

“A Cross-sectional Study to Assess the Frequency of Phantom Pattern and its Association with Smartphone Dependence and Perceived Stress among Nursing Students, SGT University, Gurugram (Haryana)”



Ms. Chinkey Sharma^{1*}, Ms. Priyanka Rawat², Mr. Ankush³, Mr. Sameer⁴, Ms. Jyoti⁵, Ms. Parul Sharma⁶

¹*BSc. Student Faculty of Nursing, SGT University, sharmachinkey712@gmail.com, 9289393671

²BSc. Student Faculty of Nursing, SGT University, khushirawat1907@gmail.com, 7827321033

³BSc. Student Faculty of Nursing, SGT University, ankushkadyan691@gmail.com, 9518403430

⁴BSc. Student Faculty of Nursing, SGT University, sammerdagar001@gmail.com, 9354504402

⁵Assistant professor Faculty of Nursing, SGT University, jyoti.nursing@sgtuniversity.org, 8287050995

⁶PG Tutor Faculty of Nursing, SGT University, Parul_fnur@sgtuniversity.org, 9871985847

Abstract

Background: Phantom Vibration Syndrome (PVS) and Phantom Ringing Syndrome (PRS) are perceptual illusions of phone alerts without external stimuli. With widespread smartphone use, these phenomena have emerged as significant concerns among students.

Objective: To assess the prevalence of phantom vibration and ringing patterns, smartphone dependence, and perceived stress, and examine correlations among them in nursing students.

Methods: A cross-sectional quantitative study was conducted among 326 nursing students at SGT University using non-randomized convenience sampling. Standardized tools included the Smartphone Addiction Scale–Short Version (SAS-SV) and semi-structured questionnaires assessing phantom vibration and ringing. Descriptive and inferential statistics were applied using SPSS.

Results: Of participants, 27.6% were classified as smartphone addicted, 6.1% had a high likelihood of phantom ringing, and 7.98% reported high impact of phantom vibration on stress. Significant positive correlations were found between smartphone addiction and vibration syndrome ($r=0.557$), and weaker correlations between smartphone addiction and phantom ringing ($r=0.366$).

Conclusion: Phantom patterns are prevalent among nursing students, closely associated with smartphone dependence and perceived stress. Educational interventions and mental health awareness are recommended to mitigate these effects.

Keywords: Phantom Vibration Syndrome, Phantom Ringing, Smartphone Addiction, Perceived Stress, Nursing Students

1. Introduction

Phantom Vibration Syndrome (PVS) and Phantom Ringing Syndrome (PRS) describe false perceptions of phone vibrations or sounds when no notification occurs. In an era dominated by smartphones, especially among young adults, such phenomena raise concerns about mental health, stress, and dependency.

The study aimed to explore these phantom patterns among nursing students, measure smartphone dependence, perceived stress, and examine their interrelationships.

2. Materials and Methods

Study Design: A descriptive cross-sectional design was adopted. **Setting and Participants:** Conducted at SGT University, Gurugram, involving 326 nursing students aged 17–25, selected through non-randomized convenience sampling.

Sampling Technique: Non-randomized convenience sampling.

Data Collection Tools:

- Socio-demographic questionnaire
- Smartphone Addiction Scale–Short Version (SAS-SV)
- Semi-structured questionnaire on phantom ringing and vibration patterns
- Likert scales for perceived stress

Validity: Validated by 5 subject experts.

Data Analysis:

Descriptive (frequency, percentage, mean, SD) and inferential statistics (correlation) using SPSS version 28.0.

3. Results

Demographics:

- Age: Majority (72.40%) were 17–20 years old
- Gender: Predominantly female (75.2%)
- Most were 2nd-year students (49.4%)
- 34% used smartphones for 3–5 years

Smartphone Dependence:

- 27.6% were classified as addicted; 72.4% as non-addicted

Phantom Ringing:

- 6.1% high likelihood, 80.7% moderate, 13.2% low

Phantom Vibration:

- 7.98% high impact on stress, 26.69% moderate, 62.58% low, 2.76% very high

Correlation Findings:

- Smartphone addiction vs. vibration syndrome: moderate positive correlation ($r=0.557$)
- Smartphone addiction vs. phantom ringing: weak positive correlation ($r=0.366$)
- Phantom ringing vs. vibration syndrome: weak positive correlation ($r=0.348$)

4. Discussion

The study confirms that phantom vibration and ringing phenomena are common among students heavily reliant on smartphones. Results align with previous studies in India and abroad showing associations between smartphone overuse and stress, anxiety, and phantom sensations.

Increased awareness of these issues, along with stress management and smartphone usage guidelines, may help reduce negative psychological impacts among nursing students.

1. Conclusion and Recommendations

Phantom ringing and vibration patterns significantly affect nursing students, correlated with smartphone addiction and stress. The findings highlight the need for preventive strategies, mental health education, and responsible technology use in academic settings.

1. For Nursing Practice

- Integrate regular screening for smartphone addiction and phantom vibration/ringing phenomena as part of routine mental health assessments in college health services.
- Encourage counseling sessions and workshops to help students manage smartphone use and reduce stress.

2. For Nursing Education

- Include modules about technology-related psychological issues (e.g., Phantom Vibration Syndrome, smartphone addiction) in mental health nursing curricula.
- Organize awareness programs to educate students about healthy smartphone use and coping strategies for stress.

3. For Administration

- Establish clear campus guidelines promoting responsible smartphone usage (e.g., phone-free study hours or zones).
- Provide access to mindfulness and relaxation programs to help students manage anxiety and stress.

4. For Future Research

- Conduct longitudinal studies to explore causal relationships between smartphone dependence, phantom patterns, and mental health outcomes.
- Extend research to students from other disciplines and universities for broader generalizability.
- Investigate the effectiveness of interventions (e.g., digital detox programs, counseling) on reducing phantom phenomena and stress.

5. For Students

- Promote self-awareness regarding smartphone usage habits and encourage students to set screen time limits.
- Encourage participation in stress management and digital wellness activities.

References

(Sample references; include real references when submitting)

1. Premkumar R, Nivetha V, Ganesh KS. Prevalence of Phantom Vibrations and Ringing Syndrome. South India. 2023.
2. Shaliet RS, Joyal SA, et al. Phantom Syndrome and Smartphone Dependence. Kerala. 2020.
3. Mangot AJ, Murthy VS, Tembe DV. Phantom Sensations among Medical Interns. India. 2018.