



# A study to assess the incidence of insomnia and its impact on academic performance among undergraduate students in selected university of Ludhiana Punjab.

Supreet Rupam, Assistant Professor, Amity University Haryana Gurugram.

## Abstract

**Background-** Insomnia is a sleep disorder where a person feel difficulty in sleeping, very hard to stay asleep or it can also cause wake up too early or not be able to go back to sleep. In todays generation students repeatedly said about not getting enough sleep and be agitated. Due to more burden on students in their schools and colleges, work schedules, college students are affected by insomnia. The purpose of the study is assessing the incidence of insomnia and its impact on academic performance among undergraduate students.

**Methods-** Research approach– Quantitative research approach was used where 100 students would be selected for the study. The setting of the study is college students and target population is college students(undergraduate). The sampling technique was Convenient sampling technique.

**Results-** the result of the study shows that Mean, mean percentage and SD of finding related to academic performance of undergraduate students show that good CGPA which range from 9-10, mean score was  $(9.21 \pm 0.26)$  whereas mean % was 40.04%.

**Key words-** Insomnia, Academic Performance, students.

## Introduction

Insomnia is also called as sleeplessness, which is a sleep disorder where people are having difficulty in sleeping. Individuals may find difficulty in falling sleep, irritability, depressed mood. Insomnia may be short term or long term. It can last for days or weeks or a month. It can occur independently or due to another's etc of problems. Many conditions are there that can result insomnia i.e., hyperthyroidism, heartburn, menopause, drugs such as alcohol, nicotine etc. other risks factors can be overnight working shifts and sleeplessness.<sup>(1)</sup>

Person can check other person by asking certain questions like “**Do you experience sleeping difficulty?**” or “**Do you find difficulty in sleeping**”. Even though their efficacy for first line treatment was not evasively established. Lifestyle changes and sleep hygiene are not the first line treatment for insomnia. Mostly 10 to 30% of adults are having insomnia. And about 6% of person having insomnia. People who are more than 65 years of age are more affected than younger people. Mostly females are affected than males.<sup>(2)</sup>

## Data collection process

Data collection is the process of gathering information regarding in research problem. The study was initiated only after obtaining the permissions from concerned authorities that is from selected college Gurugram Haryana.

Inform consent from was provided to the student regarding the study. Data was selected from the 100 students who met in the inclusion criteria. Approximately 50 minutes for the data collection from a single participant.

## Methodology

**Research setting-** Research setting is a physical location condition which data collection takes place in study. The present study was conducted in the selected college Ludhiana.

### Population-

The total number of units such as individual organisation vents or from which data can potentially be conducted. In present study the population is all undergraduate student 18 to 22 years is selected college of Ludhiana.

**Sample-** Proportion of the population is known as sample. The sample for present study consist of undergraduate students in selected college Ludhiana, Punjab.

### Sampling criteria

#### Inclusion criteria

1. Undergraduate student at selected college
2. The student who are willing to participate at the time of study.
3. Student who are available at the time of Data collection.
4. Student who are age group of 18 to 22 years.

**Exclusive criteria-**Students who are not available at the time of data collection.

**Research variables-**The qualities properties or the characteristics identified in research purpose and objectives that are observed or measures in the study.

### Variables for the present study:

**Independent variable:** level of insomnia

**Dependent:** impact on academy performance among undergraduate

**Demographic:** age, gender, religion, discipline of the study, batch substance abuse habit, sleep hygienic, sleep hygienic practice, education of the father, education of the mother, occupation of the father, occupation of the mother, type of family, number of family members.

### Development of Tools.

The researcher developed the tool from the received literature and those item that were relevant to the study was elected the following steps is adopted in the development of tool The tool consists of three sections:

**Section Demographic data-** It consists of 11 items for obtaining information from undergraduate students like personal age gender resistance type of family education qualification of mother and father academic year in the graduation discipline of the study habit of the substance abuse drinking stimulants during the night and eating drinking reading or watching TV on bed.

**Section B-** Structure tool regarding insomnia was used

There are seven components to collect the data from undergraduate students to assess the academic performance.

\*The scoring procedure was minimum score was 0 and for maximum score was 3. Section CGPA (cumulative grade point average): the purpose of the tool is to assess the correlation and association regarding insomnia.

**Validity** of an instrument is the determination of how the instrument reflect the abstract concept being explained (Burns and Grove S.K,2007) Content validity for structure tool and PSQI scale was established in consultation with the guide, co guide and experts in different department like community centre nursing, medical surgical nursing. Their opinion suggestion was taken to modify the tools.

**Method of data collection procedure** Identification of subjects and precise, systematic gathering of information (data) relevant to the research purpose of the specific objectives, question, or hypothesis of the study. Demographic question and PSQI and CGPA scale were used to collect the data from the undergraduate student at selected college Gurugram Haryana.

Data collection process Data collection is the process of gathering information regarding in research problem. The study was initiated only after obtaining the permissions from concerned authorities that is from selected college Ludhiana, Punjab. Inform consent from was provided to the student regarding the study. Data was selected from the 100 students who met in the inclusion criteria. Approximately 50 minutes for the data collection from a single participant.

## Section I

### Description of personal demographic variables of respondents

Table 1-Frequency and percentage distribution of undergraduate students according to their baseline characteristics.

CHARACTERISTICS	CATEGORY	RESPONDANTS	
		Frequency	Percentage
Age in years	7-18 Years	7	7%
	19-20 Years	2	24%
	21-22 Years	4	47%
	More than 22 Years	4	22%
		7	
	2		
	2		
Gender	Male	45	45%
	Female	55	55%
Residence	Hostel	18	18%
	PG	25	25%
	Own House	57	57%
Type of family	Nuclear	71	71%
	Joint	19	19%
		10	10%
Educational Qualification of Father	No Formal Education	1	1%
	Primary	6	6%
	Secondary	27	27%
	Graduate or above	66	66%
Educational Qualification of Mother	No Formal Education	2	2%
	Primary	9	9%
	Secondary	32	32%
	Graduate or above	57	57%

Academic year in graduation	First Year Second Year Third Year Fourth Year	10 20 38 32	10% 20% 38% 32%
Discipline of study	Engineering Law Medical Others	- - 9 2 8	- - 92% 8%
Do you have the habit of substance abuse	YES NO IF YES, name the substance	5 95	5% 95%
Do you drink stimulants such as tea, coffee, energy drinks during nighttime	YES NO If YES, name it please	37 63	37% 63%
How much time do you spend on your phone each day	1 or 2 hours 3 or 4 hours more than 4 hrs.	8 29 63	8% 29% 63%

**Table 2- Categorization of the undergraduate students according to their academic performance**

Category	Range	Frequency	Mean	SD	Mean%
<b>Below average</b>	5-6	52	5.97	0.49	25.9%
<b>Average</b>	7-8	32	7.82	0.60	34%
<b>Good</b>	9-10	16	9.21	0.26	40.04%

**Maximum score- 10**

**Minimum score- 5**

**Table 4- Showing correlation between Insomnia and academic performance.**

Variables	Mean	S.D.	Correlation	df	P value	Table Value	Result
Insomnia	11.90	4.38	0.05836	41	0.736	56.942	Not Significant
Academic Performance	7.33	1.44					

Significant: ( $p \leq 0.05$ )

**Table 5- Showing the association between the demographic variables and PSQIScore**

Variables	Categor ies	N o I n s o m n i a	M i l d	M o d e r a t e	S e v e r e	Chi Tes t	P Value	df	Tabl e value	Result
<b>Age</b>	7-18 Years	1	3	2	1	23.59 7	0.004	9	16.91 9	Signific ant
	19-20 Years	7	6	9	2					
	21-22 Years	35	7	3	2					
	More than 22 Years	15	2	3	2					
<b>Gender</b>	Male	23	9	10	3	2.176	0.536	3	7.815	Not signific a nt
	Female	35	9	7	4					

<b>Residence</b>	Hostel	3	4	9	2	29.54 4	0.0000 48	6	12.59 2	Signific ant
	PG	11	6	5	3					
	Own House	44	8	3	2					
<b>Type of family</b>	Nuclear	48	12	8	3	16.93 4	0.009	6	12.59 2	Signific ant
	Joint	5	4	8	2					
	Extende d	5	2	1	2					
<b>Educatio nal Qualificat ion of father</b>	No Formal Educatio n	0	1	0	0	11.02 8	0.273	9	16.91 9	Not signific ant
	Primary	2	1	2	1					
	Seconda ry	20	2	3	2					
	Graduat e or above	36	14	12	4					
<b>Educatio nal Qualificat ion of mother</b>	No Formal Educatio n	1	0	1	0	15.66 3	0.074	9	16.91 9	Signific ant
	Primary	5	3	0	1					
	Seconda ry	25	5	1	1					
	Graduat e or above	27	10	15	5					
<b>Academic year in graduatio n</b>	First Year	4	3	2	1	18.09 3	0.034	9	16.91 9	signific ant
	Second Year	5	6	7	2					
	Thir d Year	30	3	3	2					
	Fourth Year	19	6	5	2					
<b>Disciplin eof study</b>	Medical	56	15	15	6	4.17 2	0.243	3	7.815	Not signific ant
	Others,	2	3	2	1					

<b>Do you have the habit of substance abuse</b>	YES	2	1	2	1	2.596	0.458	3	7.815	Not significant
	NO	57	17	15	6					
<b>Do you drink stimulants such as tea, coffee, energy drinks during nighttime</b>	YES	17	9	8	1	3.766	0.287	3	7.815	Not Significant
	NO	41	9	9	3					
<b>How much time do you spend on your phone each day</b>	1 or 2 hours	3	3	1	1	6.391	0.380	6	12.592	Not Significant
	3 or 4 hours	19	6	2	2					
	more than 4 hrs.	36	9	14	4					

Significant: ( $p \leq 0.05$ )

#### References –

1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3972485/>
2. <https://www.webmd.com/sleep-disorders/insomnia-latest-research>
3. <https://www.frontiersin.org/articles/10.3389/fneur.2019.00849/full>