

# Survey Based Study on Stress Level and Sleep Quality among Hostellers

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## Abstract

**Objective:** The aim of this study is to evaluate the stress level and quality of sleep among hostellers using PSS & PSQI scales.

**Method:** The current study is observational study. A sample of 272 subjects of both the genders between 18-28 years were recruited for the study. All the subjects has been explained the procedure and were asked to give their demographic data and to fill the stress and sleep questionnaire forms for the interpretation of the result.

**Result:** The google analyser was used to analyse the data and result shows that In this study after analysis of data we got that 50% of students are upset sometimes, 13.7 % are not upset at all, 15.2% are fairly upset and 8.5 % are very often.45.9% students are in stress sometime in the month, 16.7% are fairly in stress, 12.2% are very stressed in last month. 44.4% students are sometimes irritated in the last month and 13.3 are very irritated in last month. 84.4% of students have not taken any medicine for sleeping at night but rest had taken medicine to sleep at night once, twice, or thrice a week. 71.1% students don't have any issue while awake at night due to driving/eating or social activity rest 29.1% have an issue while awaking at night. 50.4% students say their sleep quality is fairly good in last month, 19.3% says fairly bad, 4.7 says very bad and 25.6% don't have any issue in sleeping.

**Conclusion:** It was concluded that there is less stress present in the students of hostel and also only some students were found with the bad quality of sleep

**Keywords:** *Hostellers, Stress, Sleep, Sleep Quality, PSS.*

## Introduction

“Environment of the home and the role of the family members play an important role in the development of the children. Differences of the factors such as the socioeconomic status of the family, educational difference, biological endowment starts making enduring differences in the development children behaviours,

changes the personality of the children. Surroundings of a children residential area also affect socialization process. A expand or limit of educational opportunities of the children can be seen as a result<sup>1,2</sup>. Hostel life is living away from home in another place all the educational institutes usually have their hostels. Whole environment becomes so different of the hostel to the environment of the home, as some rules can be so strict that students may not enjoy living in the hostel. Here students have to come up with all the problems by themselves. Any of these factors may become the reason of one's stress and may have impact on one's sleep quality. All these problems may induce deviant behaviours or may cause psychological problems further<sup>3</sup>. Stress is a psychological response to the threat perceived by the

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person<sup>4</sup>. Numerous readjustments that requires in any changes of life can be perceived as stressful<sup>5</sup>. Physical, social, emotional and family problems of these students may affect their academic performance and ability of learning<sup>6,7</sup>. When pressure crosses its perceived ability to cope with problems than the pressure occurs<sup>3</sup>. “Stress is a complex, multidimensional negative emotion” defined by<sup>8,9</sup> defined stress is directly relates to features of psychology such as relaxation, broadening, reframing and creativity. A specific and crucial role sleep plays in consolidation of the memory<sup>10,11,12</sup>. Also lack of sleep may results in poor cognition and attention. Lack of sleep along with the worsening of cognition also increases the sleepiness and fatigue<sup>10,13,14,15,16</sup>. A study shows that the person who has been awake for 17h his cognition function would be equivalent to the person whose concentration of blood alcohol is 0.05%<sup>10,17</sup>. In general, academic performances in school are associated with sleep. Lack of sleep may lead to poor attention and concentration during the class<sup>18</sup>. Most of the studies show that the better and longer sleep quality is linked to the better academic performances such as more efforts towards the study or getting better grades in the exams<sup>19-27</sup> The purpose of this study is to evaluate the stress level and sleep quality among the hostellers. This study will help us to determine the level of stress and quality of sleep among the hostellers.

## Methodology

**Study Design:** Observational

**Sample selection criteria:** 272 normal, healthy hostel students will be taken, aged between (17-30) years. The subjects will be taken randomly from the colleges and universities. Subjects will be given a questionnaire-based forms for the collection.

**Sampling Method:**

Randomized selection of the subjects

Sample of the convenience

**No. of sample:** 270 hostel students

**Questionnaires used for the study:**

1. Stress level (PSS-Perceived Stress Scale) questionnaire.
2. Sleep quality (PSQI-Pittsburgh Sleep Quality Index) questionnaire.

**Inclusion Criteria:**

1. Hosteller
2. Age: (17-30)

Both male and female

**Exclusion criteria:**

1. Devoid of any psychosomatic disorder

**Procedure:** The participants volunteered to participate in the study were all guaranteed about the confidential nature of the study. All the participants were informed that their participation in this study is fully voluntary and they may withdraw themselves at any time and informed that this if fully academic study. After fulfilling the subject’s inclusion and exclusion criteria and given explanation about the study. The subject demographic data was collected. Subjects were explained the PSS and PSQI and then asked to fill these questionnaire-based form for the data collection. On the basis of result obtained the stress level and sleep quality will be evaluated among the hostellers.

All subjects were undergone demographic assessment first and then asked to fill the questionnaire on the stress level and sleep quality. Data collected from the subjects was recorded and analysed by using the Google Analyser. Readings were used to interpret the result of the stress level and sleep quality among the hostellers in the form graphs and charts. All the required data was collected by the researcher. Manual entry of the data was done on a pre- planned format. The individual record of each subjects was noted in the his/her own form.

**Ethical Consideration:** All the subjects were informed about the study objectives. No unnecessary harm was caused to subjects involved. No interference was done with the subject privacy. Subject personal details privacy was maintained.

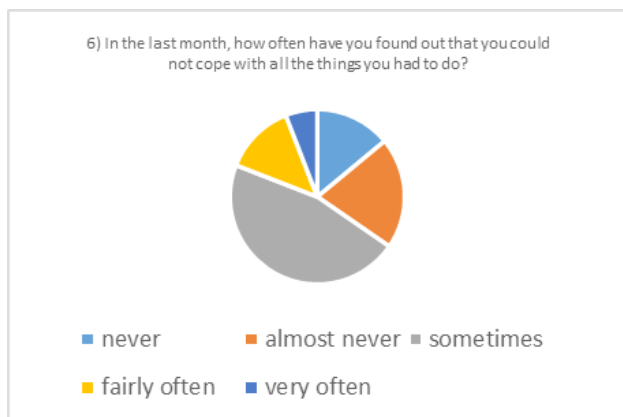
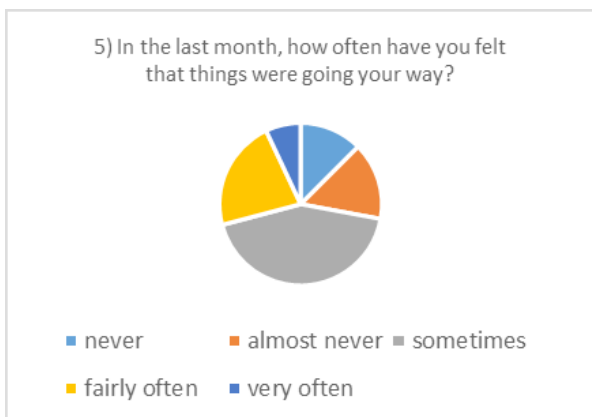
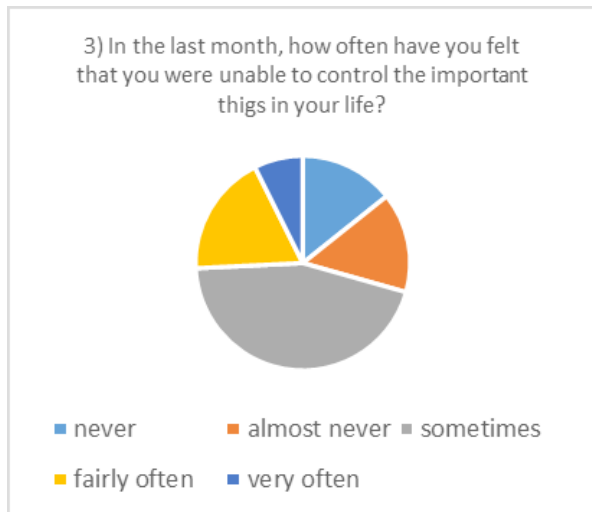
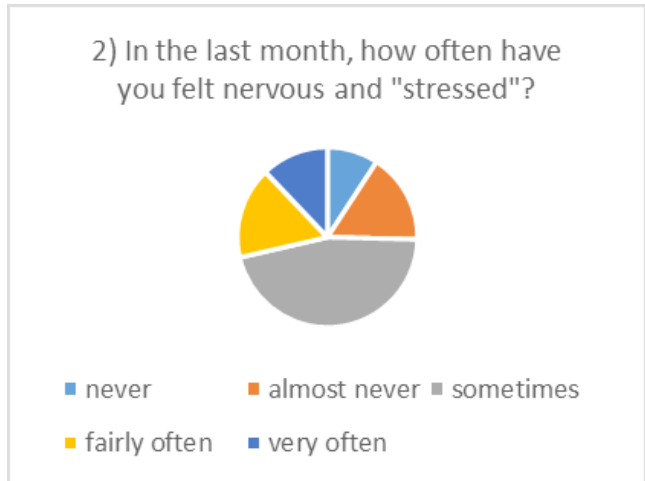
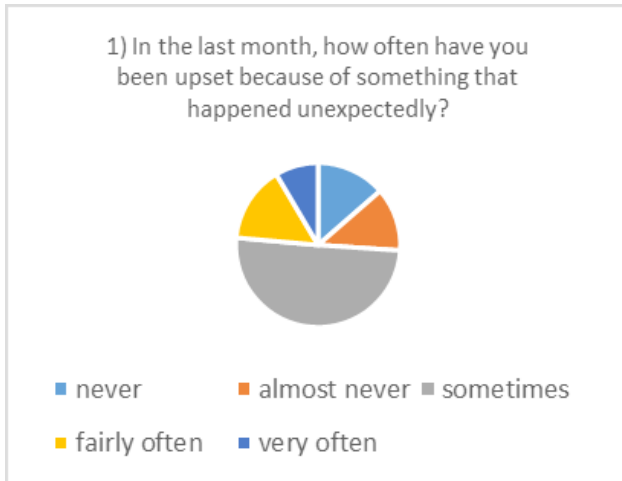
## Results

In this study after analysis of data we got that 50% of students are upset sometimes, 13.7 % are not upset at all, 15.2% are fairly upset and 8.5 % are very often. 45.9% students are in stress sometime in the month, 16.7% are fairly in stress, 12.2% are very stressed in last month. 44.4% students are sometimes irritated in the last

month and 13.3 are very irritated in last month. 84.4% of students have not taken any medicine for sleeping at night but rest had taken medicine to sleep at night once, twice, or thrice a week. 71.1% students don't have any issue while awake at night due to driving/eating or social activity rest 29.1% have an issue while awaking at night.

50.4% students say their sleep quality is fairly good in last month, 19.3% says fairly bad, 4.7 says very bad and 25.6% don't have any issue in sleeping. So by this data, we can say that the many students are having stress and their mental health is not in good condition.

**Graphs:**



## Discussion

The purpose of this study was to evaluate the stress level and sleep quality among the hostellers. The study was designed to determine whether there is any stress level and to evaluate the quality of sleep among the hostellers. The previous studies have shown the quality of life, mental health status, mobile usage among the hostel students etc. The stress level and sleep quality are yet been not checked among the hostellers unlike in the different courses of college or university students, so the current study was taken to evaluate the stress level and quality of sleep by using questionnaire among the students of the hostel.

In the current study the result nearly 50% of the students shows low stress level, moderate to severe stress level observed among about 23.7% students and on the other hand 13.7% students shows no stress at all. In a study of Vivek B. et al in Sultan Qaboos University, Maharashtra, India, stress was present in 24.4% students of the university, in which moderate to severe stress was observed in 14.4% of the respondents<sup>30</sup> In another study of Mumbai medical students, Supe et al found out 73% students had perceived stress<sup>31</sup>. Abu-Ghazaleh et al, observed in Jordan, on dental students that stress present among the 70% of the students<sup>32</sup>. In addition, it is also necessary to note that<sup>30</sup> applied the scale was DASS-21, measures stress. In the study<sup>31</sup> used the perceived stress for the subjects and<sup>32</sup> considered a 12-item general health questionnaire (GHQ-12) that measures the psychiatric morbidity. Whereas in present study the Perceived Stress Scale was used to evaluate the stress level among the hostellers. Supe et al in 1998 noticed that stress was respective of the class and semester of the students whereas irrespective of the present accommodation of those students. On the other hand vivek<sup>30</sup> et al observed that stress had no association with class and semester, the present accommodation proved as a highly important feature, they concluded that students living in the hostel becomes more sensitive and prone to stress. Might be due to reason that students found hostel condition quite unsatisfactory as they come from a very comfortable place 'home', that results into reason for great stress among hostellers. Abu-Ghazaleh also researched about the significance of the variant factors of academics. Another researcher Barikani et al<sup>33</sup> determined probability that among the

medical students of Iran the residence and the finance associated problems were proved as stressors among the students. Harshini<sup>34</sup> et al in 2015 conducted a study to measure the stress in the hostellers and the day scholars, he used a PSS (Perceived Stress Scale) to determine the result and observed that stress was present in the both the groups as hostellers, when they come to hostel's very new environment from their comfortable homes and their parents' supportive hands it becomes quite difficult to them to mould themselves according to new place and people that might leads to separation stress. He concluded in the study that statistically the day scholars had more stress comparatively to the hostellers, as according to him day scholars have laxity of time for the fulfilment of study tasks and also interactions to their friends as they can only meet them during college hours due to their exhausted travelling time.

### Limitation of the study:

- One of the limitations of this study the result was not based on any factors like gender, socioeconomic, environment.
- The study was limited to some geographical boundaries.
- Factors such as current status of person's personality or emotions might be present.
- And also, the different time spans of the students such as the period of examination, pre-examination, or post-examination were not included in the study.

### Future Studies:

- Future studies could evaluate pre and post exam stress level as well as quality sleep among the hostellers.
- There could be a comparison done of stress level and quality of sleep between males and females hostellers.
- There could also be a comparison between sleep quality and stress level among the different year hostel students such as first, second, third, and fourth year.

## Conclusion

The current study is dealt with the stress level and quality of sleep among hostellers. The result of the study shows that there is almost no effect on the sleep quality

of the hostellers. The evaluated data show a very less effect on the stress level of the hostellers.

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**Conflict of Interest:** NA

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