



Nomophobia Among Young Adults: Assessing the Fear of Being Without a Mobile Phone.

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Abstract

Background: Nomophobia describes distress or anxiety associated with being unable to access or use a mobile phone. The present study assessed the severity of nomophobia and its relationship with smartphone-use characteristics using the 20-item Nomophobia Questionnaire (NMP-Q). **Methods:** A cross-sectional online survey was analyzed. The dataset contained 229 responses, of which 226 consenting responses were included. The NMP-Q uses a 7-point Likert scale, with total scores ranging from 20 to 140; higher scores indicate greater severity. Descriptive statistics, frequencies, percentages, mean $\pm$ standard deviation, Cronbach's alpha, cross-tabulation, chi-square tests, and Spearman correlation were performed. **Results:** The mean total NMP-Q score was 83.61 ± 21.83 . Moderate nomophobia was observed in 133 participants (58.8%), severe nomophobia in 57 (25.2%), and mild nomophobia in 36 (15.9%); no participant scored in the absent category. The highest item mean was for concern that family or friends could not reach the participant (Item 11; mean 4.99 ± 1.69), followed by anxiety about losing contact with family/friends (Item 13; 4.82 ± 1.68). Internal consistency was high (Cronbach's $\alpha = 0.923$). Nomophobia severity was significantly associated with gender ($p = 0.020$), daily smartphone-use category ($p = 0.034$), keeping the smartphone throughout the day ($p = 0.013$), and previous anxiety when the smartphone was unavailable ($p < 0.001$). Daily usage category showed a small positive Spearman correlation with total NMP-Q score ($\rho = 0.225$, $p < 0.001$). **Conclusion:** Moderate and severe

nomophobia symptoms were common in this sample and were linked to several smartphone-use behaviors. The findings support the need for awareness of healthy smartphone habits, while recognizing that NMP-Q scores represent self-reported symptoms rather than a clinical diagnosis.

Keywords: nomophobia; smartphone use; Nomophobia Questionnaire; NMP-Q; smartphone dependence; cross-sectional survey

1. Introduction

Smartphones have become multifunctional devices used for communication, information seeking, education, entertainment, financial activities and social networking. This constant connectivity can make separation from the device uncomfortable for some individuals. Nomophobia, commonly described as "no mobile phone phobia," refers to anxiety, worry or discomfort associated with being unable to access or use a mobile phone. [1] The construct has attracted increasing research attention, although it is not currently established as a formal DSM-5 or ICD-11 diagnosis. [11,12]



Recent evidence emphasizes that nomophobia should be interpreted as a pattern of self-reported symptoms rather than automatically equated with a psychiatric disorder.

Yildirim and Correia developed the 20-item Nomophobia Questionnaire (NMP-Q) and identified four dimensions: not being able to communicate, losing connectedness, not being able to access information, and giving up convenience. [1] The NMP-Q uses a 7-point response scale and produces a total score from 20 to 140, with higher scores indicating greater nomophobia severity. The instrument has been widely used in subsequent research and has demonstrated strong reliability across studies. [4,20] A 2023 reliability meta-analysis reported pooled internal consistency of approximately 0.93 for total NMP-Q scores and supported the four-factor structure. Recent systematic reviews and meta-analyses indicate that mild and moderate symptoms are common, with a smaller but important proportion of individuals reporting severe symptoms.

The present study was undertaken to describe nomophobia severity in a mixed-age sample and to examine whether severity differed according to demographic and smartphone-use characteristics. The study is particularly relevant because smartphone use now extends beyond communication to social media, education, entertainment, financial transactions and work, potentially increasing opportunities for continuous connection.

2. Objectives

- To assess the level and severity of nomophobia among participants using the 20-item Nomophobia Questionnaire (NMP-Q).
- To describe demographic and smartphone-use characteristics of the participants.
- To examine the relationship between nomophobia severity and daily smartphone-use duration.
- To determine whether nomophobia severity is associated with gender, educational qualification, smartphone-carrying behavior, and previous anxiety when the smartphone was unavailable.

3. Literature Review

The original NMP-Q study by Yildirim and Correia established four dimensions of nomophobia and validated the 20-item instrument among undergraduate students. [1] The four dimensions describe concerns about communication, connectedness, access to information and convenience. This multidimensional structure has made the NMP-Q one of the most frequently used measures in nomophobia research. [4,20]

Systematic reviews have shown substantial variation in reported prevalence, partly because studies use different instruments, populations and cut-off definitions. [6] A 2023 meta-analysis of university students using the NMP-Q reported approximately 24% mild, 56% moderate and 17% severe nomophobia. [3] A broader 2022 systematic review and meta-analysis similarly estimated that roughly one-fifth of participants had mild symptoms, one-half had moderate symptoms and one-fifth had severe symptoms. [2] A newer 2025 global meta-analysis based on 43 studies and more than 36,000 participants estimated 26% mild, 51% moderate and 21% severe symptoms, while emphasizing that these are self-reported symptom levels rather than clinical diagnoses. [7]

The relationship between nomophobia and related psychological or behavioral outcomes has also been examined. A 2023 systematic review and meta-analysis found positive associations between nomophobia and anxiety, smartphone addiction and insomnia symptoms. [5] Other reviews have identified demographic, lifestyle, academic, smartphone-related and psychosocial variables as potential correlates, while also highlighting methodological heterogeneity and the need for standardized reporting. [11,12]

Evidence from India is particularly relevant to smartphone-dependent populations. Recent Indian systematic reviews indicate a substantial burden of nomophobia [9,10], although prevalence estimates vary across populations and settings. [13,16,17,18] The current study adds a mixed-age, questionnaire-based dataset and examines smartphone-use behaviors alongside NMP-Q severity.



4. Materials and Methods

4.1 Study design and participants

A cross-sectional, descriptive-analytical online survey design was used. The supplied dataset contained 229 responses. Three responses were excluded because participants selected “No” for voluntary consent. The final analytical sample therefore consisted of 226 consenting participants. The dataset included age, gender, educational qualification, average daily smartphone usage, primary purposes of smartphone use, smartphone-carrying behaviour, previous anxiety when the smartphone was unavailable, and 20 NMP-Q items.

4.2 Instrument

Nomophobia was assessed using the 20-item Nomophobia Questionnaire (NMP-Q) developed by Yildirim and Correia. [1] The questionnaire provided by the study contains 20 statements scored from 1 (Strongly Disagree) to 7 (Strongly Agree). The uploaded scoring instructions state that item responses are summed and that higher total scores indicate more severe nomophobia. The total possible score is 20–140. [4]

4.3 Scoring and severity classification

For the present analysis, the standard NMP-Q severity bands reported in the literature were applied: 20 = absent; 21–59 = mild; 60–99 = moderate; and 100–140 = severe. [6,7] These cut-offs are consistent with published descriptions of the original NMP-Q scoring system. [1] The four dimensions were also examined descriptively: not being able to communicate (Items 10–15), losing connectedness (Items 16–20), not being able to access information (Items 1–4), and giving up convenience (Items 5–9).

4.4 Data analysis

Data were analyzed from the supplied Excel response sheet. Frequencies and percentages were calculated for categorical variables. Means and standard deviations were calculated for NMP-Q item scores, total scores and dimension scores. Internal consistency was assessed using Cronbach’s alpha. Cross-tabulations were produced between NMP-Q severity and selected demographic/smartphone-use variables. Pearson’s chi-square tests were used to evaluate categorical associations, with $p < 0.05$ considered statistically significant. Because daily smartphone usage was recorded in ordered categories, Spearman’s rank correlation was used to examine its relationship with total NMP-Q score.

4.5 Ethical considerations

Participation was voluntary and the questionnaire included an explicit consent question. Only participants who selected “Yes” were included in the statistical analysis. The supplied dataset and questionnaire did not contain an institutional ethics committee approval number or formal ethics approval statement. If ethics approval was obtained, the approval body and reference number should be inserted here before journal submission. If no formal approval was required, the journal’s prescribed exemption wording should be used.

5. Results

5.1 Participant characteristics

Of the 229 submitted responses, 226 (98.7%) indicated consent and were included in analysis. The largest age group was 15–25 years (156, 69.0%), followed by 26–35 years (43, 19.0%). Females accounted for 135 participants (59.7%) and males for 91 (40.3%). No participant was recorded in a 36–45-year category because that category was not present in the questionnaire response options.

Table 1. Demographic characteristics of consenting participants (N = 226).

Variable	Category	n	%
Age	15–25	156	69.0
Age	26–35	43	19.0
Age	46–55	19	8.4



Age	56–65	8	3.5
Gender	Female	135	59.7
Gender	Male	91	40.3
Education	Undergraduate	107	47.3
Education	Graduate	55	24.3
Education	Postgraduate	31	13.7
Education	Diploma	10	4.4
Education	Other	23	10.2

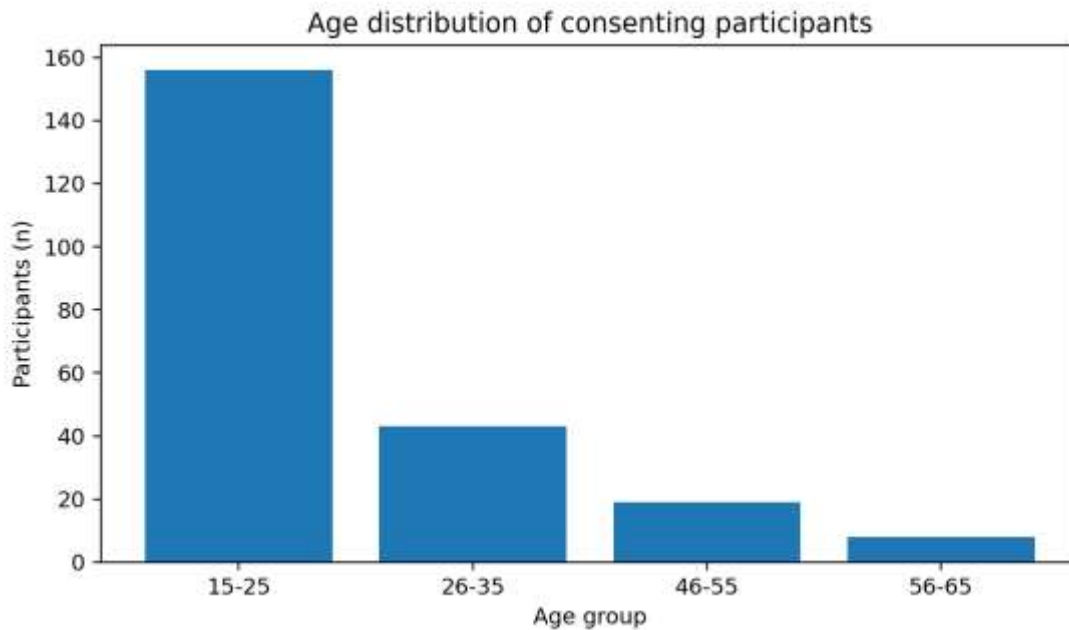


Figure 1. Age distribution of consenting participants.

5.2 Smartphone-use characteristics

Daily smartphone use was most commonly reported as 4–6 hours (78, 34.5%) and 2–4 hours (75, 33.2%). A total of 175 participants (77.4%) reported always keeping their smartphone with them throughout the day. Regarding previous anxiety or discomfort when the smartphone was forgotten or unavailable, 107 (47.3%) answered yes, 73 (32.3%) answered no, and 46 (20.4%) selected maybe.

Table 2. Smartphone-use characteristics of consenting participants (N = 226).

Variable	Category	Frequency (n)	%
Daily use	<2 hours	15	6.6
Daily use	2–4 hours	75	33.2
Daily use	4–6 hours	78	34.5
Daily use	6–8 hours	39	17.3
Daily use	>8 hours	19	8.4
Phone carried	Always	175	77.4
Phone carried	Rarely	46	20.4
Phone carried	Never	5	2.2
Previous anxiety	Yes	107	47.3
Previous anxiety	No	73	32.3
Previous anxiety	Maybe	46	20.4

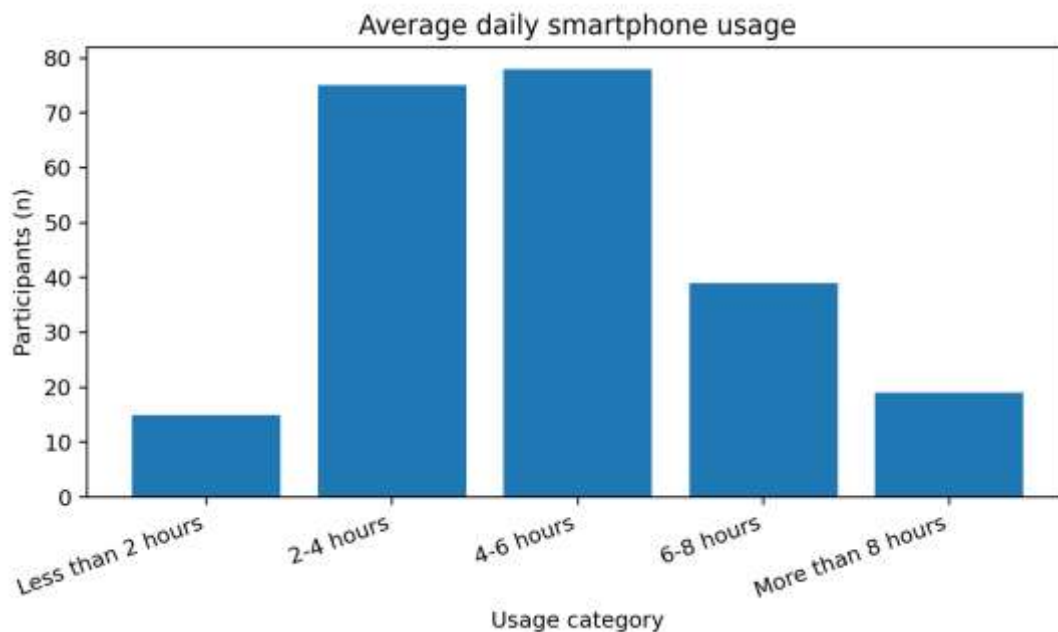


Figure 2. Average daily smartphone usage.

5.3 Primary purposes of smartphone use

The primary-purpose question permitted multiple selections; therefore, percentages do not sum to 100%. Social media was the most frequently selected purpose (177, 78.3%), followed by communication (173, 76.5%), entertainment (160, 70.8%), and education/study (143, 63.3%).

Table 3. Multiple-response frequencies for smartphone purposes.

Purpose	Participants selecting purpose (n)	% of N=226
Communication	173	76.5
Social Media	177	78.3
Education/Study	143	63.3
Entertainment	160	70.8
Online shopping	93	41.2
Banking/Payments	120	53.1
Work	93	41.2
Other	23	10.2

5.4 Overall NMP-Q score and severity

The total NMP-Q score ranged from 24 to 140, with a mean of 83.61 ± 21.83 and a median of 84.5. Using the standard severity categories, 36 participants (15.9%) had mild nomophobia, 133 (58.8%) had moderate nomophobia, and 57 (25.2%) had severe nomophobia. No participant scored exactly 20, the absent category.

Table 4. NMP-Q severity distribution (N = 226).

Severity category	Score range	N	%
Absent	20	0	0.0
Mild	21–59	36	15.9
Moderate	60–99	133	58.8
Severe	100–140	57	25.2

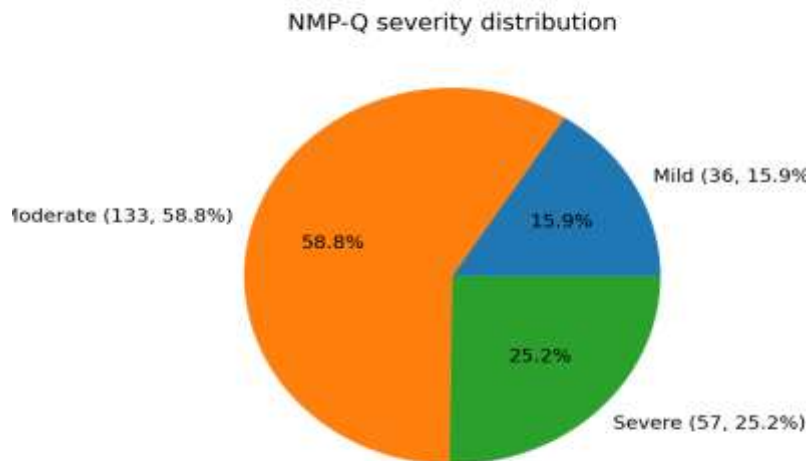


Figure 3. Distribution of NMP-Q severity categories.

5.5 Item-level NMP-Q analysis

Item means ranged from 3.65 to 4.99 on the 1–7 response scale. The highest mean was observed for Item 11, concerning worry that family or friends could not reach the participant (4.99 ± 1.69), followed by Item 13 concerning inability to keep in touch with family or friends (4.82 ± 1.68). The lowest mean was Item 16, concerning disconnection from online identity (3.65 ± 1.74).

Table 5. Item-level NMP-Q descriptive statistics.

NMP-Q item	Mean	SD	Agree (5–7) %
1	4.24	1.63	45.1
2	4.65	1.64	57.5
3	4.05	1.94	42.5
4	4.54	1.71	53.1
5	3.98	1.81	42.5
6	3.74	1.73	35.0
7	4.34	1.67	46.0
8	3.69	1.71	36.3
9	4.21	1.61	46.9
10	4.45	1.82	49.1
11	4.99	1.69	67.3
12	4.45	1.69	51.3
13	4.82	1.68	61.9
14	4.31	1.55	47.3
15	4.58	1.73	55.3
16	3.65	1.74	33.6
17	3.74	1.69	34.1
18	3.73	1.63	31.9
19	3.69	1.80	34.1
20	3.78	1.79	38.1

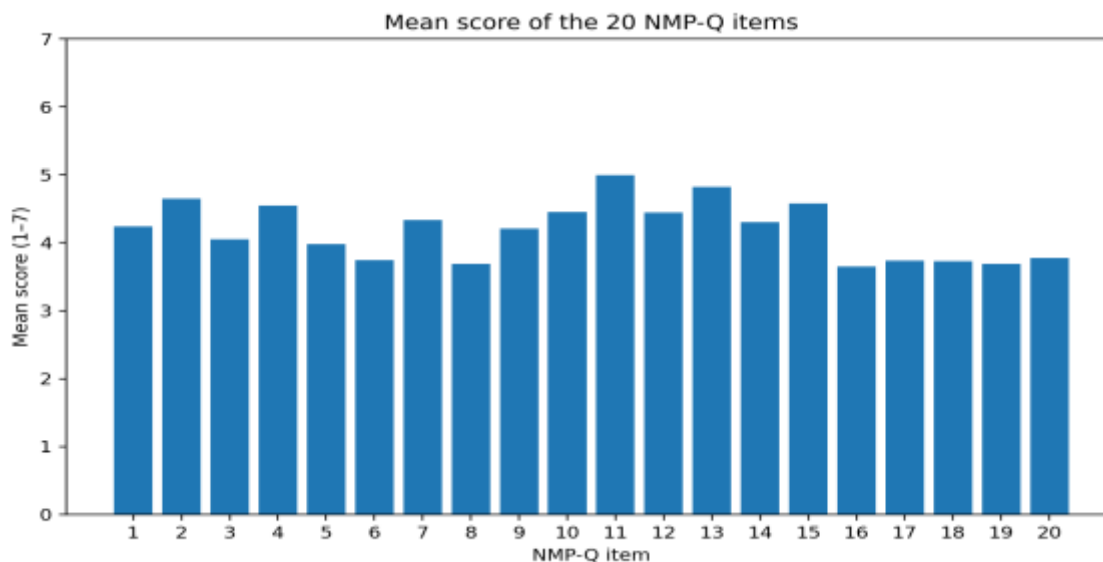


Figure 4. Mean score for each NMP-Q item.

5.6 NMP-Q dimensions and internal consistency

The overall NMP-Q demonstrated high internal consistency in this sample (Cronbach's $\alpha = 0.923$). The four dimension scores were also internally consistent, with Cronbach's alpha values ranging from 0.763 to 0.864.

Table 6. Descriptive statistics and internal consistency of the four NMP-Q dimensions.

Dimension	Items	Mean	SD	Cronbach α
Not being able to communicate	6	27.59	7.85	0.864
Losing connectedness	5	18.58	6.91	0.858
Not being able to access information	4	17.48	5.31	0.763
Giving up convenience	5	19.96	6.23	0.782

5.7 Association between NMP-Q severity and participant characteristics

Chi-square analyses showed statistically significant associations between NMP-Q severity and gender, daily smartphone-use category, keeping the smartphone throughout the day, and previous anxiety/discomfort when the smartphone was unavailable. Age and educational qualification were not significantly associated with severity. For the smartphone-carrying analysis, "Rarely" and "Never" were combined as "Not always" because the "Never" category contained only five participants.

Table 7. Chi-square tests of association with NMP-Q severity.

Variable	Df	χ^2	p-value
Age	6	9.90	0.129
Gender	2	7.84	0.020
Educational qualification	8	9.24	0.323
Average daily smartphone usage	8	16.62	0.034
Keeping smartphone throughout the day	2	8.68	0.013



Previous anxiety/uncomfortable when phone unavailable	4	43.88	<0.001
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Among females, 19.3% were classified as severe compared with 34.1% of males. Severe nomophobia was observed in 38.5% of participants reporting 6–8 hours of daily use, compared with 17.3% among those reporting 2–4 hours. Among participants who reported previous anxiety when their smartphone was unavailable, 39.3% had severe nomophobia compared with 5.5% among those who reported no such anxiety. Participants who always kept their smartphone with them had a higher proportion of severe nomophobia (29.1%) than those who did not always keep it with them (11.8%).

Daily smartphone-use category was positively correlated with total NMP-Q score (Spearman $\rho = 0.225$, $p < 0.001$), indicating that higher usage categories tended to be accompanied by higher nomophobia scores.

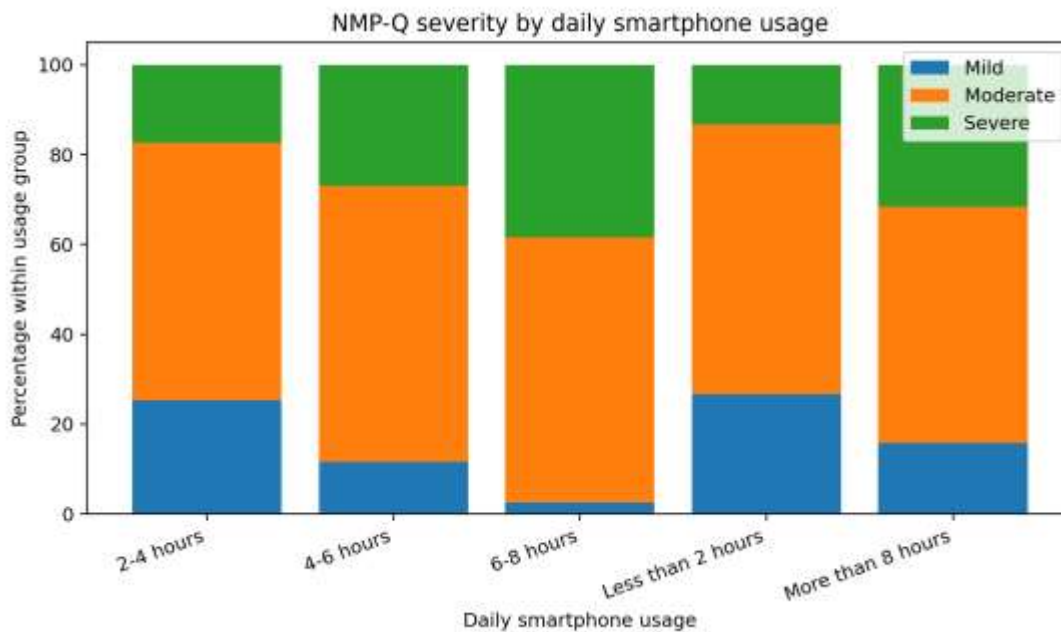


Figure 5. NMP-Q severity distribution within daily smartphone-use categories.

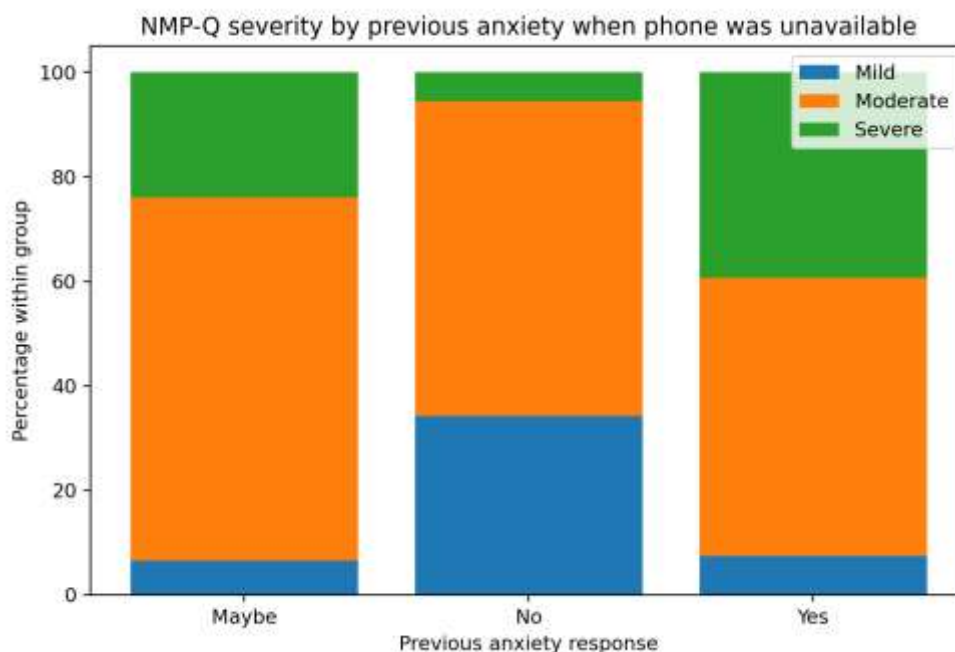


Figure 6. NMP-Q severity distribution according to previous anxiety when the smartphone was unavailable.



6. Findings

- The overall mean NMP-Q score was 83.61 ± 21.83 , indicating a substantial level of self-reported nomophobia symptoms in the sample.
- Moderate nomophobia was the predominant category (133 participants; 58.8%), followed by severe (57; 25.2%) and mild (36; 15.9%).
- Social media and communication were the most frequently selected smartphone purposes.
- The strongest individual NMP-Q item was concern about being unreachable by family or friends (Item 11).
- NMP-Q showed high internal consistency (Cronbach's $\alpha = 0.923$) in this dataset.
- Severity was significantly associated with gender, daily smartphone-use category, keeping the smartphone throughout the day, and previous anxiety when the smartphone was unavailable.
- Age and educational qualification were not significantly associated with NMP-Q severity in this sample.

7. Discussion

The present study found that moderate nomophobia was the dominant severity category, accounting for 58.8% of participants, while 25.2% had severe symptoms. This pattern is broadly consistent with recent meta-analytic evidence showing that moderate nomophobia is commonly the largest severity group, although exact proportions vary by population, country and measurement method. [6] For example, a 2023 meta-analysis of university students reported 56% moderate and 17% severe nomophobia, [3] while a 2025 global meta-analysis estimated 51% moderate and 21% severe symptoms. [7] The higher severe proportion in the present dataset may reflect differences in age composition, sampling, smartphone-use patterns or other unmeasured contextual factors.

The mean total NMP-Q score of 83.61 is compatible with a predominantly moderate symptom burden. The strongest item-level responses concerned communication and reachability, particularly worry that family and friends could not reach the participant and anxiety about losing contact with them. This is consistent with the original conceptualization of nomophobia, [1] in which inability to communicate and loss of connectedness form central dimensions. [4]

Daily smartphone-use duration was significantly associated with nomophobia severity, and the ordinal usage category was positively correlated with total NMP-Q score ($p = 0.225$). This finding is consistent with evidence that nomophobia is related to smartphone-related behaviors [14,15] and with studies reporting associations between nomophobia and problematic smartphone use. [5] However, the relationship should not be interpreted as proof that greater smartphone use causes nomophobia because the present study is cross-sectional.

Gender was significantly associated with severity in this dataset, with a larger proportion of males in the severe category. This result differs from some systematic reviews that have reported higher nomophobia vulnerability among females and younger participants. [3,10,14,16] Such differences reinforce the importance of considering population and cultural context rather than assuming a universal demographic pattern.

Previous anxiety or discomfort when the smartphone was unavailable showed the strongest association with NMP-Q severity. This is expected conceptually because the item asks about a closely related experience to the construct measured by the NMP-Q. Accordingly, this finding should be interpreted as evidence of construct-related behavioral consistency rather than as an independent causal risk factor.

The high internal consistency observed in the present dataset ($\alpha = 0.923$) is consistent with the strong reliability reported for the NMP-Q in previous validation and reliability studies. [4,20] Nevertheless, Cronbach's alpha measures internal consistency and does not by itself establish validity in this particular sample.



8. Limitations

- The cross-sectional design prevents conclusions about causality or temporal direction.
- The data were collected through an online self-report questionnaire and may therefore be affected by recall, response and self-selection biases.
- The sampling strategy and study setting beyond the online survey were not documented in the supplied materials, limiting assessment of representativeness.
- The dataset did not contain information on clinical mental-health diagnoses, so NMP-Q severity should not be interpreted as a clinical diagnosis.
- Some demographic categories were unevenly represented, including the very small “Never” smartphone-carrying group.
- The questionnaire did not include a 36–45-year age category, which limits age-group continuity.
- Formal institutional ethics approval information was not included in the supplied documents and must be clarified before submission.

9. Conclusion

This cross-sectional survey of 226 consenting participants identified a high burden of self-reported nomophobia symptoms, with 58.8% classified as moderate and 25.2% as severe according to standard NMP-Q severity bands. The overall mean score was 83.61 ± 21.83 . Nomophobia severity was significantly associated with gender, daily smartphone-use duration, smartphone-carrying behavior and previous anxiety when the smartphone was unavailable. The findings suggest that continuous smartphone availability and greater use may be important behavioral correlates of nomophobia. However, the results should be interpreted as self-reported symptom severity rather than a clinical diagnosis. Longitudinal and multicenter studies using standardized sampling and additional psychological measures are recommended to clarify risk factors and causal relationships.

10. Declarations

Funding: No funding information was provided in the supplied materials. Insert a funding statement if applicable.

Conflict of interest: No conflict-of-interest information was provided. Authors should insert the journal-required declaration.

Data availability: The study data were provided by the investigators in an Excel response file. A public data-sharing statement should be added if the target journal requires one.

Ethics approval: The supplied materials document voluntary consent but do not provide an institutional ethics approval number. This must be clarified before submission.

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Appendix A. NMP-Q scoring framework used in analysis

Score	Interpretation
20	Absent
21–59	Mild
60–99	Moderate
100–140	Severe

The questionnaire supplied by the investigator states that responses to the 20 items should be summed and that higher scores indicate more severe nomophobia. The severity bands above follow published descriptions of the original NMP-Q scoring system.