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Severity of Insomnia among Adolescents and Young Adult Females: A Comparative Study

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ABSTRACT

The current study's objective is to evaluate the effects of insomnia and its factor on adolescents and young adult females on mental health and physical health. A person suffering from insomnia is not able to get sound sleep. This directly or indirectly affects the health and work efficiency. The person is not able to concentrate on these studies or duties given. Thus, this study will help the individual to sleep screen. The research was conducted in Lucknow city on 200 samples. The research design was descriptive in nature. Self constructed interview schedule along with standardized scale revealed Insomnia Severity Index by Morin, M.C. was used to assess severity of insomnia in different age groups. Results showed that more than half of the respondents in both categories Result depicted that as p<0.001, thus null hypothesis was rejected, which means that there is significant difference between stress, eating habit too much late in the evening, over thinking faced by adolescents and young adults. Mean value also depicts the same. Results revealed that as p>0.01thus null hypothesis was accepted, which means that there is no significant difference between Work during night, Poor sleep habit, Excess used of caffeine(coffee), Mental health disorder (Anxiety), Faced hormonal changes, suffered long term illness faced by Adolescents and young adults' females. They're Discussed ANOVA between Insomnia severity index across different age group. Data in the table showed that as p < .00 thus null hypothesis was rejected which means that there was significant difference in the severity of Insomnia among respondents across different age groups. Mean values also depicted the same Higher the mean value, more is the level of severity Insomnia among respondents. There was significance difference between the Insomnia Severities of respondents across adolescents and young adult.
Keywords: *Adolescence and young adults, Severity of Insomnia, Insomnia Severity Index*

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INTRODUCTION

Adolescence is a stage of physical and psychological development that typically takes place between the time of puberty and the age of legal maturity (the name adolescence is derived from the Latin adolescere, meaning "to grow up"). Adolescence is a very important stage of life, and during this time, a person's likes and dislikes also rapidly change. Certain physical, emotional, and social changes also happen as the developmental process reaches its climax. Adolescents experience mood swings more frequently than any other age group, and when this happens frequently, it has an impact on mental health [1].

"Adolescence" is a theoretical construct that is always changing and is influenced by physiological, psychological, temporal, and cultural factors. Traditionally, the years between the onset of puberty and the establishing of social independence are considered to constitute this key developmental phase. [9]. The ages of 10 to 18 are included in the most widely accepted chronologic definition of adolescence, however other sources may cover a range of 9 to 26 years. Confusion in the development of adolescent research and adolescent program design might result from inconsistent inclusion criteria for "adolescence" and its sub-stages. While acknowledging the importance of developmental diversity in discussions about adolescence, conceptual clarity is as important. This article proposes a theoretically coherent chronology of adolescence and adolescent sub-stages for use in research and program creation, examines the developmental basis for definitions of adolescence, and lists frequently used chronologic indicators. [8]. Adolescence brings with it the problem of emotional, if not physical, parental separation. Although this feeling of distancing is an essential phase in developing own ideals, many teenagers find that the shift to independence necessitates a number of modifications. Additionally, teenagers typically inhabit an uncertain stage between childhood and adulthood rather than having distinct responsibilities of their own in society. In Western societies, these problems typically characterize adolescence, and how a person responds to them shapes their adult

years in part. In addition, the person has a resurgence of sexual feelings in adolescence after latent sexuality throughout childhood. Adolescence is the time when a person learns to regulate and focus their sexual impulses [4-7].

Young adulthood is a distinct developmental stage that lasts between the ages of 18 and 30 years. During this time, the young adult is able to engage in self-exploration and identity building through the completion of important developmental tasks. Various organizations presently define young adulthood differently and include varying age ranges when defining it. This creates ambiguity when creating programs, offering healthcare services, and doing research. Since young adults use healthcare less frequently than older age groups and have worse health outcomes related to preventable causes of morbidity and mortality, they should be separated from adolescents and adults. Young adults are comparatively prone to injury, mental health disorders, substance addiction, and concerns about their sexual and reproductive health. [3].

Conditions known as sleep disorders cause modifications to your sleeping patterns. The general health, security, and quality of your life can all be impacted by a sleep issue. Lack of sleep increases your risk of developing various health issues and can make it more difficult for you to drive safely. A few of the telltale signs and symptoms of sleep disorders include excessive daytime tiredness, erratic breathing, or increased movement while you're asleep. Other symptoms and indicators include difficulties falling asleep and an inconsistent sleep-wake cycle. Sleep disturbances come in a wide variety of forms. They are frequently categorized into groups that describe how or why they occur. Other ways to categories sleep disorders include behaviors, issues with your natural sleep-wake cycles, breathing issues, difficulties falling asleep or staying asleep, and how drowsy you feel **[7]**.

The severity of insomnia in various age groups will be examined in this research, despite the fact that there are numerous different types of sleep problems. Insomnia is a frequent sleep disorder that can cause problems getting asleep, staying asleep, or waking up too early and having issues going back to sleep. Upon awakening, one may still experience fatigue. In addition to lowering your energy and mood, insomnia can also have a detrimental effect on your quality of life, job productivity, and health. Although everyone has different sleep demands, most people require seven to eight hours each night. Acute insomnia, or short-term insomnia, affects a lot of people and can last for days or weeks. Because sleep deprivation has been associated with a lower quality of life and greater functional limitations in adolescents with chronic pain, its consequences may be pervasive in this population. However, because no precise behavioral or psychological characteristics connected with insomnia symptoms in young individuals with chronic pain have been properly identified by study, our ability to interact with potentially modifiable elements is limited. Research on adolescents has grown over the last few decades in attempt to better understand their sleep needs, habits, and bioregulatory processes. Teenagers usually have inconsistent and delayed sleep patterns, more daytime tiredness, and higher rates of insomnia compared to younger children. We chose to focus on a teenage sample in the current study and to assess severity of insomnia sleep disorders in past research on adolescent sleep because of this. We examine several behaviors and processes that are significant in the adult literature on insomnia and are emerging as significant in defining sleep in the child and adolescent population, with a focus on pre-sleep arousal (somatic and cognitive arousal present at night). Sleep issues in otherwise healthy young people have been associated with pre-sleep stimulation, particularly cognitive arousal. Because laboratory studies have demonstrated that puberty delays the timing of adolescents' sleep. Last but not least, previous study in young persons with chronic pain has demonstrated sad symptoms as a strong predictor of sleep disruption. Pubertal development was also taken into consideration. The main causes of insomnia in adolescents and young adults are psychosocial and demographic variables. Insomnia symptoms are more prevalent in girls and older teens, according to several research. Significant psychosocial factors that contribute to sleeplessness include stress and poor mental health. According to extensive study, acute insomnia may be seen as a physiological reaction to short-term stressors or "threats". Events in the environment that are stressful have been linked to insomnia, and research has shown that for people who are stressed, social support can be a resource for coping with stress and a crucial protective component in guaranteeing sleep quality [8].

MATERIAL AND METHODS

SELECTION OF SAMPLE

For selecting the respondents, purposive random sampling was utilised. For the present study, 200 respondents were randomly selected from government, private school and girl's hostels in Lucknow city, out of which 98 were adolescents and 108 were young adults. The respondents for the study were chosen from two different locations in luck now city. The sample consists of 200 respondents.

DATA COLLECTION

Two tools were utilized, including a Sociodemographic questionnaire for assessing the demographic profile of the respondents. Insomnia Severity Index (ISI) by Morin M.C was used to gather general and specific information from respondent. The method was modified and now incorporates seven items for the assessment of severity of insomnia, rated from 0-7(No clinically significant insomnia) 8-14(Sub threshold insomnia) 15-21(Clinical insomnia- moderate severity) 22-28(Clinical insomnia- severe) in each of the seven location.

STASTICAL ANALYSIS

The statistical analysis was performed using IBM SPSS statistics version 20. With the aid of frequency percentage, mean, standard deviation, correlation coefficient using Pearson's correlation, and significance of test using t-test and ANOVA, the severity of insomnia among adolescents and young adult females was found.

RESULTS AND DISCUSSION

TABLE:1-DISTRIBUTION OF RESPONDENT ON THE BASIS OF THEIR AGE GROUP N=200

S.No.	**Age group (Years)**		**F (%)**
A	Adolescent (N=108)		
	1	11-14	67(33.5)
	2	15-17	41(20.5)
B	Young Adult(N=92)		
	3	18-21	24(12.0)
	4	22-24	54(27.0)
	5	25-27	6(3.0)
	6	28-30	8(4.0)

Respondents on the basis of their age group. Data revealed that 33.5 percent respondents belonged to 11-14 years of age group where as 20.5 percent belonged to 15-17 years of age group, while 27.0 percent respondents were between 22-24 years. Very few (3.0%) respondents belonged to 25-27 years of age group Most of the respondents fall in the Adolescents groups.

TABLE:2- DISTRIBUTION OF RESPONDENTS ON THE BASIS OF THEIR SLEEPING HRS DURING NIGHT

S.no	Variables sleeping hrs during night	Adolescents		Young adults			
		11-14	15-17	18-21	22-24	25-27	28-30
1	less than 3 hrsN=(9)	2(22.2)	5(55.5)	0(0.0)	1(11.1)	0(0.0)	1(11.1)
2	3-5 N=(29)	16(55.1)	2(6.8)	3(10.3)	5(17.2)	1(3.4)	2(6.8)
3	5-7 N=(107)	24(22.4)	27(25.2)	16(14.9)	34(31.7)	3(2.8)	3(2.8)
4	more than 9hrs N=(55)	25(45.4)	12(21.8)	5(9.0)	13(23.6)	0(0.0)	0(0.0)

Respondents on the basis of sleeping hrs. During night. Results show that majority of the respondents are 3-5 hrs. (55.1%) in adolescents' group. Majority of the respondents are 5-7 hrs. (31.4%) in young adult females.

TABLE:3- DISTRIBUTION OF RESPONDENTS ON THE BASIS OF THEIR TYPE OF SLEEP

S.No.	Variables Type of sleep	Adolescents		Young adults			
		11-14	15-17	18-21	22-24	25-27	28-30
1	sound sleep N=(173)	60(34.6)	42(24.2)	19(10.9)	44(25.4)	4(2.3)	4(2.3)
2	disturbed sleep N=(27)	7(25.9)	4(14.8)	5(18.5)	9(33.3)	0(0.0)	2(7.4)

Respondents on the basis of type of sleep Results show that majority of the respondents are sound sleep 34.6%) inadolescents' group. Majority of the respondents are disturbed sleep (33.3%) in young adult females.

TABLE:4- DISTRIBUTION OF THE RESPONDENTS ON THE BASIS OF REASONS OF INSOMNIA ACROSS ADOLESCENTS AND YOUNG ADULT FEMALES

S.no	Variables	Adolescents		Young adults			
1	**stress**	**11-14**	**15-17**	**18-21**	**22-24**	**25-27**	**28-30**
	Yes N=(94)	22(23.4)	25(26.5)	14(14.8)	29(30.8)	0(0.0)	4(4.2)
	No N=(106)	45(42.4)	21(19.8)	10(9.4)	24(22.6)	4(3.7)	2(1.8)
2	**Work during night**	**11-14**	**15-17**	**18-21**	**22-24**	**25-27**	**28-30**
	Yes N=(46)	6(13.0)	14(30.4)	8(17.3)	17(36.9)	0(0.0)	1(2.1)
	No N=(154)	61(39.6)	32(20.7)	16(10.3)	36(23.3)	4(2.5)	5(3.2)
3	**Poor sleep habit**	**11-14**	**15-17**	**18-21**	**22-24**	**25-27**	**28-30**
	Yes N=(74)	25(33.7)	20(27.0)	9(12.1)	19(25.6)	0(0.0)	1(1.3)
	No N=(126)	42(33.3)	26(20.6)	15(11.9)	34(26.9)	4(3.1)	5(3.9)
4	**Eating**	**11-14**	**15-17**	**18-21**	**22-24**	**25-27**	**28-30**
	Yes N=(39)	4(10.2)	12(30.7)	7(17.9)	15(38.4)	0((0.0)	1(2.5)
	No N=(161)	63(39.1)	34(21.1)	17(10.5)	38(23.6)	4(2.4)	5(3.1)
5	**use of caffeine**	**11-14**	**15-17**	**18-21**	**22-24**	**25-27**	**28-30**
	Yes N=(25)	4(16)	3(12)	4(16)	12(48)	1(4)	1(4)
	No N=(175)	63(35)	43(24.5)	20(11.4)	41(23.4)	3(1.7)	5(2.8)
6	**Hormonal change**	**11-14**	**15-17**	**18-21**	**22-24**	**25-27**	**28-30**
	Yes N=(95)	28(29.4)	19(20)	14(14.7)	28(29.4)	3(3.1)	3(3.1)
	No N=(105)	39(37.1)	27(25.7)	10(9.5)	25(23.8)	1(0.9)	3(2.8)
7	**Long term illness**	**11-14**	**15-17**	**18-21**	**22-24**	**25-27**	**28-30**
	Yes N=(28)	2(7.1)	5(17.8)	5(17.8)	15(53.5)	0(0.0)	1(1.7)
	No N=(172)	65(37.7)	41(23.8)	19(11.0)	38(22.0)	4(2.3)	5(2.9)
8	**Over thinking**	**11-14**	**15-17**	**18-21**	**22-24**	**25-27**	**28-30**
	Yes N=(67)	9(13.4)	913.4)	17(25.3)	26(38.8)	3(4.4)	3(4.4)
	No N=(133)	58(43.6)	37(27.8)	7(5.2)	27(20.3)	1(0.7)	3(2.2)

Factor responsible for Insomnia of the respondents. Results showed that majority of respondents (23.4% stress in 11–14-year group ,30.8 % stress in 22–24-year group.)

Most of the respondent's belonged factors affected to Adolescents groups compared toyoung adult females.

TABLE: 5 –DISTRIBUTION OF THE RESPONDENTS ON THE BASIS OF SEVERITY OF INSOMNIA ACROSS ADOLESCENTS AND YOUNG ADULT FEMALES N=200

Respondent of age	**Respondent severity of insomnia across different age groups**			
	No clinically significant insomnia	**Sub threshold insomnia**	**Clinically Insomnia (Moderate)**	**ClinicallyInsomnia (Severe)**
Adolescents (%)				
11-14	**67(39.1)**	**0(0.0)**	**0(0.0)**	**0**
15-17	38(22.2)	8(34.7))	0(0.0)	0(0.0)
Young Adults (%)				
18-21	**21(12.2)**	**1(4.3)**	**2(33.3))**	**0**
22-24	40(23.3)	**1043.4)**	3(50)	0
2 5-27	**3(1.7)**	**0(0.0)**	**11(16.6)**	**0**
28-30	2(1.1)	4(17.3)	0(0.0)	0

Majority of (34.7% Sub threshold Insomnia in 15–17-year group and (33.3 % Clinically Insomnia (Moderate). Most of the respondents belonged to adolescents group compare to young adult females.

TABLE:6-ANOVA VALUE BETWEEN REASONS OF INSOMNIA ACROSS DIFFERENT AGE GROUPS

Reason	Mean	F	S	Conclusion
Stress	.673	2.733	0.67	S
Work during night.	.034	.190	.827	NS
Poor sleep habit	.313	1.339	.265	NS
Eating habit too much late in night	.327	3.596	0.29	S
Excess use of caffeine(coffee)	.147	1.344	.263	NS
Mental Health Disorder (Anxiety)	.642	1.907	.161	NS
Survive Hormonal Changes	.466	1.875	1.56	NS
Suffered long term illness	.116	.956	.386	NS
Over Thinking	.675	2.900	0.57	S

Depicted that as p<0.001, thus null hypothesis was rejected, which means that there is significant difference between stress, eating habit too much late in the evening, over thinking faced by adolescents and young adults. Mean value also depicts the same.
Results revealed that as p>0.01thus null hypothesis was accepted, which means that there Is no significant difference between Work during night, Poor sleep habit, Excess used of caffeine(coffee), Mental health disorder (Anxiety), Faced hormonal changes, suffered long term illness faced by Adolescents and young adults' females.

TABLE:7- ANOVA VALUE BETWEEN SEVERITIES OF ISOMNIA ACROSS DIFFERENT AGE GROUPS

Respondent of age	N	Mean	Std. Deviation	F	Sig.	Conclusion
Adolescents	11-14	1.000	.0000	**5.168**	**.000**	**S**
	15-17	1.174	.3832			
Young Adults	18-21	1.208	.5882			
	22-24	1.302	.5746			
	25-27	1.500	1.0000			
	28-30	1.667	.5164			

ANOVA between Severity of Insomnia across different age group. Data in the table showed that as p <0.001 thus null hypothesis was rejected which means thatthere was significant difference in the severity of insomnia among respondents across different age groups. Mean values also depicted the same higher the mean value, more is the level of severity insomnia among respondents.

In this cross-sectional study, we included 200 respondents, out of whom 98 were adolescents and 108 were young adults, randomly selected from the public and private schools and girl's hostel of Lucknow city. After. Conducting this study on 200 adolescents and young adults, Majority of the respondents (33.5%) are in the age group of 11-14 years. It isclosely followed by the age group 22-24 years (27.0%). The least number of respondents are in the age group 15-17(20.5) Respondents in the extreme age groups both Adolescents and young adults are the least in number. Most of the respondents fall in the Adolescents groups. Majority of the respondents are 3-5 hrs (55.1%) in adolescents group. Majority of the respondents are 5-7 hrs (31.4%) in young adult females. Majority of the respondents are sound sleep (34.6%) in adolescents group. Majority of the respondents are 5-7 hrs (31.4%) in young adult females. Describes severity of Insomnia among respondents. Majority of (34.7% Sub threshold Insomnia in 15-17 year group and (33.3 % Clinically Insomnia (Moderate) Most of the respondents belonged to adolescents group compare to young adult females. ANOVA between Severity of Insomnia across different age group. Data inthe table showed that as p <0.001 thus null hypothesis was rejected which means that there was significant difference in the severity of insomnia among respondents across different age groups. Mean values also depicted the same higher the mean value, moreis the level of severity insomnia among respondents p<0.001,thus null hypothesis was rejected ,which means that there is significant difference between stress, eating habit too much late in the evening, over thinking faced by adolescents and young adults. Mean value also depicts the same.
Result depicted that as p<0.001, thus null hypothesis was rejected ,which means that there is significant difference between family history , underweight , improper sleep quality faced by adolescents and young adults. Mean value also depicts the same.

CONCLUSION

The study showed that there was significant difference between in the Insomnia severity index among respondent across the different age groups. The study was done to assess the Insomnia, severity of Insomnia of Adolescents and young adults' females in Lucknow. Findings suggest that there is significant difference between Severity of Insomnia among respondents. Majority of the young adult females had subthreshold Insomnia, especially 22-24 age groups. Adolescents age groups were no clinically significant Insomnia. Majority of the Adolescents have a below average score of severity of Insomnia. The study suggests that Adolescents and young adult females usually do have below average severity of Insomnia and higher sub threshold Insomnia due to their work and person al if and because of conflict between them.

RECOMMENDATIONS

Same type of research may be conducted on large sample. Same type of research may be conducted among working and non- workingfemales. Same type of research may be conducted across rural area females and urbanarea females.

LIMITATIONS

The present study was conducted on a small sample; therefore, it cannot be generalized to the target population. The study was conducted in Lucknow only, so we need to explore further to understand this area of study better. Due to the unavailability of time, the sample size was limited to 200. The sample was restricted to Lucknow city only. The study was restricted to a specific age group.

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