family atmosphere and social problems	11 (16.92%)	17 (20.0%)	28 (18.66%)	14.0	4.24	1.29	3
Escaping academic workload pressure	7 (10.76%)	20 (23.52%)	27 (18.0%)	13.5	9.19	7.52	4
Discussing social problems with online friends	9 (13.84%)	13 (15.29%)	22 (14.66%)	11.0	2.82	0.36	5
Living a different virtual life	14 (21.53%)	17 (20.0%)	31 (20.66%)	15.5	2.12	0.06	2
Interacting with other cultures with fewer restrictions	21 (32.30%)	16 (18.82%)	37 (24.66%)	18.5	3.54	0.68	1
Finding a life partner not found in real life	3 (4.61%)	2 (2.35%)	5 (3.33%)	2.5	0.71	0.20	6
Total	65 (43.33%)	85 (56.66%)	150 (100%)				

Online discussion of the issues was the least common (14.66%), and the search for a life partner was the least common (3.33%), which was more common in men (4.61%) than in women (2.35%). The mean scores indicated that culture sharing (M = 18.5) and fantasy living (M = 15.5) had the highest mean, while seeking a life partner had the lowest mean (M = 2.5). The standard deviations were between low and mediocre (2.12 -9.19), which suggested that the responses were not very varied. Chi-square test did not reveal any significant differences in terms of gender, and the same patterns were observed between men and women.

TABLE X shows, the psychological motives showed that the primary reason for smartphone use was escaping accountability or avoiding family anger (24.66%), most common among students living with both parents (89.18%). The second most frequent motive was relieving guilt (23.33%), also prevalent among those living with parents (88.57%). Overcoming shyness (21.33%) was third, dominated by students living with both parents (84.37%). Escaping loneliness was the least reported motive (6.66%), with 76.0% of these students living with their parents. The means revealed that avoiding accountability (M = 9.25), relieving guilt (M = 8.75), and overcoming shyness (M = 8.00) were the strongest psychological motives. Standard deviations were high (max = 15.88), indicating variability in responses. A significant relationship was found between family setup and students' psychological motives, as shown by the chi-square test (χ^2 = 28.89, df = 15, p = 0.016).

TABLE X PSYCHOLOGICAL MOTIVES FOR FOLLOWING SMARTPHONE PROGRAMS AND APPLICATIONS BY SOCIAL STATUS

Psychological Motives	Living with Parents (n, %)	Living with Father (n, %)	Living with Mother (n, %)	Other (n, %)	Total (n, %)	Mean / Std. Dev.
Escaping loneliness	5 (50.0%)	2 (20.0%)	2 (20.0%)	1 (10.0%)	10 (6.66%)	2.50 / 1.73
Escaping anxiety and fear of the unknown	11 (50.0%)	3 (13.63%)	6 (27.27%)	2 (9.09%)	22 (14.66%)	5.50 / 4.04
Overcoming shyness and hesitation	27 (84.37%)	2 (6.25%)	3 (9.37%)	0 (0.0%)	32 (21.33%)	8.00 / 12.73
Forgetting feelings of guilt	31 (88.57%)	1 (2.85%)	3 (8.57%)	0 (0.0%)	35 (23.33%)	8.75 / 14.89
Escaping bullying and sarcasm	7 (50.0%)	2 (14.28%)	4 (28.57%)	1 (7.14%)	14 (9.33%)	3.50 / 2.65
Escaping accountability and avoiding family anger	33 (89.18%)	1 (2.70%)	3 (8.10%)	0 (0.0%)	37 (24.66%)	9.25 / 15.88
Total	114 (76.0%)	11 (7.33%)	21 (14.0%)	4 (2.66%)	150 (100%)	

Research Findings

Smartphones were the most commonly used device (54.0%) among participants, particularly by those living with both parents (73.3%), while the computer was the least used device (<8.0%). The vast majority of the students were fond of using smartphones during the evening or later at night, irrespective of their academic level. As well, 38.0% of the participants spent seven or more hours per day on smartphones, predominantly of the low-income category (AED 5,00010,000 monthly), which means that students with low incomes are the primary smartphone users. The platform with the most usage was more than one (34.66%), then Instagram (22.0%), then WhatsApp and Twitter (9.0% each), and there were no significant differences in the use of the platform between genders. Almost half of the participants favored the use of various apps, and the other half used entertainment apps (games, movies, chatting), and the marital status and course (no significant differences were found). Arab expatriates followed more programs (33.3%) than nationals (22.4%), and non-Arab foreigners rarely followed Arab programs, showing a significant relationship between nationality and platform preferences. The primary social motivation for smartphone use was the desire to interact with cultures with fewer restrictions (24.66%), especially among men (32.30%), while finding a life partner was the least common reason (3.33%). There were no significant gender differences in social motivations. Finally, avoiding family accountability and anger was the strongest psychological motive (24.66%), particularly among students from nuclear families (89.18%), while escaping loneliness was the least common motive (6.66%). A significant relationship was found between family status and psychological motivations influencing smartphone use.

Recommendations

- Offer social, economic, and psychological support to college students who do not enjoy good or stable social conditions so as to prevent them from excessive use of smartphone programs and applications, which can create addictive behaviors that could affect their academic performance.

- Incorporate education campaigns in university subject content that build on students' incentives to use skill-enhancing/ scientifically enriching applications and programs from different fields of science.

- Drive universities to build concerted taskforces or departments with experts in IT, design, media, sociology, and psychology that can develop fun and knowledge/skills-oriented applications/programs. These alternatives allow students to focus more of their time, eliminate the obstacles they encounter, and increase their skills in accordance with those demanded by the labor market.

- Develop edutainment applications that are both academically and play-centric for all segments of the target audience on mobile devices in a professional, attractive , and fun way to blend entertainment with learning and skill development. They should be viewed as must-have apps for college students to steer them away from damaging, useless content on smartphones.

V. CONCLUSION

The paper has identified that smart phones and mobile applications are relevant in the lives of university students especially in social and psychological aspects. Most students spend time on their smartphones being entertained in terms of games, movies and socializing without much use of educational applications. The statistical data indicate that the percentage of students spending more than seven hours a day with smartphones is 38.0, and the number of students that spend more time with the smartphone is the highest among lower-income households (62.0% households with incomes between 5-10k AED), indicating that people use their smartphones more frequently because of the necessity to be entertained and manage their time. The research also indicates that students with healthy family backgrounds have more frequent smartphone usage with 73.3% of the participants who reportedly lived with both parents saying that they utilize smartphones more. The comparison shows that there are no pronounced gender differences in terms of preferences and patterns of platforms. Nevertheless, the research indicates that there is a high level of psychological drive among the students not to get the family in disapproval

and 24.66% of the students gave the motivation as a reason that made them use a smartphone. Further, overuse of smartphone has adverse academic performance especially when motivated by psychological reasons like avoiding academic pressure or evading family disagreement. The study suggests measures that can be taken to help the students to use smartphones in a more productive manner, which include skills development and learning applications. Universities ought to have campaigns that are not too entertaining but rather learning and students should be involved in improving their knowledge and at the same time enhance personal developments. Future studies may be conducted to understand the long-term consequences of smartphone use on the academic path of a student and the effectiveness of interventions aimed at promoting the use of educational apps and the impact of technological progress in reducing the adverse effects of excessive screen time.

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