



“A DESCRIPTIVE STUDY TO ASSESS THE DISTURBED SLEEPING PATTERN AMONG ADOLESCENTS (11-19) YEARS DUE TO EXPOSURE OF MULTIMEDIA AT THE VILLAGE OF SARAI, BAHADURGARH”.

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ABSTRACT

“A Descriptive study to assess the disturbed sleeping among adolescents (11-19) years due to pattern exposure of multimedia at the village of sarai, bahadurgarh.”

The study was based on the disturbed sleeping pattern due to exposure of multimedia. The Design used for this study was descriptive design. The study was conducted in selected area of Sarai, Bahadurgarh.

Simple random sampling technique was used for selecting the samples. The data collection tools developed for generating the necessary data was a questionnaire and checklist to assess the knowledge and attitude of adolescents (11-19) years.

The tool was found to be reliable .Pilot study was conducted to find out the feasibility of the study. The tool was administered to the subjects and the data obtained were analyzed in terms of descriptive and inferential statistics.

Based on the result found in this work, it is concluded that the disturbed sleeping pattern due to exposure of multimedia is a field of study that is currently in the early stage of research

So, that most of the research is the exploratory phase. young people exposed to intensive and irrigational use of technology are only aware of the advantages its often and are unaware of the risk they may suffer are consequences.

INTRODUCTION

Adolescent's interactions with media have changed in the past few years due to the widespread adoption of multimedia technologies in daily life.

Adolescents are becoming more and more accustomed to a digital world that is defined by continual connectivity and limitless access to multimedia content, thanks to devices like game consoles, computers, and cell phones.

Although there are many advantages to this technological revolution, there are also worries about the possible effects on the health and wellbeing of adolescents, especially with regard to sleep habits. All the health risks linked to prolonged use of multimedia, disturbed sleep patterns are one of the most urgent.

Adolescents are especially susceptible to disturbances in their sleep patterns because they are going through a crucial developmental stage that is characterized by substantial changes in sleep physiology and behavior.

Adolescents between the ages of 11 and 19 find it extremely difficult to maintain proper sleep patterns due to the attraction of fascinating content that is always accessible on their gadgets. Even though the negative effects of multimedia exposure on sleep length and quality are becoming increasingly well-known, there is still a significant lack of detailed information in the literature about this phenomenon.

With the changes of technologies, new challenges are coming up on a daily basis. The increasing utilization and penetration of new technological devices and virtual communication involving personal computer and tablets, the so-called computer-mediated communication and mobile phone such as smart phones are causing changes in individuals' daily habits and behaviors.

The use of multimedia has been linked to sleep disturbances in the past, but few studies have looked at the prevalence, patterns, and correlates of disrupted sleep in ADOLSCENTSs in this age group.

In order to fill this knowledge vacuum, the current study will undertake a descriptive analysis of how exposure to multimedia disturbs sleeping patterns in ADOLSCENTSs between the ages of 11-19 through a methodical analysis of the complex link between multimedia.

This structure conclusion highlights the significance of addressing the negative effects of multimedia exposure on adolescents' sleep patterns and the demand for evidence-based interventions to lessen these effects and promote the best possible health and well-being for ADOLSCENTSs growing up in the digital age.

Sleep has a major impact on the health and well-being of children and adolescents. Sleep is vital for development and learning ability, and insufficient sleep over an extended period can have long-term physical and psychological health implications. Physiological and psychological changes that emerge in childhood and youth may impact negatively on sleep, but poor sleep is arguably also related to, or compounded by, external factors such as early school start times, environmental conditions in the bedroom (e.g. noise, high temperature or too much light) and the availability of electronic media. *Over the last few decades, a major lifestyle change has happened due to the incorporation of electronic media device use into people's daily life.*

Electronic media has become a core part of young people's lives and children today are growing up surrounded by electronic media devices. Studies demonstrate that most children, even as young as four months of age, have experience with using electronic media devices, although electronic media consumption is largest among older teenagers.

Media devices have become an integral part of children's development environment and a prevalent mode of communication among adolescents. Although electronic media is widely accepted and accessible in the home environment, there is yet only a limited understanding of how access to and use of electronic media may impact the sleep patterns of children and adolescents.

Technology is continuously evolving, and the way electronic media devices are used in everyday life may change over time. Although previous systematic reviews and meta-analyses have established a correlation between media use and sleep, it is crucial that research continuously addresses the processes of technology and media use and its implication on children and adolescents' sleep patterns. Therefore, reviews that include the newest types of electronic media devices and technological trends are needed. Moreover, previous reviews on this subject focus mainly on an older Pediatrics target group, and there is limited knowledge about the evidence of electronic media devices and the impact on sleep among Adolescent.

The aim of this study was to systematically review the literature on the impact of using electronic media on sleep in children and adolescents. The population was adolescents, school- age children up to 11-19-years-old young Adolescents. The exposure was to access and use of electronic media devices.

NEED FOR STUDY

Multimedia is a combination of more than one media type such as text (alphabetic or numeric), symbols, images, pictures, audio, video, and animations usually with the aid of technology for the purpose of enhancing understanding or memorization. It supports verbal instruction with the use of static and dynamic images in form of visualization technology for better expression and comprehension (Alemdag and Cagiltay, 2018; Chen and Liu, 2008).

The hardware and software used for creating and running of multimedia applications is known as multimedia technology (Kapi et al., 2017).

Multimedia technology has some characteristics like integration, diversity, and interaction that enable people to communicate information or ideas with digital and print elements.

The digital and print elements in this context refer to multimedia-based applications or tools used for the purpose of delivering information to people for better understanding of concepts.

The central problem, however, remains the same. Which is, the problem of how to use the applications to provide students with stimulating experience by delivering information for better understanding of concepts. While it is important to develop various applications for effective teaching delivery, each of these applications has its own focus area, peculiarities, target age, merits and demerits. Thus, the taxonomy and component synthesis for the development of the multimedia application need to be extensively investigated as these would affect the teaching delivery, learning and wider applicability.

Some of the multimedia solutions have been deployed tested and recorded significant success, while some did not record marginal success.

The success stories also vary with location, target age and deployment purposes. Therefore, the aim of this paper is to provide a systematic review of the scientific published studies that examined different multimedia tools in the teaching and learning process with a view to identifying the existing multimedia-based tools, understanding their usage, application areas and impacts on education system.

existing multimedia-based tools for teaching and learning; understanding their usage and limiting factors, application areas, evaluation methodologies, technology components synthesis and impacts on education system.

To this end, the study is guided by the following research questions:

- (1) What are the existing multimedia tools in teaching and learning?
- (2) What type of multimedia component fits an audience?
- (3) What types of multimedia components are adopted in the existing tools?
- (4) What evaluation methodologies are useful for successful outcome?
- (5) What factors aid success or failure in the use of multimedia tools for teaching and learning?

The outcome of this study is aimed at serving as a guide for teachers and education administrators while selecting multimedia tools and applications for teaching in schools. So, in this study, the taxonomy and component synthesis of some widely cited multimedia applications are provided. Various case studies and results are examined. Furthermore, barriers limiting the usage of ICT and multimedia in teaching and learning are identified; and some unresolved cases and future research decisions are outlined.

PROBLEM STATEMENT

A Descriptive study to assess the disturbed sleeping among adolescents (11-19) years due to pattern exposure of multimedia at the village of sarai, bahadurgarh.

OBJECTIVES OF THE STUDY

- To assess the prevalence and severity of disturbed sleeping pattern among adolescents (11-19)
- To evaluate the frequency and duration of multimedia usage among adolescents
- To find out the significance association between demographic variables with prevalence and severity of disturbed sleeping pattern.

HYPOTHESIS

- H1- There will be no significant relation between the prevalence and severity of disrupted sleeping pattern among adolescents (11-19) years
- H2- There is a significant relation between the frequency of usage of multimedia among adolescent age (11-19) years
- H3- There will be no significant relation between the demographic data with prevalence and severity.

OPERATIONAL DEFINITIONS

1. Prevalence: Prevalence refers to the proportion of individuals in a population who have a particular characteristic or condition at a specific point within a specific period.
2. Assess: To evaluate or decide the amount, value, quality, or importance of something.
3. Severity: The quality or state or condition of being severe.
4. Multimedia: Multimedia is the presentation of text, pictures, audio, and video with links and tools that allow

the user to navigate, engage, create, and communicate using a computer.

5. Frequency: The number of times the value occurs in the data.

ASSUMPTIONS:-

- The adolescents in the (11-19) years age range regularly use multimedia, such as television, smart phones, laptops, and video games, which may affect their sleep habits.
- The multimedia exposure has a measurable impact on adolescents' sleep quality and duration, resulting in sleeping pattern disruptions.
- The male adolescents in Bahadurgarh have comparable high level of exposure to multimedia device as compare to female.

LIMITATION

The study is limited to only:-

- Adolescents (11-19) years at village of Bahadurgarh.
- 50 samples.

PROJECTED OUTCOME

- The study will help to promote knowledge regarding to disturbed sleeping pattern dueto exposure to multimedia.
- The findings of the study will create awareness among adolescents regarding the usage of multimedia and sleeping pattern.

Chapter summary

This chapter deals with the introduction and need of the study .the chapter includes aims And objectives of the study, the key terms were operationally defined .the assumptions and hypothesis underline the study focus were started .the next chapter continuous with the literature review in order to understand this study in view of other similar one

REVIEW OF LITERATURE

A literature review is a body of test that aims to review the critical points of knowledge on a particular topic of research.

Concerns regarding the influence of adolescents' extensive usage of multimedia gadgets on their sleep habits have been highlighted in recent years.

The goal of this review of the literature is to present a thorough summary of the research that has already been done on the subject of the connection between teenage sleep disturbances, multimedia exposure, and sleeping habits in the 11-19 age range.

Impact of Particular Multimedia Activities: Additionally, research has looked at how particular multimedia activities affect the quality of sleep. For example, a study conducted in **(2010) by Cain and Gradisar** found that ADOLSCENTs who used cell phones and tablets right before bed experienced trouble falling asleep and had shorter sleep durations.

The efficacy of multimedia in healthcare communication :has been demonstrated by studies conducted in **(2013 by Street and colleagues)**. These studies demonstrated how using multimedia tools can increase patient knowledge and treatment regimen compliance

Prevalence of Sleep Disorders in Multimedia Users: Studies **by Falbe et al. (2015) and Gradisar et al. (2013)** looked at the prevalence of sleep disorders in people who use multimedia devices on a regular basis. They found that heavy multimedia users had greater rates of symptoms of insomnia, trouble falling asleep, and daytime drowsiness.

Excessive Multimedia Exposure and Sleep Disturbance: **(2014 by Owens et al)** Several studies have shown a strong correlation between ADOLSCENTs' sleep patterns being disturbed and their exposure to multimedia. For instance, a study discovered a link between ADOLSCENTs' shorter sleep duration, delayed bedtime, and increased screen time, which included computer use, video gaming, and television viewing.

Chimatapu sri nikhita et al (2014) conducted cross-sectional study to assess the prevalence of multimedia dependence in secondary school adolescents. Findings of the study showed that mobile phone dependence was found in 31.33% of sample students. It was significantly associated with gender ($P=0.0012$), type of mobile phone used ($P=0.003$, $OR=1.91$, $CI:1.23- 2.99$), family type ($P=0.0012$), type of mobile phone used ($P<0.001$, $OR=2.6$, $CI:1.63-4.35$), average time per day spent using mobile phone ($P<0.001$) and years of mobile phone usage ($P=0.004$, $OR=2.4$, $CI:1.3/-4.55$).

Biological Mechanisms: **(Chang et al., 2015)**. Research has also been done on the biological mechanisms that underlie the link between multimedia exposure and irregular sleep patterns. For example, it has been demonstrated that exposure to blue light from electronic screens suppresses the production of melatonin, a hormone that controls sleep-wake cycles. Sleep difficulties in ADOLSCENTs may be exacerbated by this circadian rhythm disruption.

Screen usage and Adolescent Sleep Disturbance: Research conducted in **2015 by Hysing et al. and in 2015 by Hale and Guan** revealed a strong correlation between adolescents; sleep disruptions and increasing screen usage, especially during the nighttime hours. Before going to bed, using multimedia devices like computers, tablets, and cellphones excessively has been associated with lower sleep quality, a shorter sleep duration, and a delayed start to sleep.

Blue Light Exposure and Sleep Disruption: Studies on the effects of multimedia screens; blue light emissions on sleep patterns were conducted by **Chang et al. (2015) and Cajothen et al.(2011)**.

It has been demonstrated that blue light, which is frequently emitted by computers, televisions, and cellphones, suppresses the generation of melatonin and interferes with the circadian rhythm, making it harder to fall asleep and resulting in less restful sleep.

Michelle Helena van velthoven et al (2015) conducted a study to assess the prevalence and the factors that influence usage of mobile phones among 1854 caregivers of young children. Findings of the study showed that the majority of 1854 survey participants (1620; 87.4%) used mobile phones, but usage was much higher among mothers (1433; 92.6% and father (41; 100.0%) compared to grandparents.

(142;54.6%).

Interventions to Mitigate Multimedia-Induced Sleep Problems: Research by Carter et al. (2016) and Brien and Mindell (2005) evaluated various interventions aimed at reducing the adverse effects of multimedia on sleep, such as implementing screen-time limits, using blue light filters or blocking apps before bedtime, and promoting sleep hygiene practices. These interventions were found to be effective in improving sleep duration and quality among multimedia users.

The effects of using multimedia before bed: The mind and body were examined in research conducted in 2010 by Cain and Gradisar and in 2016 by Exelmans and Van den Bulck. These studies looked at the physiological and mental factors that contribute to sleep disturbances caused by using multimedia before bed.

They discovered that interacting with exciting multimedia content—like social media, video games, or internet streaming—can raise stress hormones and arousal levels and interfere with relaxing, all of which make it more difficult to go from awake to sound sleep.

Psychosocial Factors: (Levenson et al., 2016). Moreover, ADOLSCENTs' sleep difficulties have been linked to psychosocial factors like social media use and online communication. Research has indicated that overindulgence in social media platforms can result in elevated levels of anxiety, stress, and arousal, all of which can have an adverse effect on the quality of sleep.

in marketing campaigns and found that, in comparison to traditional forms of advertising, multimedia commercials typically garner better levels of attention and engagement.

In summary, the literature evaluation indicates a strong correlation between multimedia exposure and irregular sleep habits in ADOLSCENTs between the ages of 15 and 25. It is necessary to conduct more studies to investigate the underlying causes and provide focused interventions to encourage good sleep practices in this population.

REFERENCES: -Owens, J., Committee on Adolescence, and Adolescent Sleep Working Group (2014). An update on the causes and effects of sleep deprivation in adolescents and young adults. 134(3) of Paediatrics, e921–e932. Gradisar, M., and Cain, N. (2010). A review of children and ADOLSCENTs in school age groups that use electronic media and sleep. (735-742) in Sleep Medicine, 11(8). Duffy, J. F., Chang, A. M., Aeschbach, D., & Czeisler, C.A. (2015).

Using light-emitting e Readers in the evening has a negative impact on circadian rhythm, sleep quality, and alertness the next morning.

The National Academy of Sciences Proceedings, 112(4), 1232–1237. Levenson, J. C., Colditz, J. B., Primack, B. A., Shensa, A., and Sidani, J. E. (2016). the link between young adults' use of social media and disturbed sleep. 85, 36–41; preventive medicine.

CONCEPTUAL FRAMEWORK

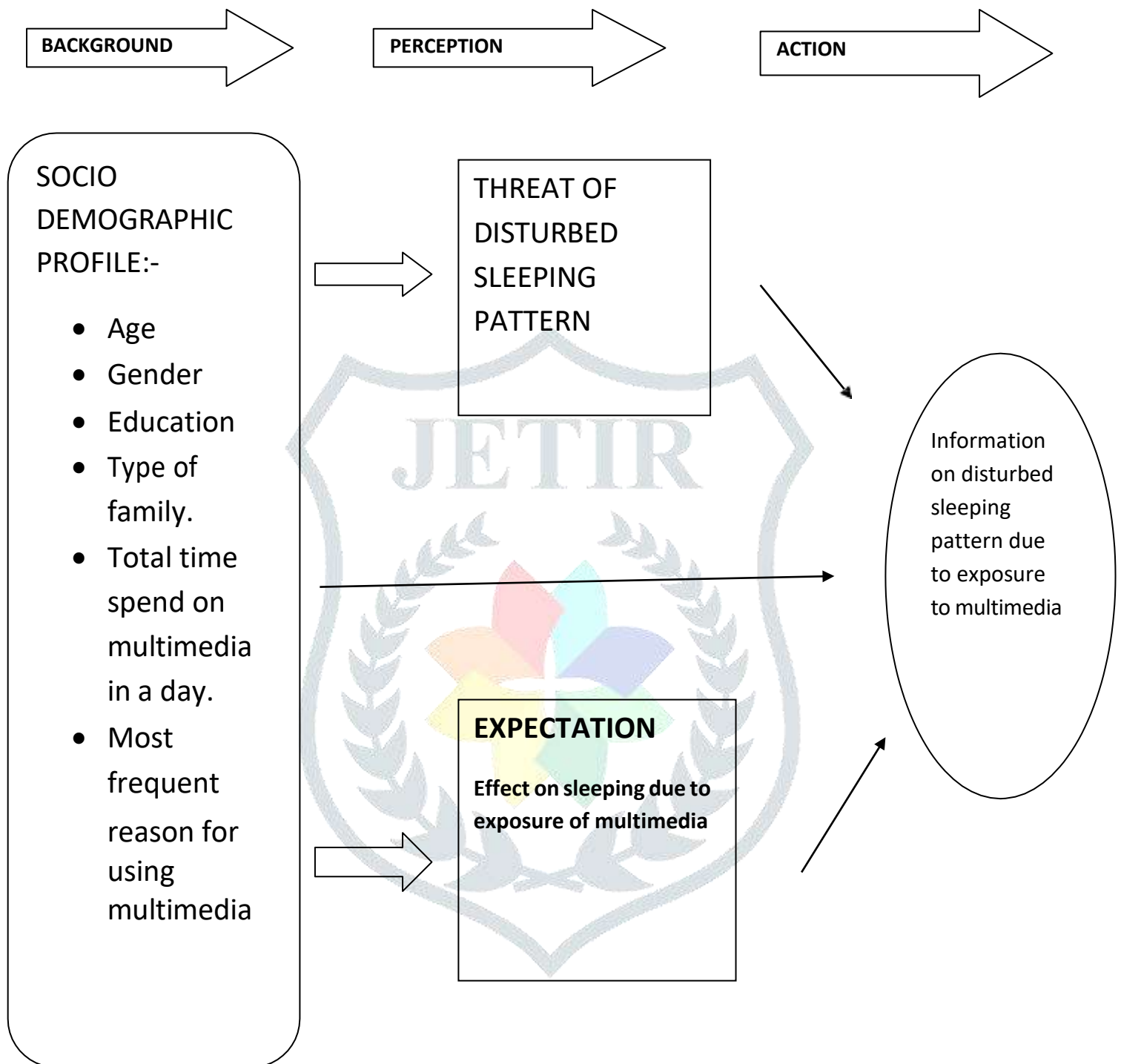


fig:1- the conceptual framework was based on modified health belief model.

Conceptual framework selected for the study is based on health belief model it is developed to assess noncompliance with health screening program, mostly concerning disease prevention , three key components were identified as influential aspects towards an Individual likelihood to following health recommendation .They included:

- Background
- Perception
- Action

BACKGROUND

It includes socio demographic variables of the study participants that are age, gender, religion, marital status, residential area, total time spent on, multimedia in a day, most frequent reason for using multimedia.

PERCEPTION

It includes two components that are threat and expectation

- Threat of disturbed sleeping pattern.
- Expectations of effect on health of using excessive multimedia.

ACTION

It includes the preparation of health talk to improve knowledge regarding disturbed sleeping pattern due to exposure of multimedia.

This includes:

- Introduction of disturbed sleeping pattern
- Definition of disturbed sleeping pattern
- Risk factor of disturbed sleeping pattern
- Causes of disturbed sleeping pattern
- Effects of disturbed sleeping pattern
- Effects of disturbed sleeping pattern
- Management of disturbed sleeping pattern
- Prevention of disturbed sleeping pattern

Chapter summary

This chapter includes literature review and conceptual framework. The literature was reviewed in view of concept of disturbed sleeping pattern in adolescents due to exposure of multimedia, overall the review of literature has supplemented educational information to understand and obtained holistic information necessary for formulation of objectives.

The conceptual framework was developed by the theory of health belief model. The next chapter deals with research methodology.

RESEARCH METHODOLOGY

This chapter's description of the research methodology outlines the broad guidelines for structuring the process of obtaining trustworthy and accurate data for analysis. It comprises methods for gathering and analyzing data in order to meet research goals and test hypotheses. The present study was carried out "A descriptive study to assess the disturbed sleeping pattern among adolescent (11-19) years due to exposure to multimedia in village of Sarai, Bahadurgarh".

LIST OF CONTENT

- Research approach
- Research design
- Setting of study
- Population
- Sample, sample size, & sampling technique
- Criteria for sample selection
- Research tool and technique
- Protection of human right
- Ethical consideration
- Reliability of tool
- Report of pilot study
- Data collection procedure
- Plan for data analysis

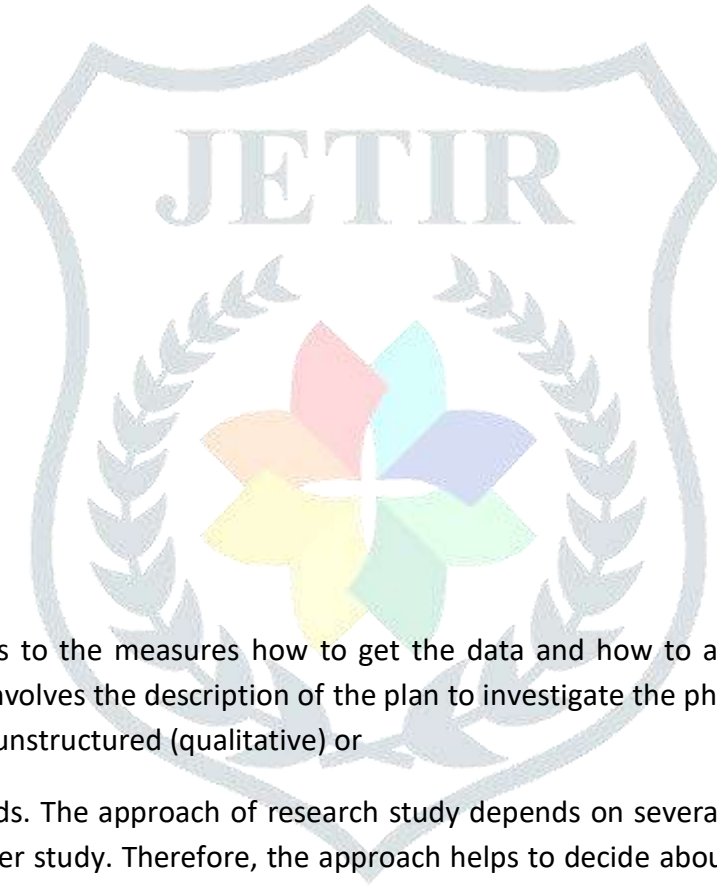
RESEARCH APPROACH

A research method explains to the measures how to get the data and how to analyzing the data in order to achieve the study goals. It involves the description of the plan to investigate the phenomenon under the study in a structured (quantitative), unstructured (qualitative) or

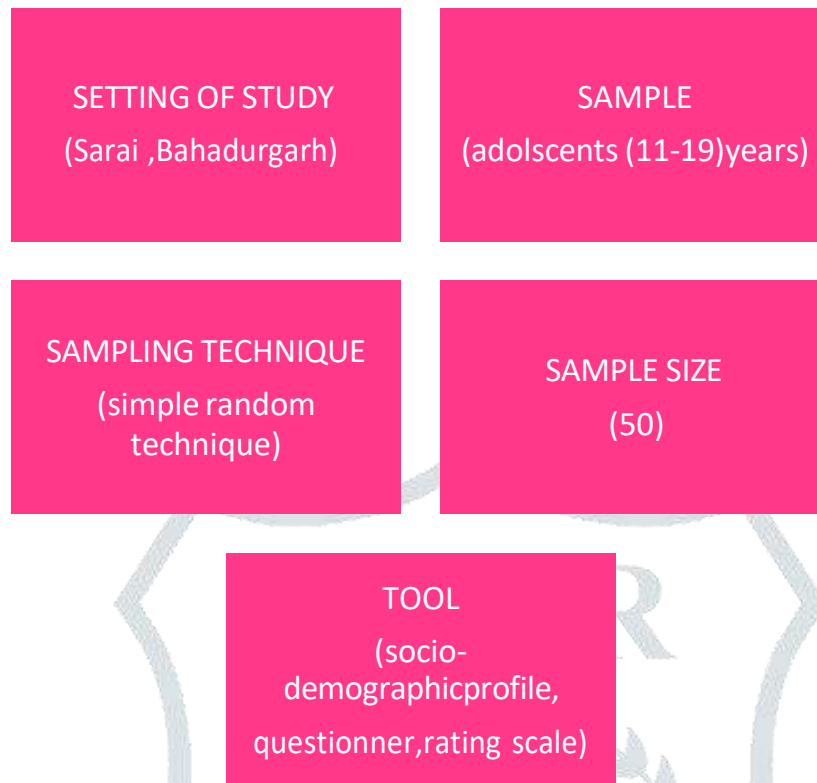
Combination of two methods. The approach of research study depends on several factors, but primarily on the nature of phenomenon under study. Therefore, the approach helps to decide about the presence or absence of randomization as well as manipulation and control over variables.

RESEARCH DESIGN

Research design is the overall strategy outlining the techniques and steps to be taken in order to gather and analyzing the necessary data for the research project. A descriptive survey design was used to assess the disturbed sleeping pattern among adolescents due to exposure of multimedia.



SYSTEMATIC REPRESENTATION OF THE STUDY



SETTING OF STUDY

Setting is the physical location and condition in which data collection takes place in study (Polit, 2008). A standard-setting study is an official research study conducted by an organization that sponsors tests to determine a cut score for the test. The present study was conducted at Sarai Bahadurgarh.

POPULATION

In this study the samples selected were 50 populations is all the organisms that both belong to the same species and live in the same geographical area.

TARGET POPULATION: Adolescents (11-19) years.

ACCESSIBLE POPULATION : Adolescents who meet the designed criteria and available for the research study.

SAMPLE

A sample is a selected portion Adolescents in the age group of (11-19) years.SAMPLE SIZE : 50 samples.

SAMPLING TECHNIQUE

According to Polit and Beck {2008}, sample is a subset of population selected to participate in research study. Sampling technique is defined as the process of selecting the samples for the research study. It can be by probability and non-probability method .In the present study simple random technique was used.

In this study sample comprised of adolescents who are in the age group of (11-19) Years who are at Sarai, Bahadurgarh and who fit into the criteria for samples selection were selected.

SAMPLING TECHNIQUE : Simple random sampling technique.

THE CRITERIA FOR SAMPLE SELECTION

The sample was selected based on the following criteria

INCLUSION CRITERIA

ADOLESCENTS

- At the age group of 11-19 years.
- Who are living in a rural selected area.
- Who are able to read English and Hindi language.
- Who are willing to participate in the sample.

EXCLUSION CRITERIA ADOLESCENTS

- Those who are not willing to participate.
- Mentally ill adolescents.

RESEARCH TOOL AND TECHNIQUE PREPARATION OF THE TOOL

The tool consisted of structured questionnaire to assess the prevalence and rating scale to assess the severity regarding disturb sleeping pattern.

A review of literature regarding the disease condition, the knowledge, prevalence and severity of disturbed sleeping patients helped to attain clarity in the selection of questions.

Discussion with the concerned experts and guides directed and highlighted the areas were touched while preparing the questionnaire.

TOOL

The tool was based on the objectives for the study. It consisted of 3 sections.

Section A

It consist of demographic perform constructed t to collect data regarding the selected variables such as age, gender, education and type of family.

Section B

It consisted of 10 multiple choice questions on knowledge regarding disturbed sleeping pattern due to exposure of multimedia each question has four responses. The total attainable score for the knowledge item was 10.

Section C

It consisted of 20 rating scale based questions on prevalence regarding duration of multimedia usage, each question has four responses namely, always (4), sometimes (3), rarely (2), never (1). The total attainable score for the prevalence item was 20.

TESTING OF THE TOOL

CONTENT VALIDITY

According to Polit and Beck (2008), content validity refers to the degree to which an instrument actually measures what it is intended to measure. Content validity is defined as the extent to which the items on the test are fair representatives of the entire domain the test seeks to measure. It is to assess the quality of the item on a test.

To ensure the content validity of tools it will be submitted to 2 experts in field of nursing.

Experts were requested to judge the items on the basis of their relevancy, clarity, feasibility and organization of the items include in the study. Modification suggested by the experts were incorporated after careful review and discussion with experts. The modification was done according to the suggestions of the experts.

RELIABILITY OF TOOL

Data gathered from 50 adolescents from Sarai Bahadurgarh was used to determine the validity of a disturbed sleeping pattern among adolescents in the form of questioner and rating scale.

REPORT OF PILOT STUDY

A pilot study was carried out to assess the tools dependability and the study viability. The research was done at Dayanand Nagar, Bahadurgarh, on the 10% of the total population, which was not from Sarai, Bahadurgarh.

A pilot study was conducted on 29/3/24. The aim of the pilot study was to find out the feasibility and practicability of the tool. The study was conducted among 05 samples, the sampling technique used was simple random. The finalized tool was used to assess adolescents satisfaction with questionnaire related to sleeping pattern and multimedia.

Prior permission was obtained from ward member. The pilot study revealed that the study was feasible and practicable.

DATA OF PILOT STUDY:

AGE	11-13	2
	14-16	2
	17-19	1
GENDER	MALE	2
	FEMALE	3
EDUCATION	VII-IX-XII	1
	UNDER	3
	GRADUATION	1
TYPE OF FAMILY	NUCLEAR	4
	JOINT	1
TOTAL NO. OF ADOLSCENTS		5

METHOD OF DATA COLLECTION

Based on baseline characteristics such as age, gender, education and type of family, previously heard information, source of information, and location of residence, a structured 10 multiple choice question for demographic performance is provided in Section-A.

There will be 20 rating scale based questions about disturbed sleeping patterns in Section-B. These tick-mark questions are used to assess the duration of multimedia usage.

PLAN FOR DATA ANALYSIS

A plan for data analysis was developed by the investigator after the data collection. The data obtained from satisfaction questionnaire and rating scale would be analyzed by descriptive statistics. Percentages would be used for describing the sample. In this study there are 3 questions. The Information given by the Nursing Students. In the questionnaire all questions to Adolescents satisfaction level with information provided.

PROTECTION OF HUMAN RIGHT

The collection of the data was performed on individual basis. The purpose of the study was explained individually to the persons and a consent form was signed from them before the data collection. No pressure was exerted to enforce them to participate in the study. All samples were voluntarily agreed after explanation of the study clearly. Assurance was given to the study subjects that anonymity of each individual was maintained. This was done for assuring the moral and ethical as well as for the legal safety of the investigator.

ETHICAL CONSIDERATION

The Sarai, Bahadurgarh people gave its consent for the study to be conducted. The study subjects written agreement to take part in the research project was obtained using an English- language consent form (appendix). The individual was informed of the reason for participating in the study and provided a guarantee of anonymity.

CHAPTER SUMMARY

This chapter described the research methodology with research approach ,research design, research setting, population, sample and sampling technique ,sample size ,tools and techniques, validity ,reliability , plan for data analysis to help to organize and interpret data in chapter 4.

DATA ANALYSIS AND INTERPRETATION

This chapter deals with analysis and interpretation of data collected from 50 adolescents to assess the knowledge and attitude in selected areas of village sarai ,Bahadurgarh, Haryana.

The term analysis refers to the computation of certain measures along with searching of pattern of relationships that exists. The data after collection has to be processed and analyzed in accordance with the outline laid down for the purpose of the time of developing the research plan. Descriptive and inferential statistics were used for

analyzing the data on the basis of objectives of the study. The interpretation has been tabulated and organized as follows.

Section I

Demographic variables such as age, gender, education, type of family .

Section II

Prevalence and severity regarding disturbed sleeping pattern due to exposure of multimedia.

Section III

Distribution of sample according to no. of hours spent using multimedia.

Section IV

Association between demographic variables with prevalence and severity.

STATISTICAL ANALYSIS

The prevalence and severity regarding disturbed sleeping pattern due to exposure of multimedia were assessed in terms of percentages. The relationship between prevalence and severity were analysed by Pearson co-relation co-efficient. The association between the prevalence and severity with demographic variables were analysed by χ^2 (chi-square test). The statistical procedures were performed by statistical package namely S.P.S.S. (13.0). The level of

SECTION I

DEMOGRAPHIC VARIABLES OF RURAL ADOLSCENTS

The table 1 describes rural adolescents with respect to demographic variables such as age , gender, education, and type of family.

TABLE – 1: RURAL ADOLSCENTS WITH RESPECT TO DEMOGRAPHIC VARIABLES

Total population = 50

S.NO.	DEMOGRAPHIC VARIABLES	COMPONENTS OF VARIABLES	NO. OF ADOLSCENTS	PERCENTAGE	MEAN	S.D
1.	Age (years)	11-13	21	42.0%		
		14-16	19	38.0%		
		17-19	10	20.0%		
2.	Gender	Male	25	50%		
		Female	25	50%		
3.	Education	VII-IX class	18	36%		
		X-XII class	22	44%		
		Under Graduate	10	20%		

		(I-II year)				
4.	Type of family	Nuclear Joint	32 18	64% 36%		
					20	6.38

FIG-2: FREQUENCY DISTRIBUTION OF RURAL ADOLSCENTS ACCORDING TO THEIR AGE INYEARS

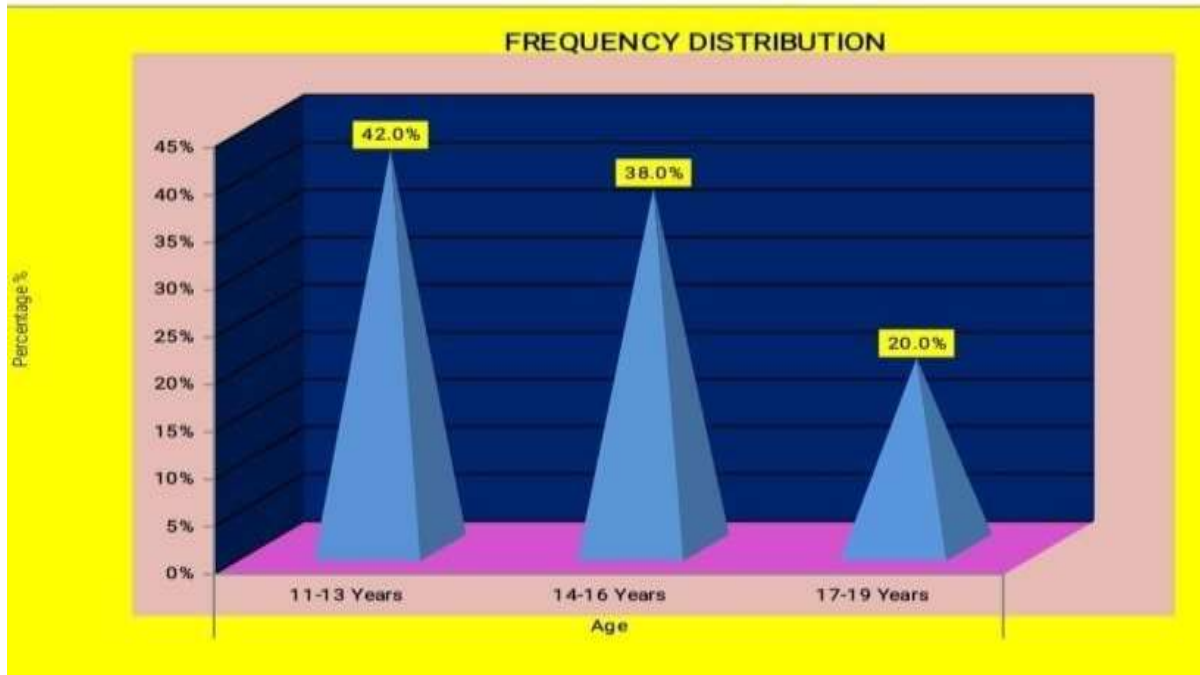


FIG-3: FREQUENCY DISTRIBUTION OF RURAL ADOLSCENTS ACCORDING TO THEIRGENDER

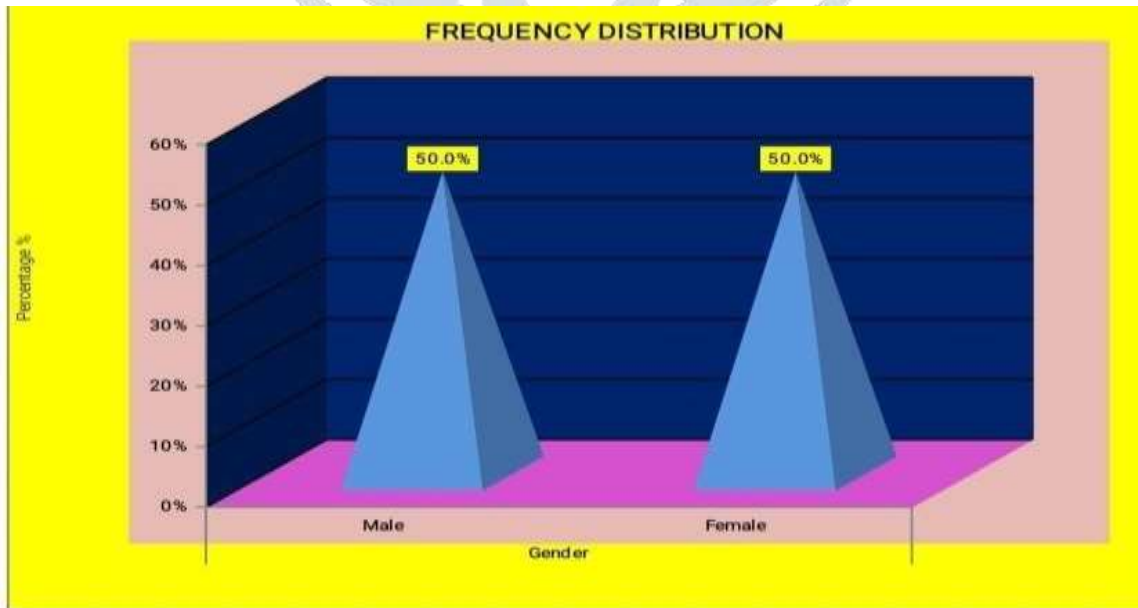


FIG-4: FREQUENCY DISTRIBUTION OF RURAL ADOLSCENTS ACCORDING TO THEIR EDUCATION

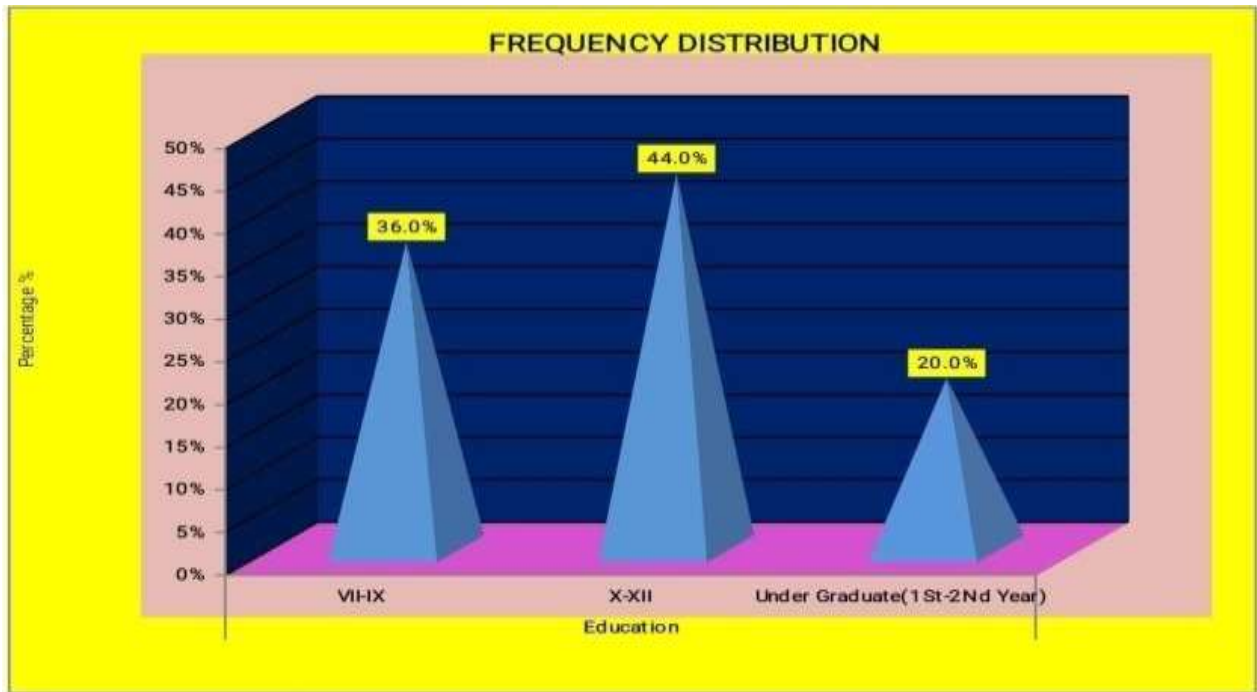
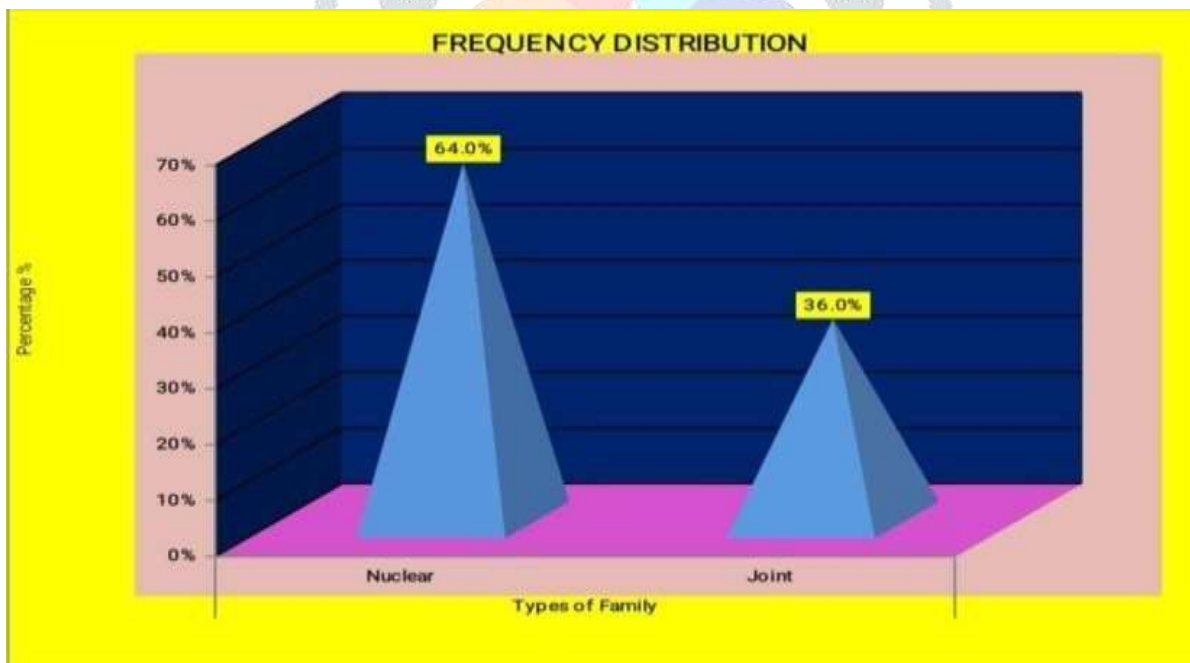


FIG-: 5 FREQUENCY DISTRIBUTION OF RURAL ADOLSCENTS ACCORDING TO THEIR TYPE OF FAMILY



SECTION II

FREQUENCY DISTRIBUTION OF PREVALENCE REGARDING DISTURBED SLEEPING PATTERN DUE TO EXPOSURE OF MULTIMEDIA

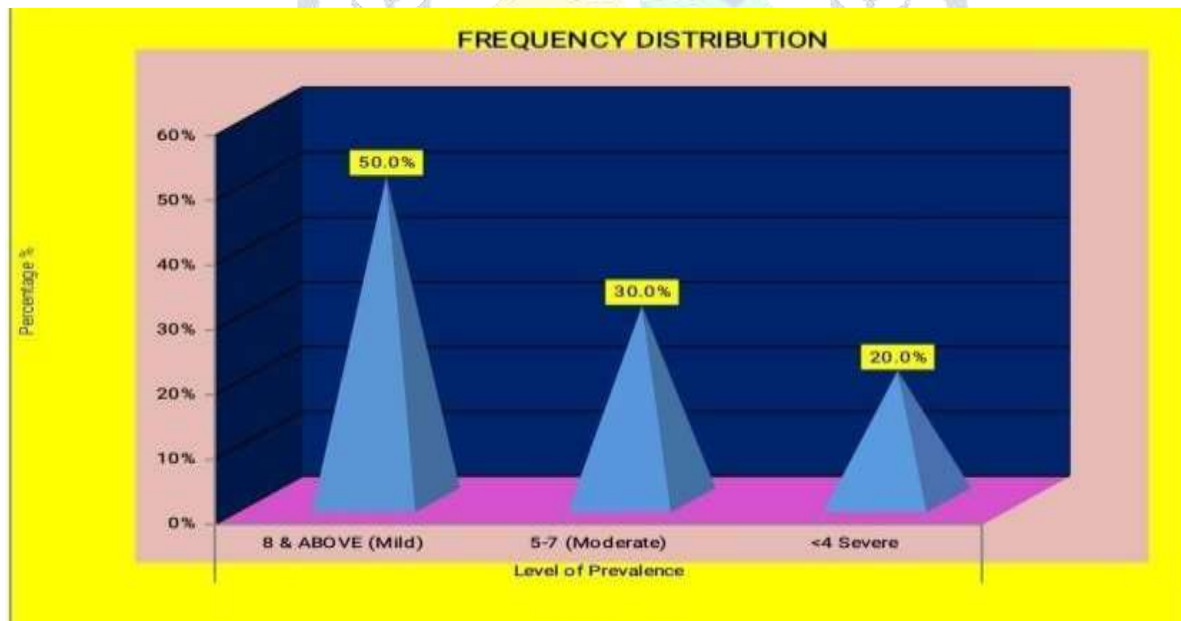
TABLE-2 FREQUENCY DISTRIBUTION AND PERCENTAGE OF PREVALANCE EREGARDINGDISTURBED SLEEPING PATTERN DUE TO EXPOSURE OF MULTIMEDIA.

SCORES	LEVEL OF PREVALENCE	FREQUENCY	PERCENTAGES
8 and above	Mild	25	50.0%
5-7	Moderate	15	30.0%
<4	Severe	10	20.0%
	Total	50	100.0%

The above table -2 describes the prevalence of disturbed sleeping pattern due to exposure of multimedia. It was found that half of (50%) of the adolescent has mild level of prevalence .

Thirty percent (30%) of the adolescence had moderate level of prevalence and twenty percent (20%) had severe level of prevalence .

FIG-6 FREQUENCY DISTRIBUTION OF PREVALENCE REGARDING DISTURBED SLEEPING PATTERN DUE TO EXPOSURE OF MULTIMEDIA

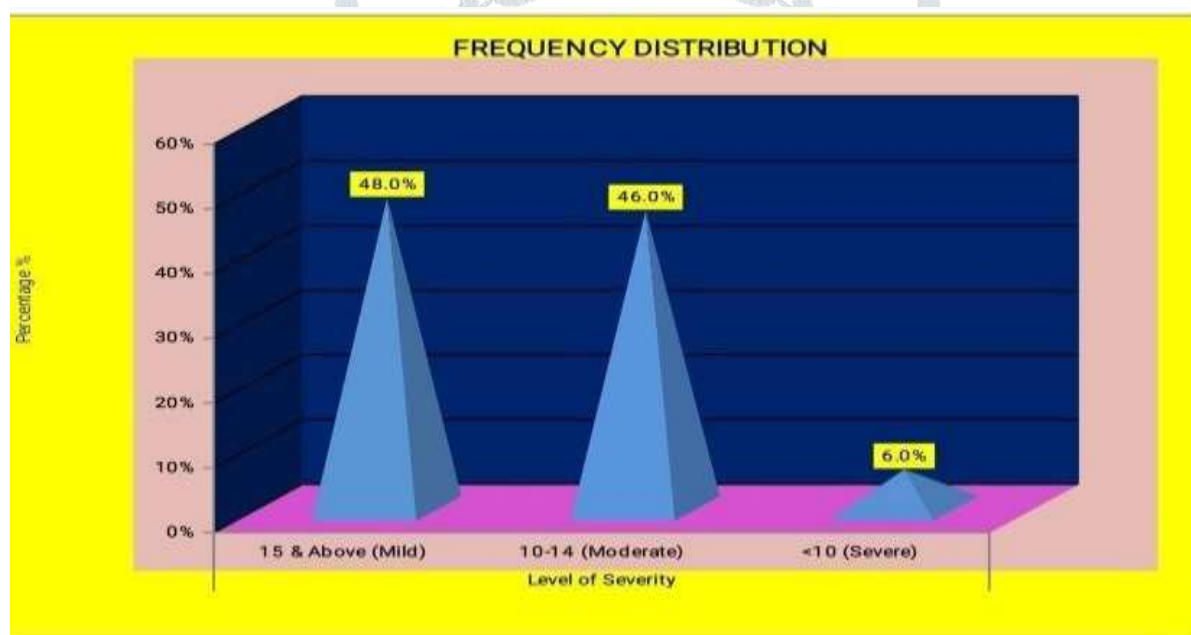


FREQUENCY DISTRIBUTION OF SEVERITY REGARDING DISTURBED SLEEPING PATTERN DUR TO EXPOSURE OF MULTIMEDIA

TABLE-3 : DISTRIBUTION OF SEVERITY REGARDING DISTURBED SLEEPING PATTERN DUE TO EXPOSURE OF MULTIMEDIA

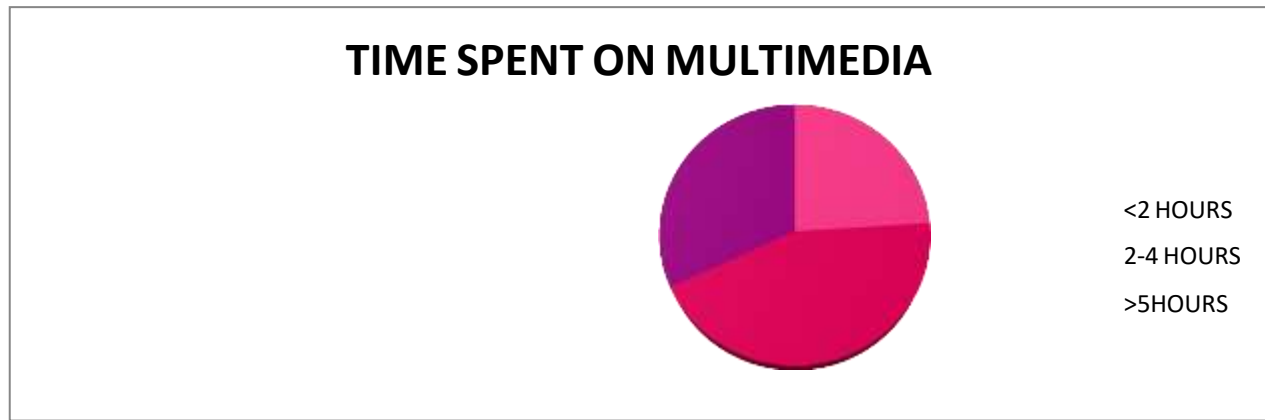
SCORE	LEVEL OF SEVERITY	FREQUENCY	PERCENTAGE
15 and above	Mild	24	48.0%
10-14	Moderate	22	44.0%
<10	Severe	4	8.0%
	Total	50	100.0 %

The above table 3 describes the severity of disturbed sleeping pattern due to exposure of multimedia. It was found that mild severity was 48% of (24) and moderate severity was 44% of (22) and severe severity was 4% of (4).

FIG-7 FREQUENCY DISTRIBUTION OF SEVERITY REGARDING DISTURBED SLEEPING PATTERN DUE TO EXPOSURE OF MULTIMEDIA.**SECTION-III****DISTRIBUTION OF SAMPLE ACCORDING TO THE NO. OF HOURS SPENT USING MULTIMEDIA****TABLE-4 FREQUENCY DISTRIBUTION OF SAMPLE ACCORDING TO NO. OF HOURS SPENT USING MULTIMEDIA.**

TIME SPENT ON MULTIMEDIA	DURATION	FREQUENCY	PERCENTAGE%
	<2 hours	12	24.0%
	2-4 hours	22	44.0%
	>5 hours	16	32.0%

table-4- shows the evident among the adolescence 24%(12) is <2 hours duration of multimedia usage , 44%(22) is 2-4 hour duration of multimedia usage and 32% (16) is >5 hour duration of usage multimedia .



SECTION-IV

ASSOCIATION BETWEEN DEMOGRAPHIC VARIABLES WITH PREVALENCE AND SEVERITY

The association between the demographic variable like: age, gender, education and type of family was studied with prevalence and severity and tabulated as follows.

TABLE-5 : SHOWS THE ASSOCIATION BETWEEN PREVALENCE AND SEVERITY OF DISTURBED SLEEPING PATTERN DUE TO EXPOSURE OF MULTIMEDIA.

DEMOGRAPHIC VARIABLE	ASSOCIATION WITH PREVALENCE			ASSOCIATION WITH SEVERITY		
	X ²	d.f	significance	X ²	d.f	significance
Age	0.100	4	0.999>0.05	4.710	4	0.318>0.05
Gender	2.240	2	0.326>0.05	1.391	2	0.499>0.05
Education	1.650	4	0.800>0.05	4.728	4	0.316>0.05
Type of family	0.116	2	0.944>0.05	0.047	2	0.977>0.05

X²=chi square test

d.f=degree of freedom THE ABOVE TABLE-5 SHOWS :-

PREVALANCE:-

1. Age and Level of Prevalence:

There is no significant association between age and the level of prevalence ($p = 0.999 > 0.05$). The distribution of age groups is not significantly different across different levels of prevalence (8 & ABOVE (Mild), 5-7 (Moderate), <4 Severe).

2. Gender and Level of Prevalence:

There is no significant association between gender and the level of prevalence ($p = 0.326 > 0.05$). Both males and females are distributed similarly across different levels of prevalence.

3. Education and Level of Prevalence:

There is no significant association between education level and the level of prevalence ($p = 0.800 > 0.05$). Different education levels are similarly distributed across different levels of prevalence.

4. Types of Family and Level of Prevalence:

There is no significant association between types of family and the level of prevalence ($p = 0.944 > 0.05$). Both nuclear and joint families are distributed similarly across different levels of prevalence.

5. Level of Severity and Level of Prevalence:

There is no significant association between the level of severity and the level of prevalence ($p = 0.086 > 0.05$). Different levels of severity are similarly distributed across different levels of prevalence.

6. Time Spend on Multimedia and Level of Prevalence:

There is no significant association between time spent on multimedia and the level of prevalence ($p = 0.418 > 0.05$). Different durations of multimedia use are similarly distributed across different levels of prevalence.

SEVERITY:-

1. Age and Level of Severity:

There is no significant association between age and the level of severity ($p = 0.318 > 0.05$). The distribution of age groups is not significantly different across different levels of severity (15 & Above (Mild), 10-14 (Moderate), <10 (Severe)).

2. Gender and Level of Severity:

There is no significant association between gender and the level of severity ($p = 0.499 > 0.05$) both males and females are distributed similarly across different levels of severity.

3. Education and Level of Severity:

There is no significant association between education level and the level of severity ($p = 0.316 > 0.05$). Different education levels are similarly distributed across different levels of severity.

4. Types of Family and Level of Severity:

There is no significant association between types of family and the level of severity ($p = 0.977 > 0.05$). Both nuclear and joint families are distributed similarly across different levels of severity.

5. Level of Prevalence and Level of Severity:

There is no significant association between the level of prevalence and the level of severity ($p = 0.086 > 0.05$). Different levels of prevalence are similarly distributed across different levels of severity.

6. Time Spend on Multimedia and Level of Severity:

There is no significant association between time spent on multimedia and the level of severity ($p = 0.060 > 0.05$). Different durations of multimedia use are similarly distributed across different levels of severity, although this result is close to the significance threshold.

CHAPTER SUMMARY

This chapter deals with the analysis and interpretation of findings of study. The next chapter will deal with the result and discussion, summary, conclusion.

RESULT AND DISCUSSION

A Descriptive study to assess the disturbed sleeping among adolescents (11-19) years due to pattern exposure of multimedia at the village of sarai, bahadurgarh.

OBJECTIVES OF THE STUDY

- To assess the prevalence and severity of disturbed sleeping pattern among adolescents(11-19)
- To evaluate the frequency and duration of multimedia usage among adolescents
- To find out the significance association between demographic variables with prevalence and severity of disturbed sleeping pattern. .

SAMPLE CHARACTERSTICS

The demographic variables of disturbed sleeping pattern among adolescents due to exposure multimedia were shown in table 1. According to their age 42% (21) of them were in the age group of 11-13, 38% (19) of them were in the age group of 14-16 and the remaining 20% (10) were above 17 years. The mean age of them was 20,(+)- 6.38 years. According to their gender are, 50% (25) were males and 50% (25) were females. According to their education 36%(18) were VII-IX class,44%(22)were in class X-XII and 20%(10) were in undergraduate (I-II year).According to their type of family 64% (32) of adolescence were nuclear family and the remaining 36% (18) were joint family .

THE FIRST OBJECTIVE WAS TO ASSESS THE PREVALENCE AND SEVERITY OF DISTURBED SLEEPING PATTERN AMONG ADOLSCENTS(11-19).

The assessment of prevalence regarding disturbed sleeping pattern among adolescence due to exposure of multimedia was shown in Table 2. It is evident that among the 50% adolescence had mild level of prevalence and 30% and 20% were moderate and severe level of prevalence.

The assessment of severity regarding disturbed sleeping pattern among adolescence due to exposure of multimedia was shown in Table 3. It is evident that among the 48% adolescence had mild level of severity and 44% and 8% were moderate and severe level of severity.

THE SECOND OBJECTIVE WAS TO EVALUATE THE FREQUENCY AND DURATION OF MULTIMEDIA USAGE AMONG ADOLESCENTS.

The evaluate of frequency and duration of multimedia usage among adolescents was shown in table-4:.it is evident that among the adolescence 24%(12) is <2 hours duration of multimedia usage , 44%(22) is 2-4 hour duration of multimedia usage and 32% (16) is >5 hour duration of usage multimedia .

THE THIRD OBJECTIVE WAS TO FINE OUT THE SIGNIFICANCE ASSOCIATION BETWEEN DEMOGRAPHIC VARABILE WITH PREVALENCE AND SEVERITY OF DISTURBED SLEPPINGPATTERN.

There is no significant association between the demographic variable with prevalence and severity.

There is no significance association between age and level of prevalence is ($p=0.999>0.05$), gender ($p=0.326>0.05$), education($p=0.800>0.05$), type of family($p=0.94>0.05$).

The significant association between age and level of severity is ($p=0.318>0.05$), gender($p=0.499>0.05$), education($p=0.316$), type of family($p=0.977>0.05$).

SUMMARY, CONCLUSION AND RECOMMENDATION

SUMMARY

This chapter deals with the summary, conclusion and recommendation of the study. This also presents the recommendation for future research.

The purpose of the study was to assess the disturbed sleeping pattern among adolescents (11-19) years due to exposure of multimedia at the village of Sarai, Bahadurgarh. The samples were 50 adolescents.

MAJOR FINDINGS OF THE STUDY

A study that analysed and interprets the findings of rural adolescents in form of demographic variables such as age, gender, education, type of family. The study has a total population of 50 participants.

Table-1: The distribution of rural adolescents according to their age shows that 42% were in the age group of 11-13 years, 38% were 14-16 years and 20% are in 17-19 years. In terms of gender, 50% were males and the remaining 50% were females. For education, 18% were in class VII-IX, 22% were in X-XII, and 10% were under graduates. For type of family, 32% of adolescents belong to nuclear family and 18% are from joint family.

Table-2 describes the prevalence of disturbed sleeping pattern due to exposure of multimedia. It was found that half of (50%) of the adolescent has mild level of prevalence. Thirty percent (30%) of the adolescent had moderate level of prevalence and twenty percent (20%) had severe level of prevalence.

Table-3: describes the severity of disturbed sleeping pattern due to exposure of multimedia. It was found that mild severity was 48% of (24) and moderate severity was 44% of (22) and severe severity was 4% of (4).

Table-4: It is evident that among the adolescent 24% (12) is <2 hours duration of multimedia usage, 44% (22) is 2-4 hour duration of multimedia usage and 32% (16) is >5 hour duration of multimedia usage.

Table-5: shows there is no association between the demographic variable with prevalence and severity ($P>0.05$).

CONCLUSION

Based on the result found in this work, it is concluded that the disturbed sleeping pattern due to exposure of multimedia is a field of study that is currently in the early stage of research, so that most of the research is the exploratory phase. Young people exposed to intensive and irrational use of technology are only aware of the advantages it offers and are unaware of the risks they may suffer as consequences.

The study is suggestive of multimedia dependence among the (11-19) years adolescents of Sarai, Bahadurgarh, Haryana.

IMPLICATIONS OF THE STUDY

The present study has several implications in Practice, Nursing Education, Nursing research and administration.

NURSING EDUCATION

- Nursing education should prepare effective nurse. Active preparation of student nurse in conducting educational programme to provide information regarding disturbed sleeping pattern due to exposure of multimedia.
- With the increase in knowledge students can impart this knowledge to others also that will help to reduce the prevalence and severity of disturbed sleeping pattern due to exposure of multimedia .
- The study outlines, the significance of short-term courses and in-service education to equip nurses with the current knowledge on multimedia.
- Nurse Educators when planning and instructing nursing student, should provide opportunities for students to gain the knowledge in teaching adolescents about multimedia and its effects.
- Nursing personnel should be given in-service education to update their knowledge.
- Nurse Educators when instructing the students, should provide adequate opportunity for each student.
- Nurse must require adequate knowledge regarding multimedia and its harmful effects that would help to prevent prevalence and severity of disturbed sleeping pattern
- Being the backbone of health team, nurse owes a great responsibility in educating the people especially our youth about effects of multimedia and ideal ways of using smart phone to reduce the impact of using smartphone, video games, t.v.
- Psychiatry health nurse and other health professionals should be aware of psycho- education on reduction in usage of multimedia among the adolescents; Psych- education is an important part for individual.
- The purpose is to maintain, improve and promote the prevalence and severity regarding multimedia.
- This would facilitate awareness among adolescents about harmful effects of multimedia.

NURSING RESEARCH

- The lack of research based information shall be merged in relation to an intervention applied by nurse.
- There is need for extensive and intensive research in this area.
- The study can be done with large sample for the generalization of the findings.
- The same study can be done in different settings.

NURSING ADMINISTRATION

- In-service education can be conducted to the personnel regarding disturbed sleeping pattern due to exposure of multimedia.
- Nursing Administrator can prepare a protocol based on institutional policy regarding disturbed sleeping pattern.
- In the administrative level periodic conferences, symposium, seminars can be arranged to update the knowledge, skills and practice of the uses.

RECOMMENDATION

- In future studies more samples has to be selected.
- The study has to be conducted on a large basis.
- After assessing the prevalence and severity provide education to the people.

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APPENDIX-I



Act Established under Haryana Private Universities Act No.32 of 2006 and Haryana Private Universities (Amendment)

Act 2015 (Haryana Act No.1 of 2016)

TO,

Faculty of Nursing,

P.D.M University, Bahadurgarh

Subject: Expert opinion for the content validity of "A descriptive study to assess the disturbed sleeping pattern among the adolescents (11-19) due to exposure of multimedia at the village of sarai, Bahadurgarh.

Sir/ Madam,

We are the students of 4th year BSC Nursing at P.D.M University, I have selected mentioned topic for research project to be submitted to university as a partial fulfillment of University requirement for award of Bachelor's of Nursing degree.

TOPIC: " A descriptive study to assess the disturb sleeping pattern among the adolescents(11-19) due to exposure of multimedia at the village of sarai, Bahadurgarh."

We would request you to kindly go through the tool, and give your expert opinion for any modification and improvement. I shall be grateful for your remarks and suggestions.

Thanking you Yours faithfully

Group B students : Muskan (N40120022

Monika (N40120027)

Piyush barka (N40120015)

Dev Raj (N40120029) Kartik gehlawat

(N40120014)

Diksha (N40120025)

APPENDIX-II

LIST OF EXPERTS FOR VALIDATION OF RESEARCH TOOLS

SNO.	TEACHER'S NAME	DESIGNATION
1	MS.SANTOSH HOODA	DEAN, PRINCIPAL
2	MRS.SANTOSH KUMARI	VICE PRINCIPAL

APPENDIX –III PERMISSION LETTER FOR PARTICIPANTS

DEAR PARTICIPANTS,

Objective of this study is “A Descriptive study to assess the disturbed sleeping pattern among adolescents (11-19) years due to exposure of multimedia at the village of Sarai, Bahadurgarh. you are requested to participate in this study, your cooperation is highly respected and your honest feedback is valued. I assure you that the information you provide will be kept strictly confidential and will be used only for the purpose of the study .if you are willing to participate in this study ,please sign the consent from below.

Thank you for participating in the study .Yours truly ,

Muskan ,Monika, Piyush barka ,Dev Raj ,Kartik gehlawat,Diksha

Place:

Date:

CONSENT

I have been informed about the purpose of the study and I give my willing consent to the studyParticipants.

Signature:

APPENDIX-IV

RESEARCH TOOL

The questioners is designed to collect data to assess the prevalence and severity in adolescents regarding disturbed sleeping pattern due to exposure of multimedia.

It has 3 sections- section-A, section-B, section-C

SECTION-A

SOCIO DEMOGRAPHIC VARIABLE

Read the following items and select the appropriate option.

Age (in years)

- A. 11-14
- B. 15-16
- C. 17-18

Q2. Gender

- A. Male
- B. Female
- C. None of these

Education

- A. VII-IX class
- B. X-XII class
- C. under graduation (1&2 year)

Type of family

- A. Nuclear
- B. joint
- C. None of these

SECTION-B QUESTIONNERS TO ASSESS THE PREVELANCE

Q1. Did you believe that decreasing the time usage of your multimedia use would positively impact your overall health and well-being?

- Yes, I strongly believes
- Yes, I somewhat believe so
- No, I believe it would negatively impact my life
- All of these

Q2. According to you what age group is more affected by multimedia?

- 11-13year
- 14-16year
- 17-19years
- All of these



Q3. Have you experienced any negative impacts on your social life or relationships as a result?

- No impacts
- Moderate impacts
- Major impacts
- All of these

Q4. How often do you engage with multimedia content(videos, social media, gaming) on a typical day?

- < 2 hour
- 2-4 hour
- >5 hours
- All of these

Q5. Which of the following physical discomforts can be associated with prolonged use of multimedia devices?

- Eye strain
- Headache
- None of the above
- All of these

Q6. According to you which gender is more influenced by multimedia?

- Male
- Female
- Both male and female
- None of these

Q7. According to you, In which standard the multimedia is more required ?

- VII-IX class
- X-XII class
- Under graduate(I-II year)
- All of these

Q8. Have you noticed any changes in your sleep patterns or quality of sleep due to multimedia consumptions?

- No changes
- Slight changes
- Moderate changes
- None of these

Q9. Have you ever felt addicted or overly reliant on multimedia devices for entertainment or communication?

- Never
- Rarely
- occasionally
- Sometimes



Q10. Have you noticed any changes in your mood or academic performance due to disrupted sleep patterns caused by multimedia use?

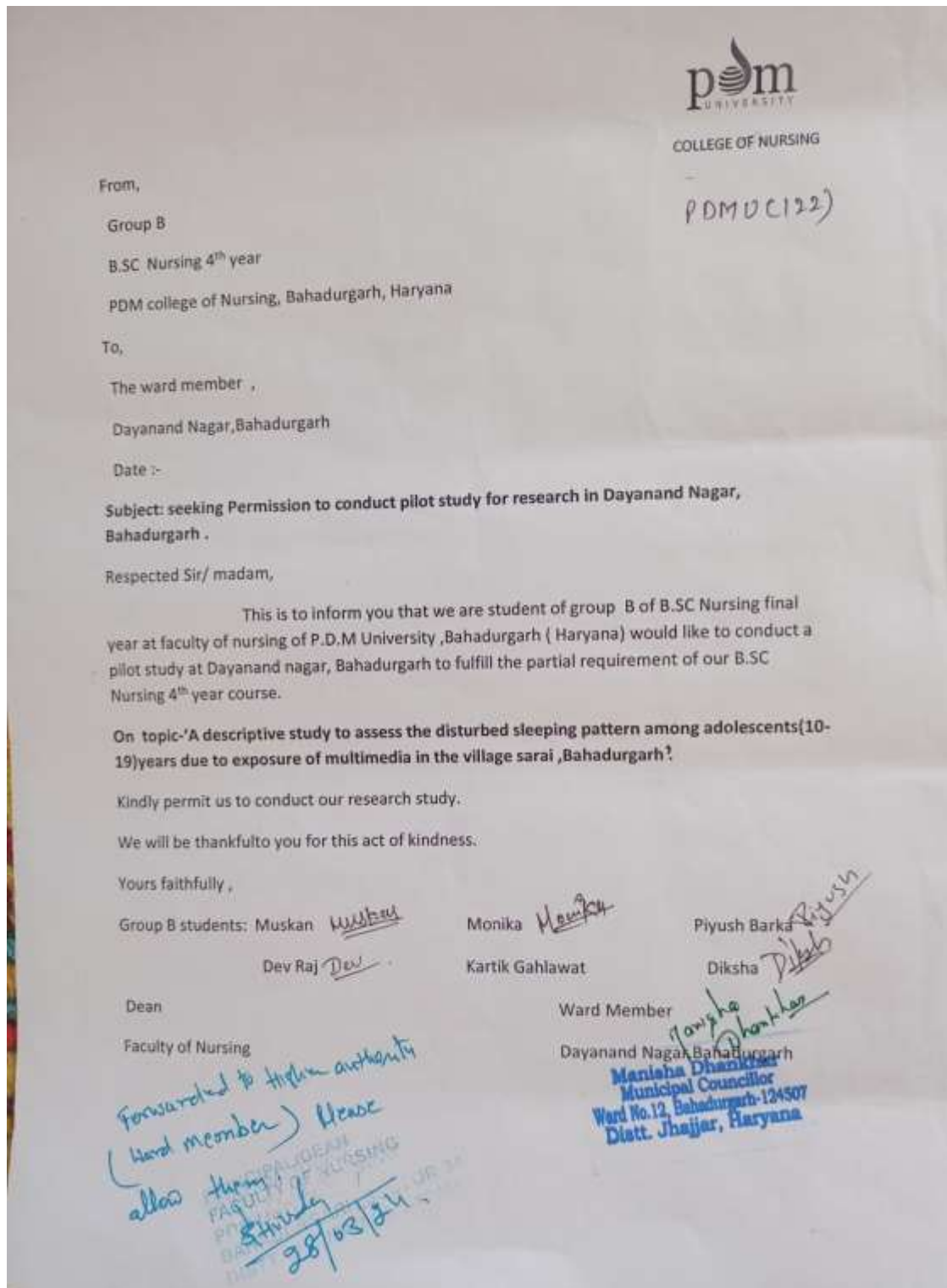
- Yes , significantly
- Yes, somewhat
- Not really
- None of these

SECTION-C

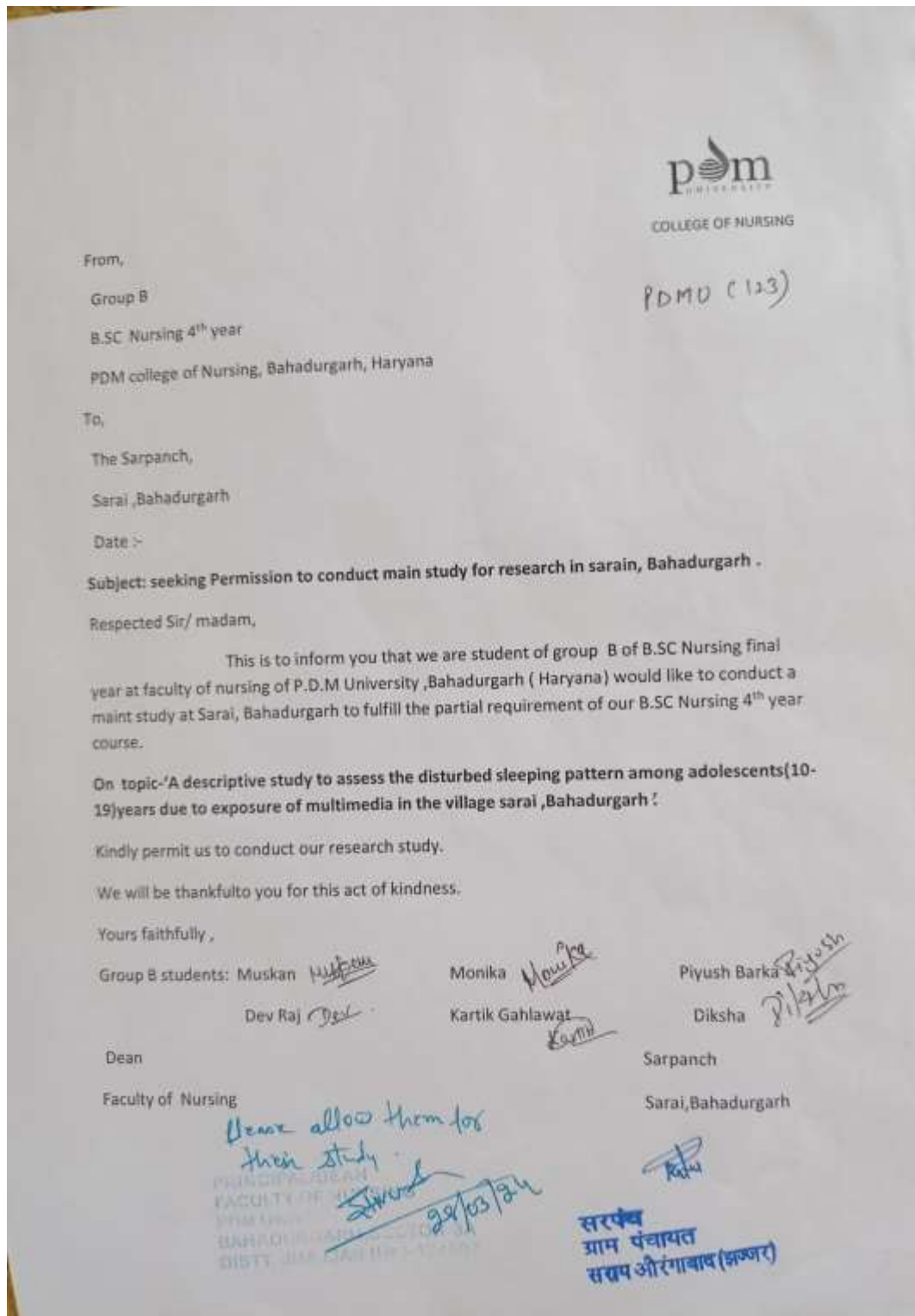
RATING SCALE QUESTIONNAIRE TO ASSESS THE SEVERITY

S.n o	Questionnaire	Never 1	Rarely 2	Sometimes 3	Always 4
1	Do you use the smartphone or computer?				
2	Do you find social media essential in making entertainment?				
3	Did social media affect your daily routine?				
4	Does different types of media in your device affect your sleep?				
5	Do you take healthy sleep of 7-8 hours?				
6	Does your sleeping pattern is affected due to excess use social media ?				
7	Is watching time on your device is more 3 to 4 hours?				
8	Do you find it easy to study using smartphone other than books?				
9	Have you used multimedia to fall sleep faster?				
10	Do you sleep at day time rather than night?				
11	How much time its take you to fall sleep?				
12	Do you feel fresh when you wakeup in the morning?				
13	Have you ever sleep app to fall sleep?				
14	Do you experience addicted towards social media?				
15	Do you experience symptoms of irritation?				
16	Do you have any illness that doesn't let you sleep?				
17	Do you use smartphone as an alarm clock?				
18	Do you use any managing strategy to improve your sleep?				
19	Have you ever compromise your sleep to use social media?				
20	Does lack of sleep restricting your thinking capacity?				

APPENDIX-V



APPENDIX-VI



APPENDIC-VII

LIST OF STATISTICAL FORMULA

1) FROMULA OF MEAN:-

$$M = \frac{\text{sum of the terms}}{\text{number of terms}}$$

2) FORMULA OF STANDARD DEVIATION:-

$$\sigma = \frac{\sqrt{\sum(x_i - \mu)^2}}{N}$$

- σ = Standard Deviation
- x_i =Terms given in the data
- \bar{x} = Mean
- n = Total number of term

3) Chi-square test:-

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

- O_i = observed value (actual value)
- E_i = Expected value.

