

RELATIONSHIP BETWEEN LONELINESS AND INSOMNIA AMONG YOUNG ADULT HOSTELITES



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July, 2023

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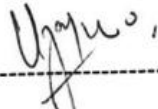
A Research Thesis submitted to the
DEPARTMENT OF PSYCHOLOGY
in partial fulfillment of the requirements for the degree of
BACHELOR OF SCIENCE IN PSYCHOLOGY

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Islamabad
July, 2023

CERTIFICATE OF APPROVAL

It is certified that the Research Thesis titled “**Relationship Between Loneliness and Insomnia among Young Adult Hostelites**” carried out by **Zaira Zaheer (BSP193006)** under the supervision of Ms. Uzma Mushtaq, Capital University of Science & Technology, Islamabad, is fully adequate, in scope and quality, as a Research Thesis for the degree of **BS Psychology**.

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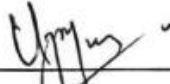
Relationship Between Loneliness and Insomnia among Young Adult Hostelites

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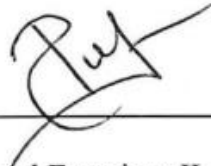
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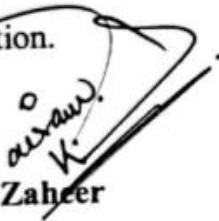
DEDICATION

This thesis is wholeheartedly dedicated to my beloved Supervisor, parents, siblings, and my closest friend who is the source of motivation and inspiration at every phase of my life.

DECLARATION

It is declared that this is an original piece of my work, except where otherwise acknowledged in text and references. This work has not been submitted in any form for another degree or diploma at any university or other institution for tertiary education and shall not be submitted by me in the future for obtaining any degree from this or any other University or

Institution.
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July, 2023

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Abstract

Students experience academic burden and loneliness but it is different and even higher specifically among hostelite students who are living away from their families and have a lack of social support. That's why studying the mental health of hostel students is essential (Melnyk et al., 2021). Loneliness and sleep dysregulation provide a baseline for many serious psychological disorders like depression and anxiety. This study aimed to observe the impact of the relationship between loneliness and insomnia among young adults both male and female hostelites in Islamabad and Rawalpindi. This study was conducted on a sample of 297 and data was collected by convenient sampling technique using two scales: the Pittsburgh Sleep Quality Index and Loneliness Scale (UCLA). Spearman correlation and Mann-Whitney test were analyzed to find mean differences among both genders. The result did not show a significant difference among both genders' quality of sleep and loneliness but depicts a significant positive relationship between them ($r = .44^{**}$). This research highlighted the factors affecting dormitory students who experience poor sleep due to loneliness may be academically at risk, which needs to be explored in future research,

Keywords: Sleep quality, Dormitory students, Stress, Loneliness

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Chapter-1 Introduction

Mental health plays a crucial role in performing daily life tasking. Its well-being reflects the performance and living conditions of a person. An unhealthy mind can lead to serious mental health disorders which could be life-threatening at a certain level (Shor et al., 2013). Insomnia and loneliness are very common psychological disorders nowadays that are being diagnosed in almost every age group. Internationally, individuals suffer from insomnia due to excessive use of mobile phones, issues related to their jobs, some engaged in financial issues and some of them are going through carrier pressure (Thoits, 2011). These issues affect an individual's life. Firstly, the individual's sleep gets disturbed, and a person is not able to take proper sleep due to which they are having a great chance to develop sleep disorders such as insomnia. Adults are involved in several activities due to which they get depressed and get stuff off those issues and start living lonely by recalling the issues that create issues in their sleep pattern (Adams et al., 2018). Although a hostel is a place where college and university students live for their education far away from their beloved ones.

Hostelites individuals are apart from their families and new place and changes in their environment may cause different health problems. They face adjustment issues, personal helplessness, changings in eating patterns, etc. due to lack of sleep they can't able to focus on their studies and can't able to maintain their mental and physical health due to which they suffer a lot (Kurina et al., 2011). The past researches depict that 70 to 80% of individuals suffer from insomnia and many other psychological issues (Pressman et al., 2005). Young adults are an important part of every community as they are the primary force for leading the country forward. Thus, their mental and physical health should be focused. Under stressful situations, people tend to have poor sleep quality and an imbalance of emotions leading to a sense of loneliness. As in the study

conducted on a sample of healthcare workers, 57% of the people reported poor sleep quality and psychological distress during the time of pandemic crisis (Ashraf et al., 2021).

In the present era, it is very difficult for students to deal with social situations due to loneliness and lack of self-esteem (home et al., 2017). It affects the quality of life of the students as well. A fear that what other people think or create an opinion about them. Mostly loneliness is the distresses of social conditions which arise discomforts like (doing communicating with people, interacting with individuals for the first time, etc.). Loneliness is a general firsthand experience acknowledged in the past so far it is rare for every individual (Copel, 1988).

Loneliness has been examined mostly in men and women who are homeless or live in hostels. Loneliness has been described as an emotional mental state in which an individual is conscious of being cut off from other people, as well as with the experience of obscure (Copel, 1988). As well as 95% of Americans have raised an episode of insomnia eventually in the journey of their lives. Every individual has the desire to present their self-acceptance and valuable in public or in a social setting to make better relationships with others. Loneliness is linked with a saddening feeling which is experienced by an individual when societal connections seem to be poor (Peplau & Perlman, 1982). Those individuals who are disconnected from their families and their social connections are less may face sleep problems than non-lonely individuals. The sleep of the individuals may be less restful and they also face disturbance in their sleep patterns. Loneliness is very common in young adults nowadays. They face difficulties in adapting to new shifts in their lifestyle related to the environment and social needs (Qualter et al., 2015).

Loneliness

Lack of social interactions and living alone without the family are highly harmful to the society and the health of the individuals. Loneliness, is a sensation that occurs when an individual's significant factors cannot be communicated to other people or when they have inappropriate beliefs and fear of being judged negatively by other people (Kang et al., 2012). However, researchers found that the addition of specific sensations in loneliness connects the person with parental and friendship bond that links with a general sense of loneliness.

Loneliness among young adults is very common nowadays. It is not just a feeling of being alone in public but also a feeling that no one is available in their surroundings to whom they feel easy to communicate. This young generation is facing many problems and challenges such as social media and pressure from society. It is very common to feel lonely in a new place and environment. People always feel hesitant to communicate with others in unfamiliar places. New connections and relationships in new places may also affect the mental health and social relationships of an individual (Thoits, 2011). Loneliness can be defined as feeling alone and separated from others and it is the most common aspect that may influence the health of an individual badly (Cacioppo & Hawkley, 2003). Individuals face many problems in making new friends and they always refused to meet new people, join groups, and participate in different activities.

According to research studies depicted different domains of loneliness; psychological, interpersonal, social, cultural, and cosmic (McWhirter, 1990). Psychological loneliness is described as a sense of isolation that emerges when distinct aspects of one's self do not interact with one another. Interpersonal loneliness refers to a sensation of alienation, particularly from friends and family (Tommaso & Spinner, 1993). The state of being isolated from a family or

society is referred to as social loneliness. Cultural loneliness is defined as an individual's withdrawal from others as a result of cultural changes. Lastly, Cosmic loneliness is the condition of feeling isolated or the feeling of turning away from God brought on by the dissolutions of relationships associated with religions. Researchers distinguished between emotional and social forms of loneliness (Weiss & Akhtar, 2013). Lack of close or intimate relationships is the definition of emotional loneliness, whereas a lack of social networks is the definition of social loneliness. The idea of belonging is closely Related to feelings of loneliness.

According to research, loneliness is one of the crucial problems that is most commonly found in young adults (Orzeck et al., 2004). After reviewing the literature, it is observed that, especially among young people, technologies like the internet, Smartphones are usually utilized to prevent this poor mood, and that the individual engages in social interaction and combats loneliness in virtual spaces (Morahan & Schumacher, 2003).

Young individuals who move away from their environment and spend most of their time online using different apps and social media may eventually feel lonely. Individuals who suffer from chronic loneliness may develop technological addictions as a means of coping with their restlessness and loneliness (Mert & Zdemir, 2018). Subjective contentment is also lowered by social and emotional loneliness (Salimi, 2011).

Insomnia

Insomnia is a sleep disorder and most adults who experienced insomnia in the U.S. Individuals with insomnia face difficulty in sleeping, staying asleep, and waking up with a fresh mind. Several types of insomnia are caused by different factors. Insomnia is caused due to stress, hormonal imbalance, and depression and affects health badly. Lack of sleep cause physical and

mental health problems. To improve the quality of sleep there are many ways to get rid of insomnia and treated it on time, if it goes untreated it can cause serious illnesses (Caspi et al., 2006).

Sleep problems, loneliness, and isolation frequently increase with age, truly affecting the health of adults. Cross-sectional and longitudinal analyzes were performed on 140,423 evaluations from 95,045 people (women 61.05) in the living community aged 65 years older to develop the relationship between inadequate sleep, oversleeping, loneliness, and social isolation. Consistently, insufficient sleep (female; 12.4%, male; 12.7%) was reported more commonly than oversleeping (female; 4.7%, male 7.6%). Overall, 23.6% of women and 18.9% of men reported feeling very lonely, while 53.8% of women and 33.8% of men in the study presently live alone. Constant insomnia is deeply prevalent and alters almost 30% of the population. Insomnia affects cognitive and physical operation and it is similar to a broad area of impaired daytime activity across several emotional, social, and physical domains (Riemann, 2010). According to DSM-V, insomnia badly affects the quality of life of men and women of all eternity and traditions.

Literature Review

Data collected from seven countries found that 35.2% of young adults pronounced at least one sleep criticism e.g., dissatisfaction with sleep patterns, or short sleep periods (Ohayon & Reynolds, 2009). As well as, analysis of fifty epidemiological researches aimed at different countries worldwide exposed predicted a 33% prevalence percentage of insomnia symptoms in the wide population (Ohayon, 2002). Collected data reveal that a significant percentage of the population suffered from different kinds of sleep problems (Mergenthaler et al., 2015). One aspect that has been associated with a high risk for sleep trouble is loneliness. Loneliness as defined by (Peplau & Caldwell, 1978) shows an imbalance between an individual's favors instead of social relations. Loneliness and perceived isolation are studied to be specific objective and social

isolation (Cacioppo et al., 2015). Thus, Hom et al., (2017) established in their research of 151 young adults that insomnia symptoms drastically look for stages of loneliness within five-week peruse, and manage for baseline loneliness severity. The human community is always conditioned to learn new skills and knowledge where parents and society can ease the process or way of learning new skills (Callaway, 1979).

Staying in hostels and away from family members either for a short or long period affects an individual and go through many experiences in their student life (Khozaei et al., 2010). In the Present research shows that loneliness amends our physical health, along with raising the possibility of sleep problems. Loneliness is not unfamiliar, but we should know that loneliness is influencing public health issues. Although there is mounting evidence that loneliness is associated with poor health, the exact mechanisms underlying this association remain a mystery. A thorough study and meta-analysis of the literature on the connection between loneliness and a potential mechanism, sleep, produced 27 pertinent publications. Loneliness was not related to length across a large sample and scale; however, it was related to self-reported sleep difficulties ($r=0.28$, 95% confidence range (0.24, 0.33)). There was no evidence to support the use of age or gender as moderators or to support publication bias. The long-term relationship between loneliness and sleep is unclear. Although there is a connection between sleep problems and loneliness, additional research is required to pinpoint the cause, look at the effects of other factors, and determine a course of action (Griffin et al., 2020).

Literature suggested that sleep problems, loneliness, and social isolation have a significant negative impact on older individuals 39; health and well-being, and these problems frequently get worse with age (McLay et al., 2021). The largest national database was used to conduct 95,045 reviews (Women: 61.0% of those aged 65 and older living in the community) to ascertain the

prevalence and connections of sleep deficiency, sleep oversleeping, loneliness, and social isolation.

In the initial analysis, more women than males (women: 12.4%, male: 12.7% vs. 4.7% and 7.6%, respectively) reported sleep deprivation. In general, 18.9% of women and 23.6% of men said they felt lonely, whereas 53.8% of women and 33.8% of men said they lived alone (McLay et al., 2021). Research demonstrated that the purpose of the study was to determine how frequently sleep paralysis affects female students (Sohail et al., 2021). This cross-sectional study included 106 residents. The self-administered 10-question survey was used to gather data from a University of Lahore hostel. It was done using a non-probability convenient sampling method. Sleep paralysis affected 55.66% of the population. 25 women (23.6% of the female population) suffer once or twice in their lifetime, compared to 15 per year (14.2%), 12 every month (11.3%), 6 per week (5.7%), and 1 per day (0.9%). The majority (49%) claimed that each session was only brief for them. 42% of respondents said they frequently woke up, experienced night terrors, or had insomnia. 40% of people stated they were unhappy, and 42% said they were afraid. 22 % of respondents claimed that stress and dejection were associated with sleep paralysis, whereas 45% claimed that mentality had nothing to do with it. Mild to moderate sleep paralysis was prevalent among dorm occupants at Lahore University. Students primarily described paralysis, frequent awakenings, lucid dreams, and sleeplessness as their main symptoms (Sohail et al., 2021).

The literature shows that in young adults, there is evidence that loneliness and restless sleep are related (Payne et al., 2012). The link between loneliness and sleep deficit among Chinese young adults who live in rural areas is not well understood, though. This investigation looked at the relationship between loneliness and sleep quality in a cross-sectional study of older persons (Jia & Yuan, 2020).

In Shandong Province, China, a face-to-face survey was done with 1,658 elderly rural residents. The University of California, Los Angeles Loneliness Scale was used to gauge loneliness. The quality of sleep was evaluated using the Pittsburgh Sleep Quality Index. We utilized ordinal logistic regression to investigate the connection between loneliness and sleep quality after controlling for several confounding variables. Poor sleep quality was linked to loneliness in young adults even after taking into account factors like age, marriage, education, occupation, economic status, family ties, housing situation, smoking behavior, alcohol use, and quality of life. This data implies that sleep quality hurts loneliness in older persons. In China's rural elderly, a lack of sleep was linked to an increased likelihood of loneliness. There is a need for the development of sleep-based therapies in China's rural old population (Jia & Yuan, 2020).

Research in the past also demonstrated that determining the causes of sleep deprivation and how it impacts young adults who live in dorms in terms of academic performance (Rana et al., 2020). Between January and June 2018, adult students in Pakistan's two cities of Rawalpindi and Islamabad, who were both male and female and enrolled in a variety of universities, underwent a correlation study. The most frequent obstacles to people's ability to sleep included stress, financial difficulties, uncomfortable beds, outside noise, and using a phone before bed. Performance at school was unaffected by sleep disorder (Rana et al., 2020).

Theoretical Framework

Cognitive discrepancy theory was proposed by Perlman and Peplau in 1998, which states that different type of self-discrepancy leads an individual to different kinds of psychological disorders i.e.; stress, anxiety, depression, and sleep-related problems, etc. it also comprises dejection-related emotions (such as disappointment, dissatisfaction, and shame) and agitation related emotions (such as fear, guilt, and self-contempt).

According to this theory the reason for loneliness and the problems that occur due to it have cognitive causes. It disturbs a person's relationships with peers and family, and also the person doesn't perceive them as supportive and having closer bonds thus, the level of satisfaction and comfort from relationships decreases. Previous research indicated a significant relationship between cognitions quality and quantity of friends or relationships with others (Burholt et.al, 2016)

The cognitive discrepancy theory of loneliness states that people tend to experience loneliness when the relationships and social communication the individual desires are different from the achieved social relations. Then, there is a state of discrepancy where the real and the ideal state of personal relations do not match. That's why people with discrepancies tend to experience an unpleasant and subjective feeling of loneliness where they perceive themselves as lonely and left out by surrounding people. Loneliness creates a state of discomfort and impacts psychological health where distorted irrational and continuous thoughts about this discrepancy affect the normal sleep pattern of the person. Thus, leads to insomnia where the person cannot have a normal comfortable sleep pattern. Among students who are living in hostels, their social contact with family and friends in their cities decreases, also they face issues in adjusting and communicating with new people in new environments, so their desired social relationships can be different from what they have which can create a feeling of loneliness and affects sleep.

Rationale

Students experience academic burden and stress but it is different and even higher among hostelites students who are living away from their families and have a lack of social support. That's why studying the mental health of hostel students is essential (Melnyk et al., 2021). Loneliness and sleep dysregulation provide a baseline for many serious psychological disorders like depression and anxiety. Loneliness and sleeplessness are common problems in hostel students.

Studies on these variables will help in screening students at an early stage who are higher at risk of developing psychological disorders.

Thus, can prevent hostel students to reach the chronic level of mental health issues. Several studies have been conducted by nurses, and doctors to check the prevalence of loneliness and insomnia (Debnath et.al, 2021) in students and young adults but in these studies loneliness and insomnia are studied with other variables like internet addiction, Facebook (Saadati et.al, 2021) use but not studied together to examine the relationship between them and also these variables together are not studied in Hostelites young adults. Such young adults should be focused on as a separate sample rather than including them in the same sample of students or employees as their life experiences are different from those living at home.

Few of the studies have been found in cross-sectional, longitudinal, mixed method, experimental methods between loneliness and psychological well-being, loneliness, academic performance, and internet issues (Ishaq et al.,2018). So, this Correlational study aimed at providing a base for future experimental, longitudinal, or cross-sectional studies. This current research will address the relationship between loneliness and insomnia among both male and female Hostelites in Islamabad and Rawalpindi. So, we can examine gender differences in the experience of these variables, as gender can play an important role in sensitivity to environmental stress and the experience of loneliness and insomnia. As hostels are a different platform where many students feel hesitant in making new social connections and have a lack of social interactions.

Objective

To find out the relationship between loneliness and insomnia among young adult hostelites of twin cities.

To examine gender differences in loneliness and insomnia among young adult hostelites of twin cities.

Hypotheses

H1: There is a positive relationship between loneliness and insomnia among young adult Hostelites in twin cities.

H2: Hostelite females experience higher levels of loneliness and insomnia as compared to male Hostelites.

Chapter-2 Method

Research Design

The Correlational research design was used to find out the relationship between loneliness and insomnia among young adult Hostelites.

Population and Sample

The sample was collected from 297 participants from the hostels of Islamabad and Rawalpindi.

Sampling Procedures

In this study, the researcher used a convenient sampling technique was used to collect the data.

Inclusion Criteria

- Young adults' hostilities living in Islamabad and Rawalpindi were included in the study.
- Both females and males were part of the study.
- Age range (18 to 25) years would be included in the study (Payne et al., 2012).

Exclusion Criteria

- Students with physical disabilities were not included.

Instrument

The University of California, Los Angeles (UCLA) Loneliness Scale

The UCLA scale was developed by psychologist Daniel Russell (1996), it is a 20-item scale designed to measure feelings of loneliness as well as feelings of social isolation. Psychometric properties of the UCLA scale were highly reliable, both in terms of internal consistency (coefficient ranging from .89 to .94) and test-retest reliability ($r = .73$).

Pittsburgh Sleep Quality Index (PSQI)

The PSQI was developed by (Buysse, et.al., 1998) and is a 10 items scale which measures sleep quality. The internal consistency of the PSQI, estimated by Cronbach's alpha, is .73. The age range for PSQI is 13 to 65 above. The order of the PSQI items has been modified from the original order in order to fit the first 9 items (which are the only items that contribute to the total score) on a single page. Item 10 which is the second page of the scale, does not contribute to the PSQI score. In scoring the PSQI, seven component scores are derived, each scored 0 (no difficulty) to 3 (severe difficulty). The component scores are summed to produce a global score (range 0 to 21). Higher score indicates worse sleep quality.

Ethical Considerations

The permission was taken from the institution from where the data was taken. The confidentiality of the participant was highly ensured at the time of administration and after the completion of the research. Informed consent was signed before the conduct of the study from each participant. The participants had the right to withdrawal anytime from the research.

Procedure

In this Correlational study, permission was taken from university authorities to reach participants who lived in Islamabad and Rawalpindi. Then the data was collected by briefly explaining the importance of the study and ensuring the study participants that their data will be only used for research purposes. Informed consent was also taken from study participants. The loneliness scale (UCLA) and PSQI scales were administered on participants and data was analyzed by using IBM SPSS-21.

Chapter-3 Results

This study aimed to find out the relationship between loneliness and insomnia among young adult hostelites. The data from young adult hostilities of Islamabad and Rawalpindi (N=297) has been collected and was analyzed through descriptive includes, mean, median, mode, and frequency statistics for demographic variables and also to calculate the reliability and Spearman correlation of both variables.

Table 1 presents the demographic characteristics of young adult hostilities in Islamabad and Rawalpindi.

Table 01*Demographic*

| Variables | Categories | <i>f</i> | % |
|------------|-------------|----------|------|
| Gender | Male | 133 | 44.3 |
| | Female | 164 | 55.2 |
| Age | 18-21 | 133 | 44.7 |
| | 22-25 | 164 | 54.3 |
| Education | BS | 238 | 80.3 |
| | MS | 59 | 19.7 |
| Job Status | Employed | 72 | 24.0 |
| | Un-employed | 225 | 76.0 |

Note: N=300, % = Percentage

Table 1 shows the frequency and percentage of demographic variables. The variables include education level, gender, age, and job status.

The above table shows that educated participants mostly females (%=55.2) who are doing Bachelor's studies and are living in hostels in educational institutions of Rawalpindi and Islamabad have a high percentage (%=80.3) than those doing Master's studies.

The table also exhibits that the participants with the age range of (22-25 years) had a high percentage (%=24.3) and are mostly unemployed (%=76.0).

Figure 1

Distribution of Gender among young adults living in hostels (n=297).

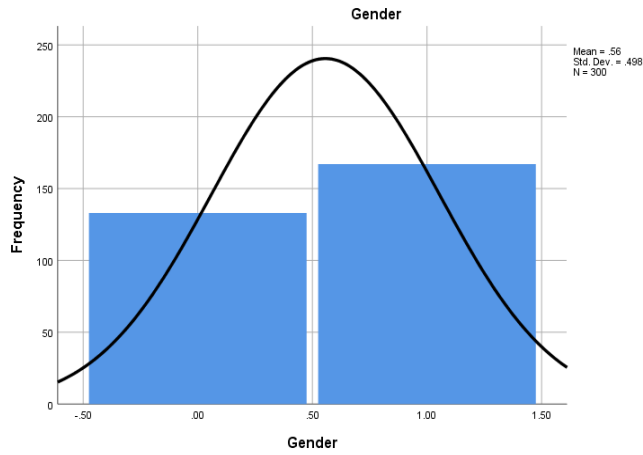


Figure 2

Distribution of age among young adults living in hostels (n=297).

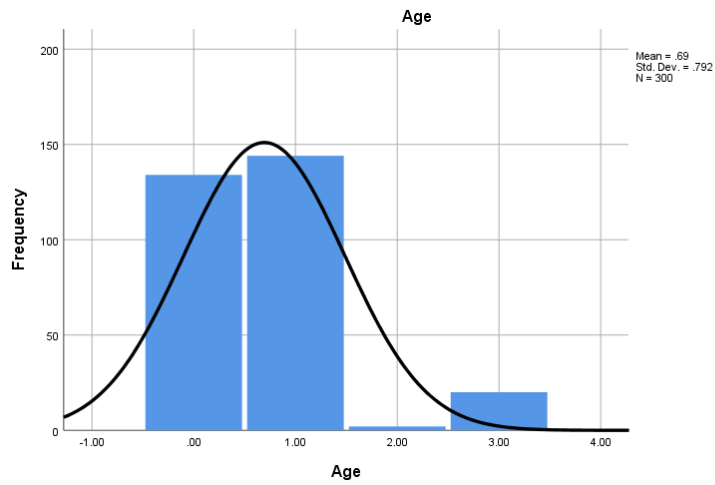


Figure 3

Distribution of Education among young adults living in hostels (n=297).

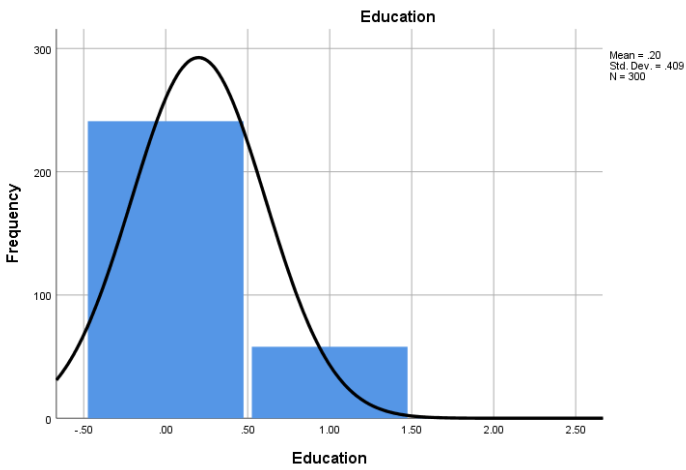
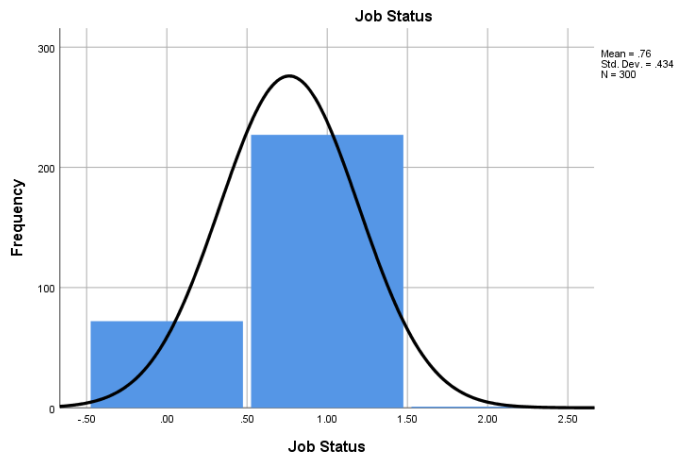


Figure 4

Distribution of Job status among young adults living in hostels (n=297).



A reliability analysis of the scales was conducted to determine the value of the reliability coefficients of administered scales.

Table 02

Cronbach's alpha reliabilities of the Pittsburgh Sleep Quality Index (PSQI) and Loneliness Scale (UCLA).

| Scales | Item | M | SD | α | Range | | kurtosis | skewness |
|--------|------|------|------|----------|-----------|--------|----------|----------|
| | | | | | Potential | Actual | | |
| UCLA | 20 | 25.2 | 11.1 | .85 | 0-65 | 10-60 | 1.1 | -1.2 |
| PSQI | 10 | 13.8 | 6.5 | .75 | 0-34 | 0-30 | 1.0 | .82 |

Note: M = mean, SD = standard deviation, α = alpha reliability, PSQI= Pittsburgh Sleep Quality Index, UCLA= Loneliness scale

Table 2 exhibits the item numbers, alpha reliabilities, mean, standard deviation, skewness, and kurtosis of all the scales used in the study. UCLA ($\alpha=.85$), and PSQI ($\alpha= .75$) of both scales are reliable concerning the Cronbach's alpha values mentioned above in the table which shows the UCLA ($M=25.2$, $SD= 11.1$), and PSQI ($M=25.2$, $SD=13.8$) were reliable.

Descriptive statistics of Scales

Table 03

Descriptive

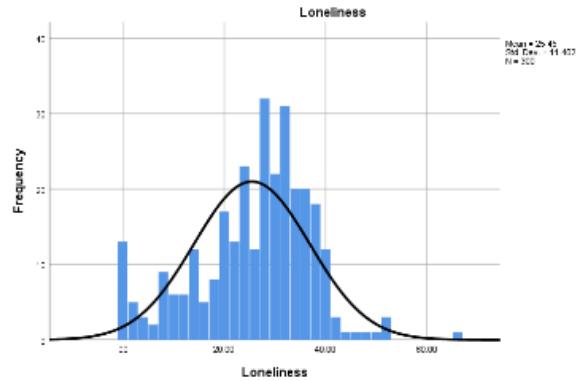
| Scales | <i>M</i> | <i>Median</i> | <i>Mode</i> | <i>SD</i> | Skewness | Kurtosis | K-S | <i>p</i> |
|--------|----------|---------------|-------------|-----------|----------|----------|-----|----------|
| UCLA | 25.4 | 27.0 | 27.0 | 11.4 | -.41 | .23 | .10 | .00 |
| PSQI | 13.8 | 15.0 | 17.0 | 6.5 | -1.5 | -.33 | .07 | .00 |

Note: *M*= Mean, *SD*= Standard Deviation, *K-S*= Kolmogorov-Smirnov, *p*= K-S significance value, *PSQI*= Pittsburgh Sleep Quality Index, *UCLA*= Loneliness scale

Table 3 shows the descriptive properties of administered scales. The K-S value for both scales is showing non- normal distribution as it is significant ($p < .05$) while considering the values of skewness and kurtosis and the shape of the histogram as well.

Figure 1

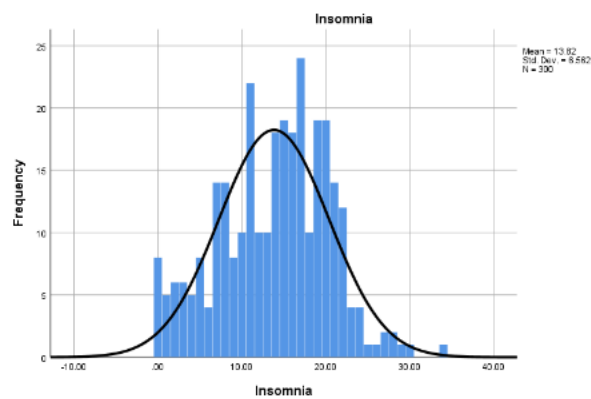
Distribution of Loneliness (UCLA) among young adults living in Hostels(N=297).



This figure demonstrates the distribution of the Loneliness scale among participants living in hostels.

Figure 2

Distribution of Sleep Quality (PSQI) among young adults living in Hostels(N=297).



This figure demonstrates the distribution of insomnia among participants living in hostels.

The scores for the “Pittsburgh Sleep Quality Index (PSQI)” and “UCLA Loneliness Scale (UCLA)” were not normally distributed according to K-S statistics ($p < .05$). Hence to find out the relationship between Sleep and Loneliness Spearman correlation was performed.

Table 4

Correlation Table

| Variables | N | 1 | 2 |
|--|-----|-------|---|
| Loneliness Scale UCLA | 297 | .44** | - |
| Pittsburgh Sleep Quality Index (PSQI) | 297 | - | - |

Note: PSQI= Pittsburgh Sleep Quality Index, UCLA= Loneliness scale

Table 4 exhibits Spearman correlation analysis was used to analyze the relationship between loneliness and insomnia as the data were non-normally distributed. The results showed a significant but weakly positive relationship between insomnia and loneliness ($p = .44^{**}$) among young adults who lived in hostels. This result shows that the quality of sleep gets affected by loneliness.

Due to the non-normal distribution of data, the Mann-Whitney U test was performed to determine the differences across groups.

Table 5

Mann-Whitney U- Test

| | Males | | Females | | U | p |
|---|-------|-------|---------|-------|---------|-----|
| | N | M | N | M | | |
| Pittsburgh Sleep Quality Index (PSQI) | 133 | 151.2 | 164 | 149.9 | 11007.5 | .89 |
| Loneliness Scale (UCLA) | 133 | 153.6 | 164 | 148.0 | 10692.0 | .57 |

Note: M = Mean, SD = Standard Deviation, U = Mann-Whitney, p = Significance value

Table 5 exhibiting the Mann-Whitney U test, indicated non-significant differences in insomnia among both groups ($U=11007.5$, $p=.89$). It also indicated non-significant differences in loneliness scores among both groups ($U=10692.0$, $p=.57$).

Chapter-4 Discussion

This chapter of the study discussed reliabilities of scale and demographic characteristics of young adults living in hostels. The relationship was statistically analyzed in SPSS by using Spearman correlation as the data was not normally distributed. Furthermore, differences among groups were also analyzed by using a Mann-Whitney U-test.

The present study consisted of 297 young adults (male and female). Two scales were used to measure insomnia and Loneliness among young adults who lived in hostels. The questionnaires used in this study include a demographic sheet, Pittsburgh Sleep Quality Index (PSQI), and UCLA Loneliness Scale (UCLA). According to the scales author; Cronbach's alpha reliability of the Pittsburgh Sleep Quality Index (PSQI) was found to be 0.85. In this research study, Cronbach's alpha of this scale was .75 which is considered as good reliability on the sample (N=297). Also, Cronbach's alpha reliability of the Loneliness Scale (UCLA) was found to be 0.89 as stated by the author. In this research study, Cronbach's alpha of this scale was .85 on the sample (N=297) which is considered good reliability. Also, the Kolmogorov-Smirnov test statistics indicate the non-normal distribution of data across both groups.

The hypothesis of the study states that there is a positive relationship between loneliness and insomnia among young adult hostelites in twin cities. Spearman correlation analysis was used to analyze the relationship between loneliness and insomnia as the data was non-normally distributed. The results in Table 4 showed a significant but weakly positive relationship between insomnia and loneliness ($p = .44^{**}$) among young adults who lived in hostels in twin cities. Loneliness is one of the significant issues that are most frequently observed in young adults, according to research studies in the past as they also depicted a significant relationship between quality of sleep and loneliness (Orzeck et al., 2004). Following a review of the research, it was

also concluded that particularly among young people less intrapersonal connections of hostelites with their environment during their stay in hostels due to more use of technology such as the internet and smartphones also affects their quality of sleep thus leading them to fight loneliness in physical and virtual environments as well (Morahan & Schumacher, 2003).

To check the second hypothesis of the study, the Mann-Whitney U test was used to exhibit the differences among female hostelites experiencing higher levels of loneliness and insomnia as compared to male Hostelites. The results indicated that there was no significant difference that exists between the two groups. According to a study, using a phone disrupted adults' regular sleep patterns and is one of many other factors that significantly contribute to the correlation. According to the current study, 65% of hostel residents specifically both males and females were addicted to playing games on their phones before bed because of loneliness, which had a negative impact on their sleep. Another study in the literature looked at the relationship between mobile phone use and stress and sleep disruptions in young adults (males and females) with significant results and found that using electronic media before bed and consuming caffeine are additional predictors of poor sleep quality but the results were insignificant among both genders when it comes to loneliness and sleep quality among adults living in hostelites (Thomme et al., 2015).

Conclusion

The current study explored the correlation between loneliness and insomnia among young adults who are living in hostels to pursue their education. The results showed a weakly positive relationship that exists among both variables. Though there were statistically insignificant results among both genders. However, one of the numerous ways that loneliness "gets under the skin" is through poor sleep, and our findings highlight the significance of early intervention to minimize loneliness in young people, which may be the catalyst for a chain reaction of physical health issues in later life. Additionally, the results indicate that counselors in universities should take into account students' past experiences, which might represent a pre-existing susceptibility that exacerbates the consequences of loneliness, in addition to their current social situations. The association between loneliness and insomnia should be explored further in research studies.

Limitations

The current research was a correlation study conducted on young adults to explore the relationship between loneliness and insomnia among young adults when they are staying in hostels for educational purposes. The study contributed to the research but it has the following limitations.

- 1.** The sample was only young adults who are living in hostels hence the generalizability of the study research will be limited only to sleep as a factor of loneliness among the study participants.
- 2.** Self-reported questionnaires were used which might be accompanied by response bias, thus manipulating the data.
- 3.** As the convenient sampling method was employed there is a greater chance of researcher, bias in collecting data. Random sampling can be used in future studies for more generalizability of results.
- 4.** More specific instruments/measures can be used to measure insomnia among study participants over the period of their stay in the hostel.

Implications

This study contributed to highlighting that, this study can be expanded and improved by navigating the relationship between loneliness and insomnia or with other variables quantitatively. In the future, it will be important to address the problems of students facing loneliness and sleep problems, their coping with loneliness, and academic stress which may contribute as a factor to their sleep quality. According to the results of the current study, loneliness caused both male and female subjects to have more sleep deprivation. The results imply that dormitory students who experience poor sleep may be academically at risk, which needs to be explored in future research. However, over time, additional stress-related issues could reduce their productivity and perhaps affect their health.

Future research should examine additional variables, such as mood disorders, physical and mental health issues that are connected to sleep disorders and sleep deprivation, and so on. Every institution in Pakistan is strongly encouraged to implement sleep education to raise awareness among students and young people. Additionally, hostel amenities and surroundings must be carefully considered for the comfort of students. Future research should also concentrate on a single type of academic field rather than the several disciplines represented in this study so that factors impacting students' academic performance can be more thoroughly assessed and connected.

References

- Asir Ajmal, A. I. (2015). A Qualitative Study Investigating the Impact of Hostel Life. *International Journal of Emergency Mental Health and Human Resilience*, 17(2). <https://doi.org/10.4172/1522-4821.1000204>.
- Bekhet, A. K., Zauszniewski, J. A., & Nakhla, W. E. (2008). Loneliness: a Concept Analysis. *Nursing Forum*, 43(4), 207–213. <https://doi.org/10.1111/j.1744-6198.2008.00114>.
- Bye, S. (2022, February 22). *What Is Environmental Psychology?* University of Sunderland. <https://online.sunderland.ac.uk/whatisenvironmentalpsychology/#:~:text=Behaviour%20constraint%20theory&text=It%20suggests%20that%20our%20human>.
- Cacioppo, S., Capitanio, J. P., & Cacioppo, J. T. (2014). Toward a Neurology of loneliness. *Psychological Bulletin*, 140(6), 1464–1504. <https://doi.org/10.1037/a0037618>.
- Cacioppo, S., Grippo, A. J., London, S., Goossens, L., & Cacioppo, J. T. (2015). Loneliness: Clinical Import and Interventions. *Perspectives on Psychological Science*, 10(2), 238–249. <https://doi.org/10.1177/1745691615570616>.
- Copel, L. C. (1988). A Conceptual Model. *Journal of Psychosocial Nursing and Mental Health Services*, 26(1), 14–19. <https://doi.org/10.3928/0279-3695-19880101-08>.
- DiTommaso, E., & Spinner, B. (1993). The Development and Initial Validation of the Social and Emotional Loneliness Scale for Adults (SELSA). *Personality and Individual Differences*, 14(1), 127–134. [https://doi.org/10.1016/0191-8869\(93\)90182-3](https://doi.org/10.1016/0191-8869(93)90182-3)

Griffin, S.C., Williams, A.B., Ravyts, S.G., Mladen, S.N. and Rybarczyk, B.D. (2020).

Loneliness and sleep: A systematic review and meta-analysis. *Health Psychology Open*,

[online] 7(1). doi:10.1177/2055102920913235. Hom, M. A., Chu, C., Rogers, M. L., &

Joiner, T. E. (2020). A Meta-Analysis of the Relationship between Sleep Problems and

Loneliness. *Clinical Psychological Science*,8(5), 799–824.

<https://doi.org/10.1177/2167702620922969>

Hom, M. A., Hames, J. L., Bodell, L. P., Buchman-Schmitt, J. M., Chu, C., Rogers, M. L.,

Chiurliza, B., Michaels, M. S., Ribeiro, J. D., Nadorff, M. R., Winer, E. S., Lim, I. C.,

Rudd, M. D., & Joiner, T. E. (2017). Investigating Insomnia as a cross-sectional and

Longitudinal Predictor of Loneliness: Findings from Six Samples. *Psychiatry Research*,

253, 116–128. <https://doi.org/10.1016/j.psychres.2017.03.046>

Hortaçsu, N. (2007). Family- versus couple-initiated Marriages in Turkey: Similarities and

Differences over the Family Life Cycle. *Asian Journal of Social Psychology*, 10(2), 103–

116. <https://doi.org/10.1111/j.1467-839x.2007.00217.x>

Irwin, M. R. (2015). Why Sleep Is Important for Health: A Psychoneuroimmunology

Perspective. *Annual Review of Psychology*, 66(1), 143–172.

<https://doi.org/10.1146/annurev-psych-010213-115205>

Jasvinder, C. (2022). Insomnia: Practice Essentials, Background, Anatomy. *Medicine*.

<https://emedicine.medscape.com/article/1187829overview#:~:text=Insomnia%20is%20de>

[defined%20as%20repeated](https://emedicine.medscape.com/article/1187829overview#:~:text=Insomnia%20is%20defined%20as%20repeated) Kang, Y.-H., Kim, M.-Y., Lee, G.-J., Jung, D.-Y., & Ma, R.W.

(2012).

A Study of Social Support, Loneliness, Sleep Quality, and Perceived Health Status among Community-dwelling Older Adults. *Journal of Korean Public Health Nursing*, 26(2), 303–313. <https://doi.org/10.5932/jkphn.2012.26.2.303>

Jia, G. and Yuan, P. (2020). The association between sleep quality and loneliness in rural older individuals: a cross-sectional study in Shandong Province, China. *BMC Geriatrics*, 20(1). Doi: 10.1186/s12877-020-01554-3. Khozaei, F., Ayyub, N., Sanusi Hassan, A., & Khozaei, Z. (2010). The Factors Predicting Students' Satisfaction with University Hostels, Case Study, University Sains Malaysia. *Asian Culture and History*, 2(2). <https://doi.org/10.5539/ach.v2n2p148>

Komada, Y. (2022). Effects of Loneliness and Social Isolation on Sleep Health. *Sleep and Biological Rhythms*. <https://doi.org/10.1007/s41105-022-00378-5>

Morgenthaler, T., Alessi, C., Friedman, L., Owens, J., Kapur, V., Boehlecke, B., Brown, T., Chesson, A., Coleman, J., Lee-Chiong, T., Pancer, J., & Swick, T. J. (2007). Practice Parameters for the Use of Autography in the Assessment of Sleep and Sleep Disorders: An Update for 2007. *Sleep*, 30(4), 519–529. <https://doi.org/10.1093/sleep/30.4.519>

Ohayon, M. M. (2002). Epidemiology of insomnia: What We Know and What We Still Need to Learn. *Sleep Medicine Reviews*, 6(2), 97–111. <https://doi.org/10.1053/smr.2002.0186>

Ohayon, M. M., & Reynolds, C. F. (2009). Epidemiological and Clinical Relevance of Insomnia Diagnosis Algorithms According to the DSM-IV and the International Classification of Sleep Disorders (ICSD). *Sleep Medicine*, 10(9), 952–960.

Rana, R., Ghous, M., Nawaz, Ali, A., Kanwal, M. and Yaqoob, I. (2020). Factors associated with sleep deprivation and their impact on academic performance of Hostelites of twin cities of Pakistan. *Journal of the Pakistan Medical Association*, (0), p.1. doi:10.5455/jpma.16468. Riemann, D. (2010). “Hyperarousal and insomnia: State of the Science.” *Sleep Medicine Reviews*, 14(1), 17. <https://doi.org/10.1016/j.smr.2009.09.002>

Valtorta, N., & Hanratty, B. (2012). Loneliness, Isolation, and the Health of Older Adults: Do We Need a New Research Agenda? *Journal of the Royal Society of Medicine*, 105(12), 518– 522. <https://doi.org/10.1258/jrsm.2012.120128>

Sohail, M., Hafiza, S., Ashraf, H. and Farooq (2021). Prevalence of sleep paralysis among Hostelites females of University of Lahore, Pakistan. *Rawal Medical Journal*.

Appendices

A: Support Letter

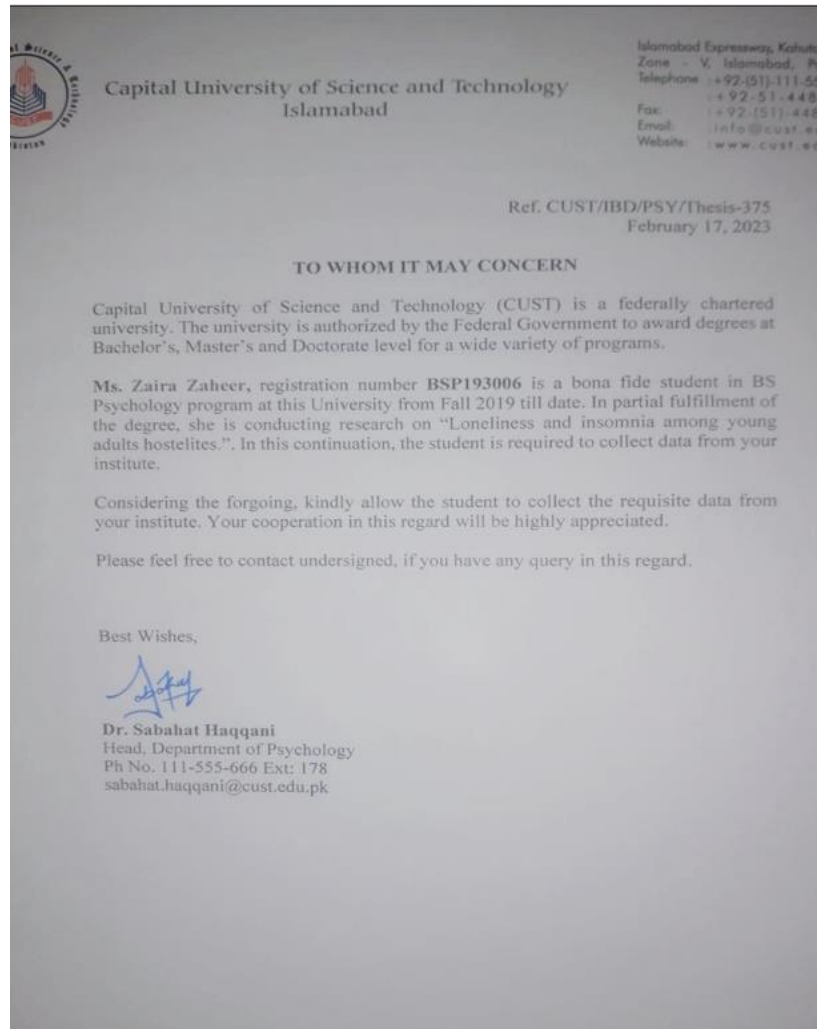
B: Consent Form

C: Demographics

D: Loneliness scale

E: Insomnia scale

Support Letter



Informed Consent

I Zaira Zaheer student of BS Psychology in Capital University of Science and Technology. I invite you to take a part in my research. The title of my research is “Relationship between loneliness and insomnia among young adult Hostelites”. In order to participate in this research; you have to fill out the questionnaire given. Your identity will kept confidential and your participation in research is voluntarily. If you want to terminate your participation in this study you can do so no questions being asked.

Please contact if you have questions about the study.

Email: Zairazaheer99@gmail.com

Signature:

Date:

Demographic form

For the following items, please fill in and select the response that is most suitable.

Gender: Male Female

Age: 18-21 22-25

Education: BS MS

Job status: Employed Unemployed

Loneliness scale

Scale:

INSTRUCTIONS: Indicate how often each of the statements below is descriptive of you.

C indicates "I often feel this way"
 S indicates "I sometimes feel this way"
 R indicates "I rarely feel this way"
 N indicates "I never feel this way"

- | | |
|---|---------|
| 1. I am unhappy doing so many things alone | O S R N |
| 2. I have nobody to talk to | O S R N |
| 3. I cannot tolerate being so alone | O S R N |
| 4. I lack companionship | O S R N |
| 5. I feel as if nobody really understands me | O S R N |
| 6. I find myself waiting for people to call or write | O S R N |
| 7. There is no one I can turn to | O S R N |
| 8. I am no longer close to anyone | O S R N |
| 9. My interests and ideas are not shared by those around me | O S R N |
| 10. I feel left out | O S R N |
| 11. I feel completely alone | O S R N |
| 12. I am unable to reach out and communicate with those around me | O S R N |
| 13. My social relationships are superficial | O S R N |
| 14. I feel starved for company | O S R N |
| 15. No one really knows me well | O S R N |
| 16. I feel isolated from others | O S R N |
| 17. I am unhappy being so withdrawn | O S R N |
| 18. It is difficult for me to make friends | O S R N |
| 19. I feel shut out and excluded by others | O S R N |
| 20. People are around me but not with me | O S R N |

Scoring:

Make all O's =3, all S's =2, all R's =1, and all N's =0. Keep scoring continuous.

Insomnia scale

Pittsburgh Sleep Quality Index (PSQI)

Instructions: The following questions relate to your usual sleep habits during the past month only. Your answers should indicate the most accurate reply for the majority of days and nights in the past month. **Please answer all questions.**

1. During the past month, what time have you usually gone to bed at night? _____
2. During the past month, how long (in minutes) has it usually taken you to fall asleep each night? _____
3. During the past month, what time have you usually gotten up in the morning? _____
4. During the past month, how many hours of actual sleep did you get at night? (This may be different than the number of hours you spent in bed.) _____

| 5. During the <u>past month</u> , how often have you had trouble sleeping because you... | Not during the past month | Less than once a week | Once or twice a week | Three or more times a week |
|---|---------------------------|----------------------------|-----------------------|----------------------------|
| a. Cannot get to sleep within 30 minutes | | | | |
| b. Wake up in the middle of the night or early morning | | | | |
| c. Have to get up to use the bathroom | | | | |
| d. Cannot breathe comfortably | | | | |
| e. Cough or snore loudly | | | | |
| f. Feel too cold | | | | |
| g. Feel too hot | | | | |
| h. Have bad dreams | | | | |
| i. Have pain | | | | |
| j. Other reason(s), please describe: | | | | |
| 6. During the past month, how often have you taken medicine to help you sleep (prescribed or "over the counter")? | | | | |
| 7. During the past month, how often have you had trouble staying awake while driving, eating meals, or engaging in social activity? | | | | |
| | No problem at all | Only a very slight problem | Somewhat of a problem | A very big problem |
| 8. During the past month, how much of a problem has it been for you to keep up enough enthusiasm to get things done? | | | | |
| | Very good | Fairly good | Fairly bad | Very bad |
| 9. During the past month, how would you rate your sleep quality overall? | | | | |

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