Prevalence of Dreaming Experiences Among Young Adults: Association with Sleep Quality and Personality Traits

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Abstract**:** The current study aimed to predict the relationship between personality traits and dreaming experiences use among young adults, associated with sleep quality and it also aimed to see the gender differences among personality traits and dreaming experiences. A sample of 350 young adults ranging in age from 18-25 years was collected from Wah Cantt, and Islamabad using convenient sampling strategy. The sample of the study consisted of (n= 137) males and (n= 213) females. The data was collected from young adults using measure for personality traits and dreaming experiences, and sleep quality use i.e., Big Five Inventory (BFI), Sleep Quality Scale (SQS), and Mannheim Dream Questionnaire (MADRE). Descriptive statistics such as Pearson correlation, and t-test were used to draw study results. The statistics of the present study demonstrated that the relationship between study variables is significant and in desirable direction with $p<0.01$. Sleep quality is positively correlated with neuroticism (.117*) and dream recall (.133*) at $p<0.05$. The findings of the study revealed that females score higher (26.12) than males (24.12) in exhibiting neuroticism with moderate effect size (.44) and $p<.000$. The results further indicated that most young adults didn't have nightmares (14.9) and lucid dreaming (22.0).

Keywords: Personality Traits, Dreaming Experiences, Young Adults, Gender differences, Sleep Quality.

1. Introduction

Dreams are the important aspect in everyone's life. Some people do believe in dreams and regulate their lives according to that. People show different attitudes towards dreams and dreaming experiences. The meaning they give to their dreams and how they interpret their dreams imposes the impact on their daily lives. A study suggest that people engaged in motivated interpretation of their dreams and these interpretations impact their daily lives (Morewedge & Norton, 2009). Interpretation of dreams can be positive and people like to have their interpretation of dreams according to their beliefs Their interpretation of dreams is different and people do believe that what they have seen in their dreams might came true or chances to happen in future. There are many hidden aspects that represent in dream and dreaming experiences. According to the Freud, dreams represent unconscious desires, wish fulfillment, childhood experiences. Dreams are the royal road to unconscious (Freud, 1990). The prevalence of

dreams is also being discussed in literature. Women have reportedly high prevalence of disturbing dreams (Worley et al., 2021). One study examined the small but significant correlation between mood, bad dream, and nightmare frequency (Fjermeros, 2022). Another study was conducted that confirms that young adolescents have reportedly high suicidal ideation with disturbing and recurrent dreams than young adolescent having no suicidal ideation (Gauchat et al., 2021). The study of UK concluded that persistent bad dreams in childhood may be associated with the increased risk of cognitive impairment in adulthood (Otaiku, 2023). A pattern of dreams can be incoherence with the person's life experiences. Some people seem to have very relaxing and satisfying dreams in their life while other tend to have frightening and disturbing dreams. People with life full of hardships and struggle tend to have frightful dreams. Similarly, people with the happy and easy life, their dreams and interpretation of dreams are according to that. Researchers suggest that people seem to have dream with more negative emotions than positive and happy dreams. Negative dreaming relates to the people daily life hardships and problems. The study of UK concluded that persistent bad dreams in childhood may be associated with the increased risk of cognitive impairment in adulthood (Otaiku, 2023).Research suggests that the due to the heavy load of dreaming of negative emotionality increased the risk of hypertension, anxiety, fear. People with cardiac problem are more likely to have negative dreaming and further increased the likelihood of their disease (Saeidi et al., 2020). A recent study suggests that people diagnosed with borderline personality disorder tens to have more disturbed sleep and nightmares. They conducted the study by taking the sample of 45 participants having deregulated behaviors in which 16 of them were BPD (borderline personality disorder) and the results shows that people with BPD experiences nightmares and these nightmare and nightmare-like experiences are linked to the daily life experiences of emotional cascades (Selby et al., 2013). The study of Shaifei (2019) demonstrated that there is positive relationship exist between self-trained lucid dreaming, and negative for the agreeableness and openness to experience. The dream recall frequency is the only factor and had the positive and significant relation that affect the lucid dreaming frequency of spontaneous and non-spontaneous lucid dreamers. Dream recall frequency is linked with openness to experiences, nightmares are associated with neuroticism and openness to experience, and dream sharing is associated with extraversion (Schredl & Rauthmann ,2022). The Schredl and Göritz (2017) believed that dream recall frequency showed the associated with openness to experiences and dream recall, attitude towards dreams are with conscientiousness. Nightmares are strongly associated to the neuroticism and openness to experience and conscientiousness had small but significant effect on nightmare frequencies (Randler et al ., 2017). The current study set out to investigate whether, in addition to the well-established connections with neuroticism and openness to experience, SPS characteristics (Low Sensory Threshold, Ease of Excitation, and Aesthetic Sensitivity) also contribute to nightmare frequency and nightmare distress Ease of Excitation, or the tendency to be overtaken by internal and external stimuli, was found to contribute to nightmare discomfort in addition to neuroticism and the frequency of nightmares (Carr et al., 2022). A study suggest that the people with Post-Traumatic Stress Disorder (PTSD) are at higher risk to experiences sleep problems and traumatic-related nightmares and insomnia (Miller et al ., 2017).

Literature suggests that dreaming experience are more related with quality of sleep. The study suggests that nightmares are directly related with paranoid thoughts, hallucinations, and negative symptoms also badly affecting the sleep quality (Kammerer et al., 2021). A study examined the associations between war-related exposure, nightmares, fear, insomnia, and PTSD symptoms among university students from Western Ukraine and findings indicate that women scored significantly higher than men in fear of war, symptoms of insomnia, and PTSD (Rogowska & Pavlova, 2023). There is strong association with increased nightmares with effecting their sleep quality in Covid -19 patients (Scarpelli et al., 2021). One of variable that lucid dreaming is somehow associated is sleep quality. Lucid dreaming was associated with the poor sleep quality i-e lucid dreamers had better sleep quality

and greater mental health (Stumbrys et al., 2021). Many researches elaborated the same equation that lucid dreaming is associated with good sleep quality and eventually greater mental well-being. Sleep quality and nightmares are intimately related since those who experience nightmares are reported to have poor sleep. The frequency of dream recall and lucid dreaming are not directly related, nor are they both connected with good sleep quality. According to the literature, dreaming experiences and sleep quality are related, however the sort of dreaming experiences a person is having will determine whether their sleep quality is excellent or terrible.

Literature suggests the linkage between three variables dreaming experiences, personality traits, and sleep quality. Different researches suggests that dreaming experiences consist of nightmares, dream recall frequency, lucid dreaming, and emotional relatedness to nightmares. Different dreaming experiences influences person's life and perspective of life, along with the sleep quality and obviously the major aspect of life that is personality. The significance of our study is exploring all these three variables that are personality traits, dreaming experiences, and sleep quality together.

There is gap in literature as these studies were conducted in western culture and the direct relationship between personality traits and dreaming experiences have been explored. However, our study will contribute to the field by investigating how personality traits influence dreaming experiences and sleep quality in Pakistani young adults. The fact that lucid dreaming, a less well-known concept in Pakistan, is examined within the context of dream experiences is another important finding of our study. The objective of our study is to

1. To explore the impact of personality traits (neuroticism, conscientiousness, extroversion, and openness to experiences) on dreaming experiences (nightmares, lucid dreaming , and dream recall).

2. To study the impact of sleep quality on dreaming experiences

3. To demonstrate what type of personalities are more vulnerable to have nightmares and dream recall.

2. Literature Review

Sleep quality is linked to many other factors; it has also a strong link with dreams and dreaming experiences. Dreams and content of dreams are somehow directly related to sleep because of the fact that during the sleep dreaming occurs. Stages of sleep also play a major in dreaming and how the person's sleep quality is is. Many researches investigate that how sleep quality is affected by the dreams and dreaming experiences. Sleep is the integral part of human daily routine and is as essential for survival as water and food. Human sleep consists of 2 stages REM rapid eye movement and NREM non rapid eye movement. REM (non-rapid eye movement) is characterized by the less psychological activity and minimal muscle movement and is often referred as person fell asleep and goes from light sleep into deep sleep whereas REM sleep muscles are tonic, and dreaming is typical. A reliable sleep pattern contains the following elements: The first REM episode happens about 80 to 100 minutes after the initial NREM episode, after which deeper NREM stages follow. After that, there will be a 90-minute transition between REM and NREM sleep. REM sleep periods become longer during the night while NREM stages 3 and 4 (or stage N3) concentrate in the early NREM cycles (Carskadon & Dement, 2011).

Nightmares are defined as the frequent, disturbing, and terrifying dreams that awaken the sleeper (American Psychiatric Association, 2013). Nightmares are introduced as the dream anxiety disorder if the nightmares become frequent then it converts into the disorder. Nightmares are accompanied by the extreme intense emotional reaction, fear that disrupt the sleep cycle of the individual. The person suddenly awakes from the sleep, thus disturbing the sleep cycle and eventually the daily routine. Researchers had investigated many factors that linked the nightmare, how this nightmare occurs, and which factors hinder or exacerbate the nightmares frequency. The study suggests that nightmares are directly related with paranoid thoughts, hallucinations, and negative symptoms also badly affecting the sleep quality (Kammerer et al., 2021). A study examined the associations between war-related

exposure, nightmares, fear, insomnia, and PTSD symptoms among university students from Western Ukraine and findings indicate that women scored significantly higher than men in fear of war, symptoms of insomnia, and PTSD (Rogowska & Pavlova, 2023). There is strong association with increased nightmares with effecting their sleep quality in Covid -19 patients (Scarpelli et al., 2021). Nightmares are linked globally with the neuroticism and people having neurotic (emotionally stable) personality traits are at higher risk of having nightmares. One study concluded that openness to experience was positively correlated with nightmares, and neuroticism was positively correlates with the nightmare distress (Brekke et al., 2023). Personality traits and anxiety level can positively predict athlete's nightmare distress (Gan et al., 2022). Many researches had been done that elaborated the concept of nightmares , who are at higher risk of having nightmares , and how these nightmare can be treated. The imaginary rehearsal technique and pharmacological treatment of prazosin can be used for people having nightmares along with the PTSD (Yücel et al., 2020).

Another aspect of dreaming experiences is dream recall frequency, that is how much an individual has the tendency to recall their dreams. Many researches had been done to study that actually what is dream recall frequency and what are the factors that exacerbated or hinder the dream recall. Sleep quality is one of the factors that is being associated with dreaming experiences i-e dream recall frequency. During the times of covid-19, one study concluded that dream recall frequency is linked with openness to experiences and lucid dreaming frequency with the Covid -19 worries (Schredl et al., 2019). German researchers looked at the unusual dreams people had during COVID-19. The findings indicated that DRF (Dream Recall Frequency) is adversely correlated with depression and anxiety and positively correlated with parasomnias including nightmares and RBD (REM Sleep Behavior Disorder) symptoms. Many had dreams during Covid-19, which seems to be a manifestation of emotional intensity (Fränkl et al., 2021). Dreams recall frequency is lower in patient taking anti-depressants

Lucid dreaming one of the most interesting aspects of dreaming, is being aware that one is dreaming while dreaming (LaBerge & Rheingold, 1990; Tholey & Utecht, 1987). There are many researches done in west to study the phenomena of lucid dreaming and how lucid dreaming is related to other variables. One of variable that lucid dreaming is somehow associated is sleep quality. Lucid dreaming was associated with the poor sleep quality i-e lucid dreamers had better sleep quality and greater mental health (Stumbrys et al., 2021). Many researches elaborated the same equation that lucid dreaming is associated with good sleep quality and eventually greater mental well-being. Literature suggests that sleep quality is linked with dreaming experiences but it depends on which type of dreaming experiences a person is having and their sleep quality (good or bad) will be coherent with that. Lucid dreaming had the association with the poorer sleep quality , this relationship is disappeared when the nightmare variable is being controlled . Lucid dreaming is related with more nightmares which impaired the sleep quality however, lucid dreaming is not directly linked with poorer sleep quality (Schadow et al., 2018). On contrary, a study demonstrated that there is positive relationship of being refreshed after the night of having lucid dreaming (Schredl et al., 2020). Lucid dreaming therapy (LDT) can be used as the effective intervention technique for reducing nightmare frequency (Ouchene et al., 2023). Lucid dreaming used as treatment technique for nightmares, helped the patient in decreasing the intensity, frequency, and psychological distress (De Macêdo et al., 2019). The possible risk of cultivating lucid dreaming should be taken under consideration before using LD as the treatment intervention for nightmare distress (Soffer-Dudek et al., 2020).

Personality traits also has strong relation with the dreaming experiences (extraversion and neuroticism) along with the sleep quality. Individual possess different personality traits experiences different type of dreaming and has different type of sleep quality. The study of Shaifei (2019) demonstrated that there is positive relationship exist between self-trained lucid dreaming, and negative for the agreeableness and openness to experience. The dream recall frequency is the only factor and had the positive and significant relation that affect the lucid dreaming

frequency of spontaneous and non-spontaneous lucid dreamers. Dream recall frequency is linked with openness to experiences, nightmares are associated with neuroticism and openness to experience, and dream sharing is associated with extraversion (Schredl & Rauthmann,2022).

The hypothesis of the study is as follows

1. Dream recall is negatively correlated with extroversion.
2. Extroversion is positively correlated with lucid dreaming.
3. Neuroticism is negatively correlated with lucid dreaming
4. Gender differences in personality traits, sleep quality, and dreaming experiences among males and females.
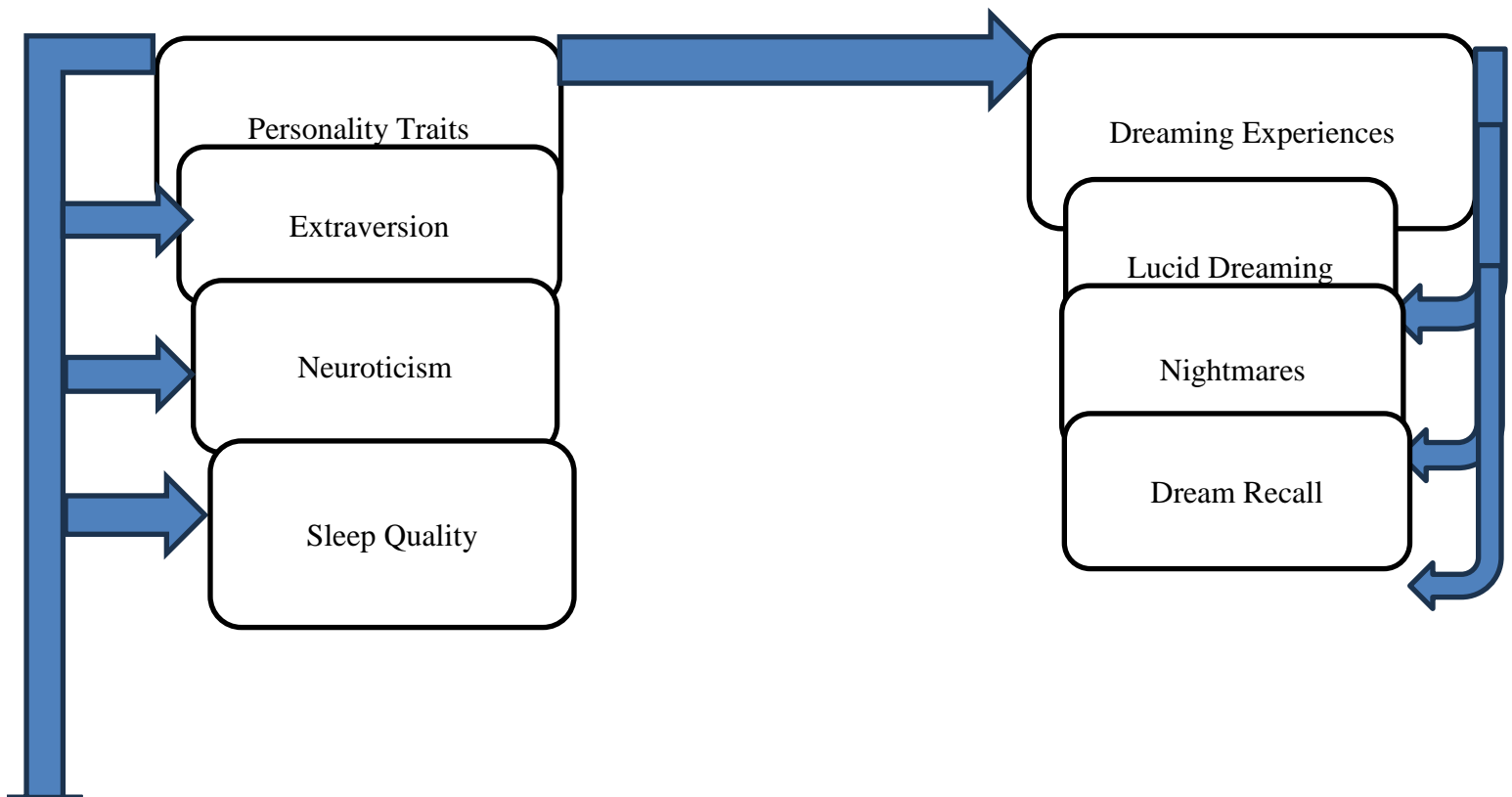
2.1 Conceptual Framework

Figure 1: Conceptual framework

3. Research Methodology

3.1 Research Design

The descriptive correlational research design was used in this study. Relationship between variables was measured using correlational design.

3.2 Operational Definitions
3.2.1 Personality Traits

Personality traits are defined and measured through Consciousness, extroversion, neuroticism, openness to experiences (John & Srivastava, 1999).

3.2.2 Sleep Quality
Sleep Quality is measured through daytime symptoms, restoration after sleep, problems initiating and maintaining sleep, difficulty waking, and sleep satisfaction (Yi et al., 2006).

3.2.3 Dream Frequency
Dream Frequency is defined and measured by dream recall, nightmares, lucid dreaming, attitude towards dreams, and the effects of dreams on waking life (Schredhl et al., 2014)

3.3 Sample and Sampling Technique
There were 350 participants in this study, including both males and females. The sample was young adults, age range from 18-25 years all participants had completed at least 12 years of education. The convenience sampling technique was used in this study. The convenient sampling technique was used because of geographical proximity and accessibility of research participants. The data was collected from both females and males.

3.3.1 Inclusion Criteria
The inclusion criteria for this study would be Young Adults; both male and female age range of 18-25 years ; marital status of both married and unmarried; educated.

3.3.2 Exclusion Criteria
The exclusion criteria would be drug and substance abusers, uneducated and individuals with mental health issues.

3.4 Instruments
The demographic sheet included gender, educational level, marital status, socioeconomic status, family system. We aimed to include all these demographics in our demographic sheet.

3.4.1 Sleep Quality Scale (SQS)
Sleep Quality Scale (SQS) developed by Hyeryeon *Yi* , Kyungrim *Shin*, Chol *Shin* that evaluates the total of 6 major domains of sleep quality, daytime symptoms, restoration after sleep, problems initiating and maintaining sleep, difficulty waking, and sleep satisfaction. It consisited of 28 items a four point –likert scale that evaluated the frequency of sleep behaviours ranging from (0 = few, 1 = sometimes,2 = often, and 3 = almost always). The internal consistency is.92 and test-retest reliability of .81. There is the revised version of SQS , a single-item sleep quality scale that provide more pragmatic approach for assessment of sleep quality in clinical settings (Synder et al., 2018).

3.4.2 Big Five Inventory (BFI)
BFI was developed by John, Donahue, and Kentle in 1991. The scale consisted of 44 items assessing the major 5 dimensions of the personality extroversion vs. introversion, agreeableness vs. antagonism, neuroticism vs emotional stability, openness vs closeness to experiences. The 5 point -Likert scale ranging from 1 (disagree strongly) to 5 (agree strongly. There are 16 revised scoring items in the scale. The reliability is .83 and validity is .92. The revised version of BFI is BFI-2 , 60 itemed scale that assessed the big five personality domains with 15 more specific facet traits .There are 2 separate forms BFI -2 S and BFI -2 X.

Variables	*f*	%

3.4.3 Mannheim Dream Questionnaire (MADRE)

MADRE was developed by Michael Schredl , Sabrina Berres , Anna Klingauf, Sabine Schellhaas1, & Anja S. Göritz (Schredl et al., 2014). The 21-itemed questionnaire and 7 point scale coded as (0 = never, 1 = less than once a month, 2 = about once a month, 3 = about 2 to 3 times a month, 4 = about once a week, 5 = several times a week, 6 = almost every morning). This questionnaire measures several domains including dream recall, nightmares, lucid dreaming, attitude towards dreams , and the effects of dreams on waking life. There was significant mean difference (standardized estimate: .4241, chi2 = 779.6, p < .0001) with higher dream recall, the nightmare distress and nightmare frequency were highly correlated (r = .551, p < .0001), and retest coefficient of attitude towards dream were scored higher (r=.842). The most of reliabilities of different domains indicates between .007 to .008. Thus, MADRE was proved to be valid and reliable.

3.5 Procedure

To begin, determine the availability of a sample to collect data from after obtaining informed consent from participants, almost all the data was collected from the university as the requirement of age range was fulfilled by our university students. Data was collected by using scales and questionnaire after gaining permission from the authors by filing a permission letter. Ethical consideration was under focus to maintain confidentiality of every participant and there was no aspect of harm for participants during whole research. Once data had collected, it was analyzed using correlation, T test analysis in SPSS. The research was concluded based on the findings about the topic.

3.6 Ethical Consideration

Keeping in view the ethical codes of conduct, informed consent prepared. Potential harm to participant was considered. The focus was to maintain confidentiality of every participant and there was no aspect of harm Sfor participants during whole research.

4 Results

The results were analyzed by using SPSS, mean and reliabilities of the study variables were calculated in descriptive statistics. Correlation analysis was done to find out the relationship between study variables. Along with that independent sample t-test was used to find out the group differences. Frequencies were also calculated.

4.1 Frequency Distribution

Table 1: *Demographic characteristics of the participants (N=350)*

Gender		
Male	137	39.1
Female	212	60.6
Age		
18-20	92	26.3
20-22	115	32.9
22-24	108	30.9
24-25	35	10.0
Education		
Matriculation	4	1.1
Undergraduate	312	89.1
Graduate	34	9.7
Marital status		
Single	311	88.9
Married	39	11.1

Family system

Nuclear	209	59.7
Joint	141	40.3

Socioeconomic status

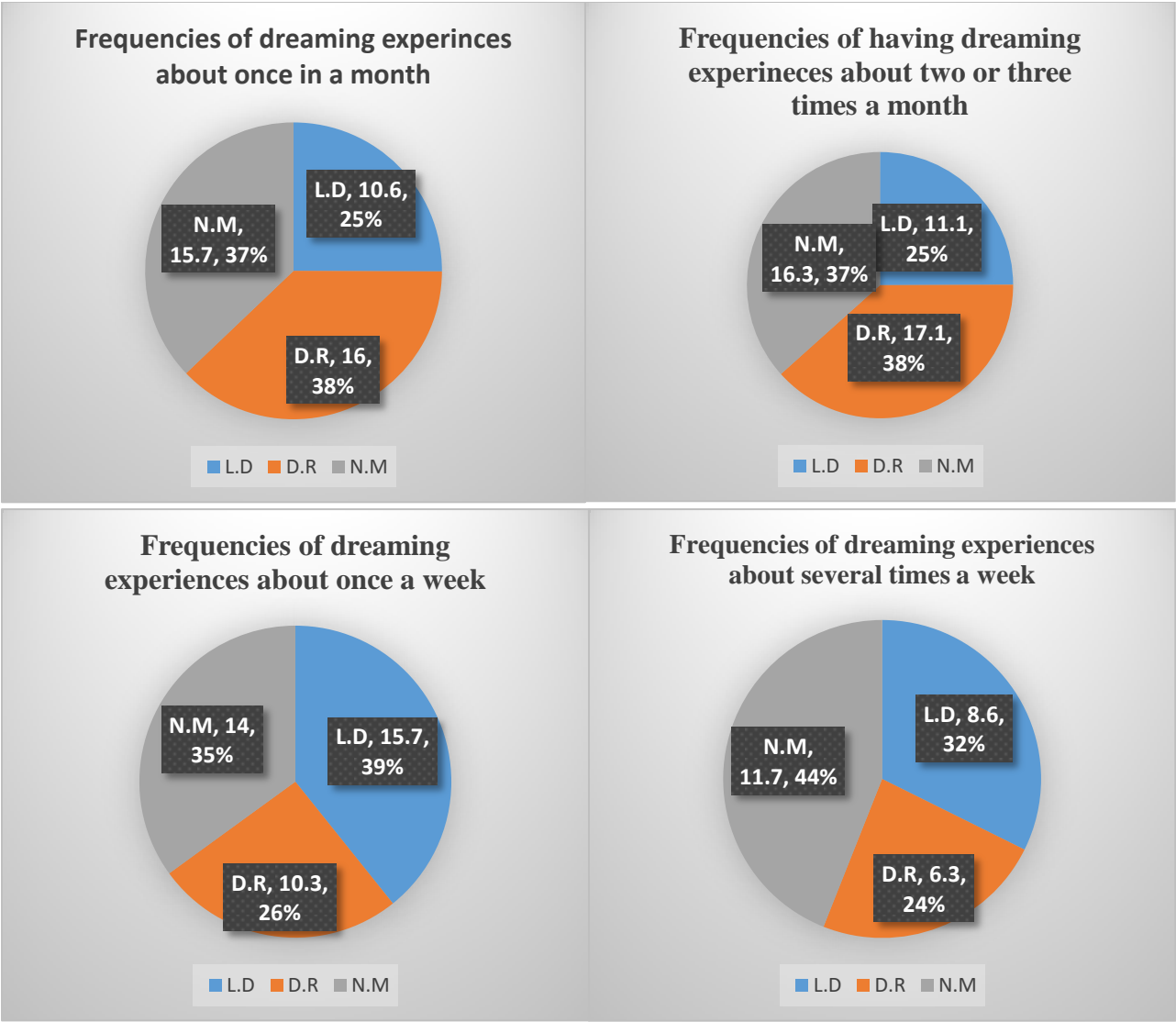|		
Lower	9	2.6
Middle	313	89.4
Upper	27	7.7

*N*ote: *f*= frequency, % =percentage

Table 1 shows the frequency and percentage of demographic variables of the participants included in the study. There were both males (N= 137, 39.1%) and females (N=212, 60.6%) in the study. Participants with age range 20-22 years have more participation rates (32.9%) then other age groups. In this sample most of the participants (89.1%) have undergraduate level of education, 59.7% participants were from nuclear family system which is greater than participation rate of participants with joint family system (40.3%). Mostly participants (89.9%) belong to middle class families.

Table 2: Frequency table for percentage of lucid dream, dream recall, and nightmare among young adults

Variables	L.D %	N.M%	D.R%
Never	22.0	14.9	19.4
About once a year	15.1	9.7	8.0
Less than once a year	9.7	8.9	10.9
About two to four times a year	7.1	8.9	12.0
About once a month	10.6	15.7	16.0
Two to three times a month	11.1	16.3	17.1
About once a week	15.7	14.0	10.3

| Several time a week | 8.6 | 11.7 | 6.3 |

Note. L.D%=lucid dreaming percentage, N.M%= nightmare percentage, D.R%= dream recall percentage

Table 2 indicates the frequency ranges that lucid dreaming, dream recall and nightmare have among young adults. Most frequent dream recall were seen two or three times a month (17.1). Most young adults did not have any nightmares, most ratio was in never (14.9) but some of them have nightmare two to three times a month (16.3). For the lucid dreaming, many young adults never had any lucid dreams in their life (22.0) but few had about once a week (15.7).

4.2 Descriptive Statistics

Table 3: Descriptives statistics for the study variables.

Variables	K	☐	MEAN	S.D	Range		skewness	Kurtosis
					Actual	Potential		
L.D	2	.405	5.81	3.444	0-13	2-14	-.343	-.798
D.R	1	.131	3.21	2.219	0-7	1-7	-.073	-1.183
Nightmare	6	.455	15.32	6.345	1-30	6-42	-.178	-.475
EXT	8	.676	27.08	4.709	8-38	8-40	-.633	.801
NEURO	8	.310	25.722	4.548	11-40	8-40	-.127	.210
SQSS	28	.728	68.85	9.5300	41-98	28-140	-.122	.071

*N*ote. K= number of items, a = Cronbach alpha reliability, SD = standard deviation, L.D = lucid dreaming, D.Rdream recall, EXT= extroversion, NEURO= neuroticism, CONCS= conscientiousness, SQSS= sleep quality scale

Table 3 indicates the items, Cronbach's alpha, mean, standard deviation, reliability, range (actual and potienal), skewness and kurtosis for scales. Cronbach's alpha states good reliability values which indicates that all scales are internally consistent. The value of skewness and kurtosis within the range of -2 and +2 and thus fulfilling the assumption of normal distribution.

4.3 Correlation Analysis
Table 4: Correlation Analysis

Variables	1	2	3	4	5	6	7
EXTRO	-	-.250**	-.046	-.061	-.015	.011	.134*
NEURO		-	.137*	.172**	.037	.117*	.139**
L.D			-	.176**	.219**	.010	.043
NG				-	.090	.133*	-.009

D.R	-	-.055	-.072
SQSS		-	.109*
CONCS			-

Note. **p<0.01 and *p<0.05

Table 4 indicates that there is significantly negatively correlated with extroversion and neuroticism and negative correlation with lucid dreaming, dream recall, nightmare, and significantly positive correlation of extroversion and conscientiousness. Extroversion has positive correlation with sleep quality. Neuroticism is positively correlated with lucid dreaming and significantly positively correlated with nightmares, sleep quality, and conscientiousness. Lucid dreaming is positively correlated with nightmares, dream recall and positively correlated with sleep quality and conscientiousness. Nightmares is significantly positively correlated with sleep quality and positively correlated with dream recall. The nightmares are negatively correlated with conscientiousness. Dream recall is negatively correlated with sleep quality and conscientiousness. Further analysis indicate that sleep quality is significant positively correlated with conscientiousness.

4.4 Comparative Analysis
Table 5: Mean comparison of adults on basis of Gender on lucid dreaming, dream recall, nightmares, sleep quality and personality

	Male		Female				95%CI		Cohn's
	(n=137)		(n=213)						d
Variables	M	SD	M	SD	t	p	LL	UL	
D.R	3.27	2.127	3.17	2.281	.396	.692	-.382	.575	0.045
N.G	6.07	3.333	5.65	3.512	1.246	.213	-.500	2.231	.020
L.D	15.85	5.635	14.98	6.754	1.096	.274	-.328	1.155	.122
SQSS	26.007	5.080	27.77	4.328	.178	.859	-1.889	2.264	.020
EXT	25.04	4.603	25.06	4.806	-.024	.981	-1.031	1.006	.004
NEURO	23.82	4.749	26.12	5.625	-3.95	.000	-3.434	-1.151	.441

Note. M=Mean, SD= standard deviation, LL = lower limit, UU =upper limit, D.R= dream recall, N.G = nightmare,

LD= lucid dream, SQSS= sleep quality scale, EXT= extroversion, COCS= conscientiousness, NEURO= neuroticism , P is significance level= *p<.05, **p<.01, ***p<.000

Table 5 displays the mean, standard deviation, t and p values of male and females on all study variables. The results depict the non-significant mean differences in male and females on conscientiousness. The value of Cohen's d that is .44 indicates moderate effect size. The further results indicate the significant mean differences in males and females for neuroticism that indicates that female has more tendencies for neuroticism than males. The value of Cohen's d of other variables indicates small effect size.

4.5 Discussion

The current study intended to examine the relationship between personality traits and dreaming experiences among young adults. Furthermore, the goal of the study is to examine the gender differences and also investigate the mediation of sleep quality between personality traits and dreaming experiences.

The current study hypothesized that extroversion is negatively correlated with dream recall. Current finding revealed the negative correlation exit between extroversion and dream recall. Previous literature investigated the relationship between openness to experiences and dream recall. Dream recall is associated with openness to experiences (Schredl & Rauthmann, 2022). The personality traits of openness to experiences are somehow related to the extroversion personality traits. The previous study conducted in Japan demonstrated that extroversion and openness to experiences are closely correlated (Aluja et al., 2003). The finding of current study that extroversion is negatively correlated with dream recall is the novelty in the literature as it is not explored variable in literature.

Another hypothesis was that the extroversion is positively correlated with sleep quality. Current finding revealed the positive correlation exist between sleep quality and extroversion. Result of the present study is line with the previous study as they conducted that study on sleep behavior and big 5 personality and results indicate that extroversion is positively correlated with sleep quality and neuroticism and age is negatively associated with sleep quality (Randler et al., 2017).We hypothesized that neuroticism is positively correlated with lucid dreaming. Current results revealed that there is positive relationship exist between lucid dreaming and neuroticism. Result of previous study was in line with our results. The study of Taitz (2011) investigated that lucid dreaming frequency is linked with depression, which is a facet of neuroticism. People with neurotic personality traits are more likely to have lucid dreaming. The current result revealed that our hypothesis is supported by the previous literature present.

The current study hypothesized that nightmares are positively correlated with the neuroticism. Current results confirmed this hypothesis as there is significant positive correlation between nightmares and neuroticism (.172**). Previous studies present in literature are in line with our results and hypothesis. The study was conducted in China where nightmare experiences and athlete's personality traits along with their anxiety level was investigated. The results demonstrated that athlete's nightmare group scored significantly higher on neuroticism and as well as anxiety level (Gan et al., 2022). Another pilot study investigated the offender- nightmare, ones with frequent nightmares. The results showed that these offender-nightmares scored higher on neuroticism, along with violent past, aggressiveness, and creativity (Mathes et al., 2018). The results of this study proved to be the supporting evidence of current study that nightmare frequency is associated with neuroticism.

We hypothesized that gender differences exist in dreaming experiences, personality traits , and lucid dreaming. One study demonstrated that neuroticism is significantly higher in females than males (Djudiyah et al., 2016). Other studies indicate that women are at higher risk of having neurotic tendencies than males. The results of this study are in line with previous literature that neuroticism is significant in males than in females.

The literature suggests that lucidity was found in young children and rates drop at the age of 16 (Voss et al., 2012).

The Hispanic young adult's participants reported the significantly lower frequency of lucid dreams compared with White participant (Schredl & Bulkeley 2020). Children of age range of 6 to 18 tends to have at least one lucid dream (Schredl et al., 2012). The prevalence of Lucid dreaming is studied in this study, prevalence of lucid dreaming among young adults in Pakistani population. The results revealed that prevalence of lucid dreaming is never that means young adults didn't experience lucid dreams and is supported by the study that children are more tend to experience lucid dreams and decreased at age of 16 (Voss et al., 2012).

5 Conclusion

The results of the study showed that young adults didn't experience lucid dreaming and nightmares and females are prone to exhibited more neuroticism than males. Additional findings show that extroversion and sleep quality are strongly connected, while neuroticism and lucid dreaming are considerably positively correlated as well as with nightmares, conscientiousness, and sleep quality. A positive correlation exists between lucid dreaming and nightmares, dream recall, sleep quality, and conscientiousness. Our study shows that young adults did not have lucid dreams and that personality factors and sleep quality both had a significant impact on dreaming experiences.

5.1 Limitations and Suggestions

Present study used the correlational research design it is difficult to attribute causality to the relationship between personality traits and dreaming experiences future researches should opt for the longitudinal research design for better understanding of the study variables.The results cannot be generalized to the whole population as the data is collected from University of Wah and Comsats University through convenient sampling.The present study only explored 2 personality traits extroversion and neuroticism. The 3 aspects of dreaming experiences are explored i-e Nightmare frequency, Dream recall, Lucid dreaming. Future Researches are suggested to study all sub variables of personality traits and dreaming experiences.

5.2 Implications

Dreaming experiences have impact on psychological evaluation and diagnosis. This information can be used by the professional to spot that how dreaming experiences cause psychopathy and what type of dreaming experiences promotes mental well-being.This study helps the counsellor to see the patterns of sleep quality and dreaming experiences influenced the student's academic performance along with that physical and mental well-being.Study variables help the researches to better understand that how dreaming experiences effect the daily functioning of people.

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