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SMARTPHONE USE AND ATTEMPTS TO LIMIT IT AMONG UNIVERSITY STUDENTS: FINDINGS OF A PILOT SURVEY

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Abstract: Smartphones have become the main device through which university students study, communicate and spend their leisure time, yet little is known about how much time students themselves report spending on them and what they do to limit it. This pilot study describes self-reported smartphone use and attempts to reduce it among university students. Methodologically, it is a quantitative, descriptive, cross-sectional online survey administered on 1–2 November 2026. Thirty-two submissions were received; after blank, duplicate, researcher-made and non-university submissions were removed, 23 university students aged 18–20 (21 women, 2 men) were analysed. Respondents reported a median of six hours of smartphone use per day, and 15 of 23 (65.2%) reported six hours or more. Instagram (52.2%) and Telegram (39.1%) were named as the most-used applications, and communication was the most frequent purpose (56.5%). Almost half of the respondents (47.8%) used the phone for more than an hour before sleep. Eighteen respondents (78.3%) had tried to reduce their use, most often through application time limits (10 of 18) or by switching off notifications (7 of 18); nine of them reported that their screen time decreased considerably, and nine that the attempt did not help. The study is limited by a small convenience sample, categorised self-reported time estimates, and the absence of validated scales and device-logged data, so the findings are preliminary and cannot be generalised. They nevertheless suggest that attempts to cut down are common but often ineffective, and they provide a basis for a larger study with validated instruments and objective screen-time measures.

Keywords: smartphone use, university students, screen time, social media, Instagram, Telegram, digital habits, self-reported use, pilot study, reduction strategies

1. Introduction

Smartphones have become the central device through which university students study, communicate and spend their free time. Evidence from many countries suggests that problematic smartphone use is common in this group and has been rising worldwide (Olson et al., 2022). Pooled prevalence estimates of smartphone addiction vary widely: 39% in a meta-analysis of 16 studies of medical students (Leow et al., 2023), 39% among Iranian school and university students (Ghanei Gheshlagh et al., 2024), and 60% among medical students in India (Pradeep et al., 2025). Systematic reviews attribute much of this spread to differences in terminology, assessment instruments and samples rather than to a single stable rate (Sánchez-Fernández & Borda-Mas, 2023).

The interest in student smartphone use rests on its possible costs. In a meta-analysis of medical students, smartphone addiction scores correlated positively with poor sleep quality ($r = 0.30$, 95% CI 0.24–0.36) (Leow et al., 2023). In a sample of 804 university students, smartphone addiction was positively related to poor sleep and to depressive symptoms (Kaya et al., 2021). One psychological mechanism discussed in this literature is the fear of missing out (FoMO), defined as "a pervasive apprehension that others might be having rewarding experiences from which one is

absent" (Przybylski et al., 2013, p. 1841), and identified as a predictor shared by problematic smartphone use and problematic social media use (Sánchez-Fernández & Borda-Mas, 2023).

Less is known about what students do about it. The strongest evidence comes from an experiment in which 143 undergraduates limited Facebook, Instagram and Snapchat to ten minutes per platform per day for three weeks and, compared with a control group, reported significantly lower loneliness and depression (Hunt et al., 2018). How students try to limit their use on their own initiative, which strategies they choose, and whether they find them effective is documented much less often in the sources reviewed for this study.

The local context is also thinly covered. A recent systematic review reports that Facebook, Instagram, Telegram, TikTok and YouTube are widely used by Uzbek learners of English as a foreign language, with engagement highest among those aged 16–24 (Ataniyazova & Panicker, 2025), but that review concerns reading motivation, not daily smartphone time or attempts to reduce it. The literature search conducted for the present study located few studies that describe these aspects for students in Uzbekistan directly.

The aim of this pilot study is to describe how much time university students report spending on their smartphones, which applications and purposes dominate, and how they try to limit their use. It addresses three research questions:

1. **RQ1.** How many hours per day do university students report using their smartphones, and how common is use before sleep?
2. **RQ2.** Which applications and purposes dominate their use?
3. **RQ3.** How many students have tried to reduce their use, which strategies did they choose, and how do they judge the result?

The contribution of the study is descriptive and preliminary. It provides a first set of self-reported data on daily smartphone time, dominant applications and bedtime use among university students who completed an Uzbek-language questionnaire; it documents the self-chosen strategies students use to limit their use and their perceived effect; and it identifies methodological problems (categorised time reporting, missing routing between questions, no validated scale) that a larger follow-up study should avoid. Practically, the findings can inform student counselling and digital-habit programmes, but only as a starting hypothesis, not as evidence of effect. The article proceeds from a review of the literature through the methods and results to a discussion and conclusions.

2. Literature Review

Prevalence and measurement. Meta-analytic estimates of problematic smartphone use among students are high but hard to compare. Olson et al. (2022) concluded from 24 countries that smartphone addiction is increasing across the world. A meta-analysis of 20 Iranian studies (6,901 participants) found a pooled prevalence of 39% (95% CI 33–45%), with no significant difference between school pupils (39.5%) and university students (36.6%) (Ghanei Gheshlagh et al., 2024). A meta-analysis of 16 studies of medical students (9,466 participants) also found 39% (95% CI 30–50%) (Leow et al., 2023), whereas 24 Indian studies of medical students yielded 60% (95% CI 45–73%) (Pradeep et al., 2025). Heterogeneity was very high in both reviews of medical students (I^2 = 99\% and 99.4%). A larger review of 117 studies similarly found variability in terminology, assessment tools and prevalence rates across its four groups of problematic online behaviour, the largest being problematic smartphone use (67 studies) (Sánchez-Fernández & Borda-Mas, 2023). Most of these estimates come from addiction scales; daily hours are reported less often. The mean daily use of 4.90 hours (95% CI 3.72–6.08) in the medical-student meta-analysis, for example, rests on only three studies (Leow et al., 2023).

Sleep and mental health. Associations with sleep and mood are the most frequently examined correlates. Leow et al. (2023) reported that 57% of medical students had poor sleep and that smartphone addiction scores correlated with sleep quality scores (r = 0.30). Kaya et al. (2021) found, among 804 university students, a positive relationship between smartphone addiction and both poor sleep quality and depressive symptoms. A meta-analysis of the general population reported an odds ratio of 2.19 for poor sleep among problematic smartphone users (Yang et al., 2020, as reported by Leow et al., 2023). All studies in the medical-student review used cross-sectional designs, so none of these associations demonstrates that smartphone use causes poor sleep or low mood (Leow et al., 2023).

Applications and purposes. Across studies of medical students, text messaging was the most common activity, followed by photo sharing and social networking, and WhatsApp was the most-used application in all three studies that reported it (Leow et al., 2023). For Uzbek learners of English as a foreign language, a systematic review identified Facebook, Instagram, Telegram, TikTok and YouTube as the key platforms, with women gravitating towards Instagram and Telegram and men towards TikTok (Ataniyazova & Panicker, 2025). These findings are consistent with communication and social networking as the dominant purposes, but they come from different populations and are not directly comparable.

Fear of missing out and social comparison. FoMO is characterised by the desire to stay continually connected with what others are doing (Przybylski et al., 2013). Negative affectivity was a predictor common to problematic smartphone use, problematic social media use and gaming, while social media use, psychological well-being and FOMO were shared by the first two (Sánchez-Fernández & Borda-Mas, 2023). Hunt, the lead author of the limiting experiment described below, explained its results partly through social comparison, particularly on Instagram, where it is easy to conclude that everyone else's life is better (University of Pennsylvania, 2018).

Limiting use. Experimental evidence shows that limiting use can help: in the study of 143 undergraduates, those who restricted Facebook, Instagram and Snapchat to ten minutes per platform per day for three weeks reported significantly lower loneliness and depression than a control group, and use was tracked from iPhone battery screens rather than recalled (Hunt et al., 2018; University of Pennsylvania, 2018). Reviews cited in the medical-student meta-analysis recommend exercise, psychological interventions, cognitive-behavioural therapy and education programmes (Leow et al., 2023). Leow et al. themselves suggest simple habits such as silent or do-not-disturb mode at bedtime. Educational interventions are likewise recommended for Iranian students (Ghanei Gheshlagh et al., 2024).

Gaps. Three gaps follow. First, daily hours are less often reported than addiction scores. Second, students' own, self-initiated attempts to limit use, and their perceived success, are rarely described, whereas structured interventions are better documented. Third, the sources located for this study contain little direct description of Uzbek university students' smartphone time. These gaps motivate research questions RQ1–RQ3.

3. Materials and Methods

Design. The study is a quantitative, descriptive, cross-sectional pilot survey. It tests no hypotheses and uses no inferential statistics: the results are counts and percentages.

Instrument and procedure. An online questionnaire in Uzbek, created in Google Forms, was sent by the author to acquaintances through Telegram, and responses were received between 1 and 2 November 2026. The questionnaire was designed by the author for this pilot and is not a validated instrument. It asked for age, gender and educational setting (university or school); average daily smartphone use, answered in hour categories (less than 5, 6, 7, 8 and more than 8 hours; no

analysed respondent chose the last category); the application on which most time is spent (one answer); the main purpose of use (communication, study, news); how often the respondent checks the phone while studying or working (always, whenever starting a task, never); use of the phone before sleep (none, 30 minutes, more than one hour); whether the respondent had tried to reduce smartphone use (yes/no); the strategy used (application time limit, switching off notifications, keeping the phone out of reach); the perceived result (screen time decreased considerably / the attempt did not help); and the duration of the attempt (1–3 days, 1 week, 1 month). One further item asked respondents to rate their sleep quality on a five-point scale; it is not analysed because 22 of 23 respondents chose the same value (3), which leaves no variation to describe.

Participants and data cleaning. The form received 32 submissions. Nine were excluded before analysis: one blank submission; three submissions made from the author's own e-mail account; three repeated submissions from the same respondent, identified by e-mail address (the first was kept; in one of the three the answers differed between submissions); and two submissions from respondents who identified themselves as school pupils. The final sample comprised 23 university students aged 18–20 (13 aged 18, 7 aged 19 and 3 aged 20), of whom 21 were women and 2 were men. The sample is a convenience sample of the author's acquaintances, whose universities and faculties were not recorded, and is not representative of any wider population.

Ethics. Participation was voluntary and all analysed respondents were adults. The form recorded e-mail addresses to detect repeated submissions; they were not analysed or reported, so responses were not anonymous at the point of collection. The form stated that participation was voluntary. The study did not receive faculty or institutional ethics approval, which is acknowledged as a limitation.

Analysis. Responses were tabulated as frequencies and percentages of the 23 respondents. Questions about reduction attempts are reported for the 18 respondents who said they had tried to reduce their use, because the form did not route respondents who answered "no" past the follow-up questions and all five of them answered those questions as well; their answers are excluded from those tables. Cross-tabulations are descriptive only. No significance tests were performed because the sample is too small to support them.

4. Results

4.1 Sample and amount of use (RQ1)

Table 1 describes the sample and the self-reported amount of daily use. Respondents were aged 18 to 20 and nearly all were women (21 of 23). The most frequent single category was less than 5 hours a day (8 respondents, 34.8%), but 15 of 23 respondents (65.2%) reported 6 hours or more, and the median category was 6 hours. Four respondents (17.4%) chose the highest category, 8 hours.

Table 1. Characteristics of the sample and reported daily smartphone use (n=23)

Variable	Category	n	%
Age	18	13	56.5
	19	7	30.4
	20	3	13.0
Gender	Female	21	91.3
	Male	2	8.7
Daily use	Less than 5 hours	8	34.8
	6 hours	5	21.7
	7 hours	6	26.1

Variable	Category	n	%
	8 hours	4	17.4

4.2 What the phone is used for (RQ2)

Instagram was the application on which most time was spent for 12 respondents (52.2%), followed by Telegram (9; 39.1%) and YouTube (2; 8.7%). Communication was the most common main purpose (13; 56.5%), ahead of study (7; 30.4%) and news (3; 13.0%). The two are linked: communication was the main purpose for 9 of the 12 Instagram users (75.0%) but for only 3 of the 9 Telegram users (33.3%), who more often named study (4) or news (2).

Table 2. Main application, main purpose and checking behaviour (n=23)

Variable	Category	n	%
Most-used application	Instagram	12	52.2
	Telegram	9	39.1
	YouTube	2	8.7
Main purpose	Communication	13	56.5
	Study	7	30.4
	News	3	13.0
Checking the phone while studying or working	Always	10	43.5
	Whenever starting a task	8	34.8
	Never	5	21.7

4.3 Use before sleep (RQ1)

Eleven respondents (47.8%) used the phone for more than one hour before sleep, 11 (47.8%) for about 30 minutes, and one (4.3%) did not use it at all. Long evening use was concentrated among heavier users: all 4 respondents in the 8-hour category used the phone for more than an hour before sleep, compared with 3 of 8 in the less-than-5-hour category. Table 3 gives the cross-tabulation.

Table 3. Phone use before sleep by reported daily use (n=23)

Daily use	None	About 30 minutes	More than 1 hour	Total
Less than 5 hours	0	5	3	8
6 hours	1	3	1	5
7 hours	0	3	3	6
8 hours	0	0	4	4
Total	**1**	**11**	**11**	**23**

4.4 Attempts to reduce use (RQ3)

Eighteen of 23 respondents (78.3%) said they had tried to reduce their smartphone use; five (21.7%) said they had not. Among the 18, the most common strategy was a daily limit on an application (10; 55.6%), followed by switching off notifications (7; 38.9%) and keeping the phone out of reach (1; 5.6%). The attempts were mostly short: 7 (38.9%) lasted one to three days, 6 (33.3%) one week and 5 (27.8%) one month.

4.5 Perceived effect (RQ3)

Nine of the 18 respondents (50.0%) said that their screen time decreased considerably and nine said that the attempt did not help. Table 4 shows the split by strategy and by duration.

Notification switch-off was reported as helpful by 4 of 7 respondents and daily limits by 4 of 10; the single respondent who moved the phone away reported a decrease. The share reporting a decrease was 3 of 7 for attempts of one to three days, 3 of 6 for one week and 3 of 5 for one month. With groups this small these differences are not interpretable, and the data show no clear advantage for any strategy or duration.

Table 4. Perceived effect of the attempt by strategy and duration (respondents who tried to reduce use, n=18)

Group	Screen time decreased considerably	Did not help	Total
Daily limit on an application	4	6	10
Notifications switched off	4	3	7
Phone kept out of reach	1	0	1
Attempt lasted 1-3 days	3	4	7
Attempt lasted 1 week	3	3	6
Attempt lasted 1 month	3	2	5
All who tried	**9**	**9**	**18**

4.6 Respondents who had not tried to reduce use

The five respondents who answered "no" reported between less than 5 and 8 hours of daily use (two reported 8 hours), were all but one Instagram users, and four of the five reported more than one hour of phone use before sleep. Because they also completed the follow-up questions, their answers to those questions are not interpreted.

5. Discussion

Amount and pattern of use. Two thirds of the respondents (65.2%) reported six or more hours of smartphone use a day, and the median was six hours. This is higher than the mean of 4.90 hours reported in the medical-student meta-analysis (Leow et al., 2023), but that mean rests on only three studies, the respondents here chose from coarse categories, and self-reported time is an estimate, so the comparison is indicative at best. The sample also cannot be compared with the prevalence figures of 39–60% cited above (Ghanei Gheshlagh et al., 2024; Leow et al., 2023; Pradeep et al., 2025), because no addiction scale was used: the study measured time, not problematic use. A student may spend six hours on the phone for study and communication without being dependent on it.

Applications and purposes. The dominance of Instagram and Telegram, and of communication as the main purpose, agrees with the pattern the systematic review of Uzbek learners describes, in which women favour Instagram and Telegram (Ataniyazova & Panicker, 2025). The sample, however, was 91% female, so this agreement may reflect its composition rather than students in general. The link between Instagram and communication, and the more study- and news-oriented use of Telegram, is a descriptive observation from 21 respondents and should be tested in a larger sample. Because the question allowed only one main application and one main purpose, it hides overlapping use.

Evening use. Nearly half of the respondents used the phone for more than an hour before sleep, and all four heaviest users did. The literature links smartphone addiction scores to poor sleep quality (Kaya et al., 2021; Leow et al., 2023), and it suggests habits such as silent mode at bedtime (Leow et al., 2023). The present data contain no usable measure of sleep quality (22 of 23 respondents gave the same rating) and none of sleep duration, so they cannot say whether these students sleep poorly; they only show that long evening use is common and a plausible target for intervention.

Attempts to reduce use. The most notable finding is the combination of a high rate of attempts (78.3%) with a split verdict: half of the respondents who tried said their screen time decreased considerably, and half that it did not help. Most attempts were brief (one to three days or one week for 72% of them), and the self-chosen methods were light-touch: application limits and notifications, which can be switched off again in a moment. The experimental evidence that limiting use can help involved a structured, three-week restriction with tracked use (Hunt et al., 2018), which is a different kind of attempt. The present data cannot show which strategy works, since each group has between one and ten respondents and the outcome is a self-assessment. What they suggest is a question for a larger study: whether duration, specificity or supervision of an attempt distinguishes those who report a decrease from those who do not.

Limitations. First, the sample is small (n=23), recruited through the author's acquaintances, almost entirely female and aged 18–20, so it supports no generalisation and no inferential statistics. Second, all measures are self-reported and use categories, with no device-logged screen time, and the hour categories are coarse. Third, no validated scale (for example, a short smartphone addiction scale) was used, so problematic use cannot be distinguished from heavy use. Fourth, the follow-up questions were not routed, so the 'no' group answered questions that did not apply to it and the results for reduction attempts rest on 18 respondents. Fifth, the form collected e-mail addresses, which may have affected candour even though they were not analysed, and duplicate submissions had to be removed. Sixth, 'perceived effect' is a single yes/no judgement without a baseline. Finally, the study did not receive ethics committee approval, the sleep-quality rating was uninformative and was not analysed, and the literature search was limited to sources that could be opened and checked, and is not a systematic review.

Implications for future research. A follow-up study should use a sample of at least 100 to 150 students from several faculties with a balanced gender distribution, a validated instrument such as the Smartphone Addiction Scale-Short Version (Kwon et al., 2013) translated and checked for Uzbek, screen-time data from the device, conditional routing in the form, and anonymous collection. It could then compare strategies and durations with proper statistical tests.

6. Conclusion

This pilot survey of 23 university students answers its three research questions descriptively.

- **RQ1:** respondents reported a median of six hours of smartphone use per day, with 65.2% reporting six hours or more, and 47.8% used the phone for more than an hour before sleep.
- **RQ2:** Instagram (52.2%) and Telegram (39.1%) were the most-used applications, and communication (56.5%) was the main purpose.
- **RQ3:** 78.3% had tried to reduce their use, mainly through application limits or by switching off notifications, but the attempts were short and only half of those who tried judged that their screen time decreased considerably.

The findings are preliminary. The sample is small, female-dominated and drawn from the author's acquaintances, time was self-reported in categories, and no validated scale or device-logged data were used, so the results cannot be generalised and say nothing about causes or about

which strategy works. Their value lies in showing that attempts to cut down are common, that they often fail or are abandoned quickly, and that evening phone use is widespread among these students. A larger study should combine a validated scale, device-logged screen time, correctly routed questions and anonymous collection, and should test whether longer, more specific or supervised attempts are associated with a greater reduction in use. Pending such evidence, the practical suggestion of this study is modest: student counselling and digital-habit programmes could start by asking students what they have already tried and for how long.

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