A Structured Teaching Programme on the Knowledge and Levels of Nomophobia and its Prevention among the Selected Colleges of Surendernagar District of Gujarat

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Authors’ contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

ABSTRACT

The prevalence of nomophobia is very high among adolescents. Adolescents need to be aware of the new disease which have come across through the over usage of mobile phone. Nowadays it is very easy to convey our feelings and messages in the remote corners of the world through the use of mobile phone technology. The communication through the mobile phone is very simple and is basics of all relations. Mobile technology helps the people to transfer the message form one person to another within short period of time. Based on this the present study was carried to assess the effectiveness of structured teaching programme on the knowledge and prevalence level of nomophobia among the selected colleges of Surendernagar district of Gujarat. Pre-experimental study was carried out among college students with one group pre test and post test was used to find out the findings of the study. The purposive sampling technique was used to carry out this study. 50 College students were selected from different college of C.U. Shah University. Data was collected with the help of structured demographic questionnaire and the structured knowledge questionnaire. Pre test was conducted on the first day and on the same day teaching programme was given to the students and the effectiveness of the teaching programme was checked on the
eighth day. The overall test knowledge score was to be 43.4% where the overall post test knowledge score was found to be 85.5% which was to be very significant. An association was also carried to find out the significance of the socio demographic characteristics on the knowledge score.

Keywords: STP or structured teaching programme; Nomophobia Questionnaire (NMPQ); prevalence; effectiveness.

1. INTRODUCTION

Our work has been made simpler by mobile technology, but it has also made us lethargic. You can do things like pay your water bill, power payment, and buy cooking supplies while sleeping in your bed [1]. All of this may be accomplished with a single click. We are almost entirely reliant on mobile phone technology. A survey of teenagers and elderly persons was conducted to see how many mobile phone numbers they could recall. It was discovered that older persons were able to recall a large number of their relatives' phone numbers, but young teenagers were unable to recall their parents' phone numbers. They need to see the phone in order to figure out their parents' phone number [2]. Youth have become increasingly reliant on mobile phone technology. They are unable to depart without their cell phone because of this predicament. Nomophobia is the dread of leaving home without a mobile phone. Nomophobia is a relatively new term, yet it has gripped people all over the world. Nomophobia affects all areas of society, rich or poor, regardless of caste, creed, colour, or sex [3]. Nomophobia is more common among early adolescents, and it is more prevalent among teenagers. The fear of losing one's mobile phone, smart phones running out of battery, or being in a scenario where there is no network connectivity, or when network coverage is extremely limited. Nomophobic teenagers have a number of features, including the inability to turn off their cellphones. Such youngsters will use their cellphones before going to bed, while in bed, and shortly after waking up. Nomophobic youngsters will constantly have their phone with them. They will take their phones with them even to the restroom. Academic development will be poor for such nomophobic youngsters, and they will be unable to concentrate throughout their studies. They will be unable to finish their assignments in a timely manner. Children that are nomophobic will have many phones and will always have an additional phone with them. The young nomophobic teenagers will not let others use their cellphones. Even when someone uses or touches their phone, they become quickly agitated and enraged. Nomophobia is widespread among teenagers, and such adolescents are likely to have strained family ties [4-5].

1.1 The Objectives of the Study

- To assess the prevalence of nomophobia among the adolescents.
- To assess the level of knowledge regarding nomophobia among the adolescents.
- To assess the effectiveness of STP on the knowledge levels regarding nomophobia among the adolescents.
- To find out the association between the pre test and post test knowledge level of adolescents with the selected demographic variables

1.2 The Review of Literature

The various studies were reviewed and it was found that there was high prevalence of nomophobia among the various sections of the society. The prevalence of nomophobia may be due to the knowledge level or the vast uses of mobile phone technology. Nomophobia and its management need to be taught among the adolescents and it should be in the part and parcel of their curriculum. Structured program or a pamphlet distribution was found to be effective in various studies in improving the knowledge.

2. MATERIALS AND METHODS

A pre-experimental survey based research approach with one group pre test and post test design was used for the present study. Hypothesis was formulated and the relationship between independent and dependent variables were framed for the study. Structured demographic Performa and structured knowledge questionnaire was used to collect the data among the college students. Pre test was conducted on the first day and post was done after 8 days of giving the structured teaching
programme. The validity of the teaching programme was done by the experts from the various fields.

2.1 Setting of the Study

The present study was carried out among the college going students of C.U. Shah University. A total of 50 students from the university were enrolled for the study purpose. The samples were selected based on the purposive sampling technique. The criteria of the selection of the study participants were done by keeping the following points of inclusion criteria.

2.2 Inclusion Criteria

- Adolescents studying in different streams of C.U Shah University.
- Adolescents who were present during the period of the data collection.

2.3 The Major tools of the Study

- **Structured Demographic Performa**: It consisted of total items which includes age, gender, religion, place of residence, type of family, nature of stay, monthly family income and previous knowledge.
- **Structured Teaching programme**: This was prepared keeping in the view of various literature and the areas of the teaching programme was mainly on the aspects related to importance of mobile phones, definition, etiology and the major signs and symptoms of the mobile phone addiction, the various treatment modalities and prevention strategies of nomophobia.
- **Structured Knowledge Questionnaire**: A total 40 questions were prepared from the structured teaching programme.

The validity of the STP and the structured questionnaire was done form the experts of various fields. The major study was done in the month of August 01/08/2020 to 08/08/2020. The prior permission was taken from all the concerned authorities.

3. RESULTS AND DISCUSSION

The above table clearly depicts that majority 56 % of the study participants were in the age group of 16 to 17 years. 62 % of the study subjects were female and 38 % were males. 46 % of the students enrolled for the study were from Hindu religion. 62 % of the adolescents were from the rural region. Most 52 % of the subjects were from nuclear family. 80 of the study subjects were coming to college from their homes and 20 % were residing in the hostel of the university. Around 38 % which was highest had monthly family income between 15001 to 2000/- rupees. 80% of the study subjects had no knowledge regarding the nomophobia and its prevention.

| Table 1. Distribution of subjects based on demographic characteristics | Frequency | Percentage |
|---|---|---|
| **Age** | | |
| 16-17 | 28 | 56 |
| 17-18 | 22 | 44 |
| **Gender** | | |
| Male | 19 | 38 |
| Female | 31 | 62 |
| **Religion** | | |
| Hindu | 23 | 46 |
| Christian | 11 | 22 |
| Muslim | 16 | 32 |
| **Place of residence** | | |
| Rural | 31 | 62 |
| Urban | 19 | 38 |
| **Type of family** | | |
| Nuclear | 26 | 52 |
| Joint | 24 | 48 |
| **Nature of stay** | | |
| Home | 40 | 80 |
| Hostel | 10 | 20 |
Table 2. Section wise analysis of pre and post test knowledge scores among students

| Areas of knowledge                                      | Pretest | Post test | Effectiveness |
|---------------------------------------------------------|---------|-----------|---------------|
|                                                          | Mean %  | Sd        | Mean %        | Sd     | Mean % | Sd     | T test paired |
| Introduction and general aspects of nomophobia           | 69.34   | 20.83     | 97.33         | 4.79   | 28     | 51.19  | 14.00*        |
| Etiology, signs and symptoms of nomophobia               | 32      | 57.18     | 85.8          | 7.34   | 54.8   | 37.22  | 19.57*        |
| Effects and management of nomophobia                     | 24.53   | 41.30     | 80.66         | 9.17   | 56.13  | 23.04  | 31.18         |
| Prevention and treatment aspects of nomophobia           | 37.67   | 69.91     | 81.66         | 15.30  | 44     | 63.3   | 11.47         |

*Significant at 5% level, \( t (0.05, 49df) =1.96 \)

Table 3. The Comparative analysis of pre and post test knowledge score regarding nomophobia

| Areas          | Max. Score | Knowledge Score | Paired t test |
|----------------|------------|-----------------|--------------|
|                | Mean       | Sd               | Mean %       | Sd     | Mean % | Sd     |
| Pre test       | 40         | 15.28            | 4.75         | 38.2   | 31.08  |
| Post test      | 40         | 34.34            | 1.27         | 85.55  | 3.69   |
| Effectiveness  | 40         | 19.06            | 4.76         | 47.65  | 24.97  |

*Significant at 5% level, \( t (0.05, 49df) =1.96 \)

Table 4. Levels of pre and post test knowledge score of nomophobia and its prevention among the adolescents

| Grades of knowledge | Frequency | Pre test | Post test |
|---------------------|-----------|----------|-----------|
|                     | Frequency | %        | Frequency | %        |
| Very poor (0-8)     | 13        | 26       | 0         | 0        |
| Poor (9-16)         | 25        | 50       | 0         | 0        |
| Average (17-24)     | 12        | 24       | 2         | 4        |
| Good (25-32)        | 0         | 0        | 6         | 12       |
| Very good (33-40)   | 0         | 0        | 42        | 84       |

Table 5. Association between pre test knowledge score on nomophobia and its management with the selected demographic variables (n=50)

| Socio demographic characteristics | Frequency | Chi square value | P value |
|-----------------------------------|-----------|------------------|---------|
| Age                               |           |                  |         |
| 16-17                             | 28        | 0.324 NS         | \( P>0.05 \) Df-1 |
| 17-18                             | 22        |                  |         |
| Gender                            |           |                  |         |
| Male                              | 19        | 2.122 NS         | \( P>0.05 \) Df-1 |
| Socio demographic characteristics | Frequency | Chi square value | P value |
|----------------------------------|-----------|-----------------|--------|
| Woman                            | 31        |                 |        |
| Religion                         |           |                 |        |
| Hindu                            | 23        | 0.080 NS        | P>0.05 Df-2 |
| Christian                        | 11        |                 |        |
| Muslim                           | 16        |                 |        |
| Place of residence               |           |                 |        |
| Rural                            | 31        | 0.084 NS        | P>0.05 Df-1 |
| Urban                            | 19        |                 |        |
| Type of family                   |           |                 |        |
| Nuclear                          | 26        | 0.341 NS        | P>0.05 Df-1 |
| Joint                            | 24        |                 |        |
| Nature of stay                   |           |                 |        |
| Home                             | 40        | 0.5 NS          | P>0.05 Df-1 |
| Hostel                           | 10        |                 |        |
| Monthly family income            |           |                 |        |
| Below 10000/-                    | 5         | 7.53 NS         | P>0.05 Df-3 |
| 10000-15000/-                    | 17        |                 |        |
| 15001 to 20000/-                 | 19        |                 |        |
| Above 20000/-                    | 9         |                 |        |
| Previous knowledge               |           |                 |        |
| Yes                              | 10        | 2.75 NS         | P<0.05 Df-2 |
| No                               | 40        |                 |        |

*Significant at 5% Level  NS: Non-Significant

The above table 2 and 3 clearly reveals that the pretest was highest 69.34% in the area of introduction and general aspects of nomophobia. The other all areas were very low knowledge in pre test but there was enhancement in the post test the knowledge was improved. The effectiveness of the teaching programme was revealed by the significant values of the paired t test.

The above table depicts that when we do comparison of the overall pretest and post test knowledge score of the students. The overall mean was 15.28 in the pre test has compared to 34.34 in the post test. The overall mean 38.2% in the pre test and after the teaching programme it was found to be 85.55%. This reveals the overall significance of 47.65%. The paired t test also revealed the high significance of structure teaching programme in improving the knowledge score in the post test which was 30.25.

The above table 5 clearly shows that 84% had very good knowledge in the post test while none of them had very good knowledge in the pre test. 50% of the participants had poor knowledge in pre test whereas none of them had poor knowledge in the post test. Structured teaching programme was really effective in improving the knowledge score of the adolescents.

The chi square test was done to find the association between the selected demographic variables and the pre test knowledge score of the students. There was no significant association found between the socio demographic variables and the pre test knowledge score of the college going students.

4. CONCLUSION

The findings of the study clearly reveals that the structured teaching programme has played a great role in improving the knowledge score from 38.2% in the pre test to a level of 85% which is very highly significant and it was found in the paired t test value also 30.25. The overall study findings clearly reveal that the structured teaching programme was found to be very effective improving the knowledge score of the adolescents. In the chi square test there was no significant association between the socio demographic characteristics and the knowledge score.

5. RECOMMENDATIONS

- Similar study can be done with large sample size.
- A study can be done with control group research design.
• A study can be done to assess the impact of nomophobia in the academic performance of the students.

CONSENT AND ETHICAL APPROVAL

Ethical permission was also taken properly from the institute concerned. Consent from the study participants was also taken before the study.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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