



QUALITY OF SLEEP ON LEVEL OF HAPPINESS AMONG THE ADULTS

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Abstract:

Research Background: Quality of sleep refers to how effectively an individual's sleep restores physical energy, emotional balance, and cognitive functioning. Level of happiness refers to an individual's overall subjective experience of well-being, positive emotions, and life satisfaction. Sleep quality and happiness are closely interconnected, as the restorative aspects of sleep significantly influence emotional well-being and life satisfaction. That way in this study, investigator, to find out the impact of sleep quality on adults level of happiness.

Objectives: The study objective was to find out the effect of sleep quality on happiness among the adults. Another objective was to examine the significant difference in happiness among the adults of excellent, moderate and poor sleep quality.

Procedure: The study one hundred twenty adult individuals were selected from different location. The purposive sampling technique was used for the selection of the samples. The selected samples age range were between 30 to 40 years. The study sleep quality was independent variable and happiness was dependent variable. The study Happiness Scale developed by Himanshi Rastogi and Janki Moorjani has been used.

Conclusions: It can be concluded that the adults of excellent sleep quality, and moderate sleep quality has found higher level happiness than adults of poor sleep quality as well as there is no significant difference in happiness between adults of excellent and moderate sleep quality.

Keywords: Sleep quality, Happiness, Adults

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Introduction:

According to Hirshkowitz et al., (2015), Young adults, in particular, often experience fluctuations in sleep quality due to academic pressure, work demands, lifestyle habits, and digital device use, all of which can negatively influence their mood and life satisfaction. It is not limited to the number of hours slept but includes several elements such as the time taken to fall asleep, continuity of sleep, depth of sleep, frequency of night awakenings, and the sense of refreshment upon waking. According to Buysse et al. (1989), good sleep quality is characterized by shorter sleep latency, minimal disturbances, and a feeling of restored energy in the morning. Research further indicates that poor sleep quality is associated with increased stress, irritability, impaired concentration, weakened immunity, and reduced overall well-being (Pilcher & Huffcutt, 1996). Overall, sleep quality plays a crucial role



in maintaining psychological health, emotional regulation, and daily performance, making it an essential component of overall happiness and well-being.

According to Diener (1984), happiness, often described as subjective well-being is influenced by emotional reactions to daily events and a person's long-term sense of life satisfaction. Happiness is understood as a combination of frequent positive affect, low levels of negative affect, and a cognitive evaluation of one's life as fulfilling and meaningful. According to Lyubomirsky, Sheldon & Schkade, (2005) that happiness is shaped by personal factors such as personality traits, relationships, health, and lifestyle, as well as environmental factors like social support and economic stability. Seligman, (2011) suggest that higher levels of happiness are linked with better physical health, stronger resilience, improved social relationships, and greater productivity. In early adulthood, happiness is particularly important because individuals face major life transitions. Thus, the level of happiness reflects the degree to which an individual experiences positivity, satisfaction, and psychological balance in everyday life.

Good quality sleep, characterized by adequate duration, continuity, and feeling refreshed upon waking, supports emotional regulation, reduces stress, and enhances cognitive functioning (Buysse et al., 1989; Pilcher & Huffcutt, 1996). Seligman (2011) also emphasizes that adequate and high-quality sleep contributes to better physical health, stronger social relationships, and enhanced resilience, all of which further support higher happiness levels. Research indicates that individuals who consistently experience higher sleep quality report greater levels of happiness, positive affect, and life satisfaction, highlighting the bidirectional relationship between sleep and emotional health (Diener, 1984; Lyubomirsky, Sheldon & Schkade, 2005).

In this study, an investigator has focused on to find out the effect of sleep quality on happiness among the adults as well as to find out the significant difference in level of happiness among the adults of excellent, moderate and poor sleep quality.

Significance of the Study:

The present study is significant as it examines how different levels of sleep quality, excellent, moderate, and poor, affect the happiness of adults. Understanding this relationship helps identify whether reduced sleep quality leads to lower emotional well-being. The study also highlights the extent of differences in happiness among groups with varying sleep quality, helping to identify individuals at risk due to poor sleep. The findings can guide mental-health professionals and educators in developing interventions to improve sleep habits. Overall, the study contributes valuable insights to health psychology by showing that sleep quality plays an essential role in enhancing happiness and life satisfaction.

Objectives of the Study:

1. To find out the effect of sleep quality on happiness among the adults of excellent, moderate and poor sleep quality.
2. To examine the significant difference in happiness among the adults of excellent, and moderate sleep quality.
3. To examine the significant difference in happiness among the adults of excellent, and poor sleep quality.
4. To examine the significant difference in happiness among the adults of moderate and poor sleep quality.



Hypothesis of the Study :

1. There will be significant difference in happiness among the adults of excellent, moderate and poor sleep quality.
2. The adults of excellent sleep quality will be more happiness than the adults of moderate sleep quality.
3. The adults of excellent sleep quality will be more happiness than the adults of poor sleep quality.
4. The adults of moderate sleep quality will be more happiness than the adults of poor sleep quality.

Research Procedure:

➤ **Variables of the Study:**

Independent Variables	Dependent Variable
Quality of Sleep a) Excellent Sleep Quality b) Moderate Sleep Quality c) Poor Sleep Quality	a) Happiness

➤ **Sample Size and Selection Procedure:**

The study one hundred twenty adult individuals were selected from different location in Solapur district in the State of Maharashtra. Out of them, forty adults were selected from excellent sleep quality, forty adults were selected from moderate sleep quality and same way forty sample were selected from poor sleep quality. The purposive sampling technique was used for the selection of the samples. The selected samples age range were between 30 to 40 years. The study sleep quality was independent variable and happiness was dependent variable. The study Happiness Scale developed by Himanshi Rastogi and Janki Moorjani has been used.

➤ **Operational Definitions:**

a) **Sleep Quality:**

In the present study, the relationship between adults' sleep quality and their level of happiness was examined. Adults who sleep at least seven to eight hours were considered to have excellent sleep quality. Those who sleep around five to six hours were categorized as having moderate sleep quality. Similarly, adults who sleep less than five hours were considered to have poor sleep quality.

b) **Happiness Level:**

In the present study, adults who scored higher on the Happiness Scale developed by Himanshi Rastogi and Janki Moorjani were considered as high-happiness individuals, whereas adults who scored lower on the same scale were considered as low-happiness individuals.

Data Collection Materials:

a) **Happiness Scale:** In this study, the Happiness Scale developed by Himanshi Rastogi and Janki Moorjani was used. The scale comprises 62 items and demonstrates good reliability, with a split-half reliability of 0.88, indicating consistent measurement across items. It was administered to individuals aged 18 to 40 years.



Statistical Analysis and Results:

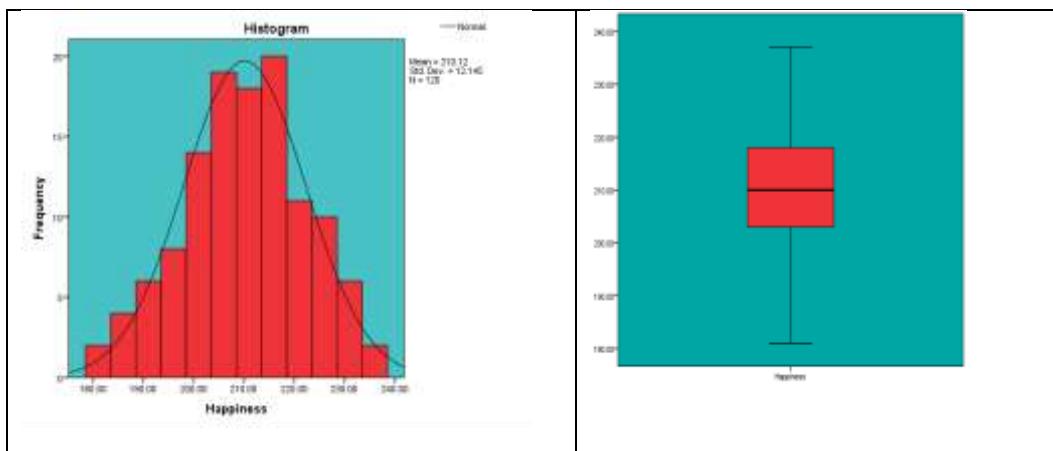
In this part, the investigator has explained significant difference in happiness among the adults of excellent, moderate and poor sleep quality. The investigator has analyzed the data in following manner.

Table: 1 shows the assessing normality of the variable happiness

Variable	Descriptive Statistics		Statistic	Std. Error
Happiness	Mean		210.1167	1.10867
	95% Confidence Interval for Mean	Lower Bound	207.9214	
	Upper Bound		212.3120	
	5% Trimmed Mean		210.2870	
	Median		210.0000	
	Variance		147.499	
	Std. Deviation		12.14491	
	Minimum		181.00	
	Maximum		237.00	
	Range		56.00	
	Inter quartile Range		15.00	
	Skewness		-0.168	0.221
	Kurtosis		-0.394	0.438

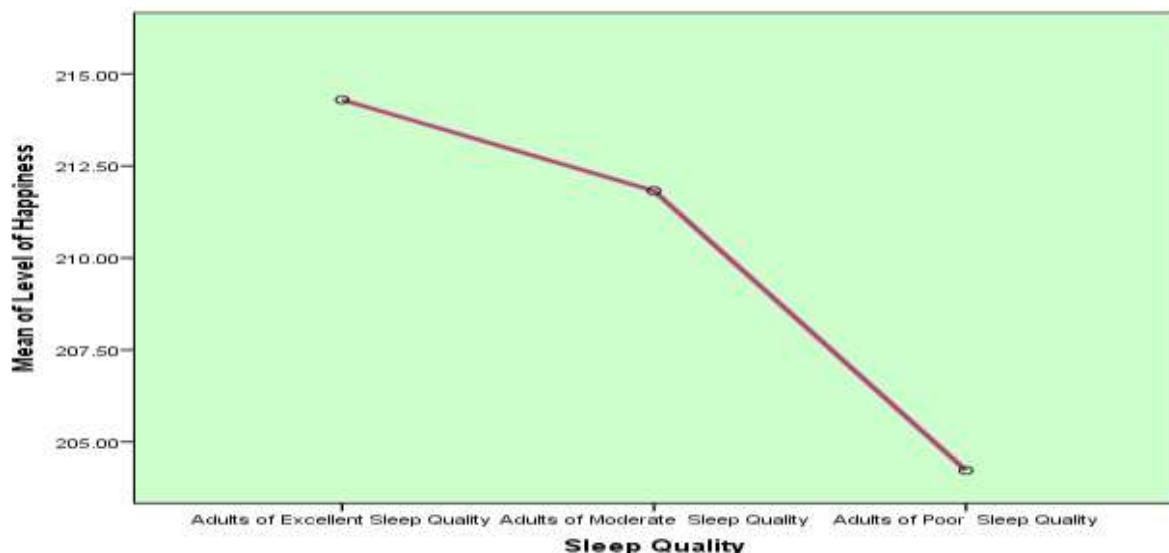
The table 1. Indicates that the trimmed mean value (210.287) is very close to the simple mean (210.116). Skewness and kurtosis describe the shape of the distribution and are used with interval and ratio level data. In this table, the skewness value (-0.168) is very close to zero. The skewness value is negative and indicates that the distribution is somewhat negatively skewed. The kurtosis value (-0.394) is also close to zero, but it is not zero. The kurtosis value is negative, and that distribution is flatter than normal (platykurtic). However, skewness and kurtosis both have fallen well within the acceptable range of ± 1 . So, both value distributions can be considered normal.

Plot: 1: Shows the normality of the data of variable happiness



Above plots indicates of variable happiness. The shape of the distribution is considered normal.

Plot: 2: Shows the mean of level of happiness among adults of different sleep quality



Above plot no. 2 represents the mean scores of the level of happiness across the three categories of sleep quality. The horizontal axis displays the three sleep-quality categories such as adults of excellent sleep quality, adults of moderate sleep quality, and adults of poor sleep quality, and the vertical axis shows the mean level of happiness. The adults of excellent sleep quality show the highest mean score of happiness (214.30). The adults of moderate sleep quality follow with a mean score of 211.825. On the other hand, the adults of poor sleep quality show the lowest mean level of happiness 204.225. Overall, the graph indicates that adults with excellent sleep quality demonstrate relatively higher happiness than adults with moderate or poor sleep quality. The adults with poor sleep quality show a noticeably lower level of happiness.

Table: 2: Shows summary of One Way ANOVA of the happiness

Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	2205.217	2	1102.608	8.406	0.01
Within Groups	15347.150	117	131.172		
Total	17552.367	119			

Significant Level, df (2,117) ---- 0.05 = 3.07 0.01= 4.85

From Table 2, a one-way ANOVA was conducted to examine the effect of sleep quality (Adults of Excellent Sleep Quality, Adults of Moderate Sleep Quality, and Adults of Poor Sleep Quality) on an individual's level of happiness. The dependent variable, happiness, was assessed for normality across the three groups formed by the sleep quality, using Q-Q plots, skewness, and kurtosis, and was found to be normally distributed.



The main effects analysis revealed that there is a significant difference in happiness among adults of excellent, moderate, and poor sleep quality, $F (2,117) = 8.406$, $p < 0.01$. This indicates that the level of sleep quality significantly influences on adults' happiness. Therefore, there is significant difference found in the level of happiness among adults of excellent, moderate, and poor sleep quality. The one-way ANOVA summary shows that the mean square for between-groups (Mean Square = 1102.608) is considerably larger than the mean square for within-groups (Mean Square = 131.172). This suggests that the variation in happiness is largely due to differences between the sleep-quality groups rather than individual differences within each group. Consequently, based on hypothesis no. 1, "*There will be a significant difference in happiness among adults of excellent, moderate, and poor sleep quality*" is accepted. The adults of excellent sleep quality, and moderate sleep quality has found higher level happiness than adults of poor sleep quality.

Table 3: Shows the difference in happiness among the adults of excellent and moderate sleep quality.

Variable	Level of Sleep Quality	N	Mean	SD	t	p
Happiness	Excellent Sleep Quality	40	214.300	10.457	1.105	NS 0.05
	Moderate Sleep Quality	40	211.825	9.562		

Significant Level at 0.05=1.990, 0.01=2.639

Table 3 shows the difference in happiness between adults of excellent and moderate sleep quality. The mean score of adults with excellent sleep quality is 214.300 and a standard deviation is 10.457 on happiness, whereas the mean score of adults with moderate sleep quality is 211.825 with a standard deviation of 9.562. The obtained t-value is 1.105, which is not significant at the 0.05 significance level. Therefore, it is concluded that there is no significant difference in happiness between adults of excellent and moderate sleep quality. Based on this analysis, hypothesis no. 2, "*The adults of excellent sleep quality will be more happy than the adults of moderate sleep quality*," is rejected.

Table 4: Shows the difference in happiness among the adults of excellent and poor sleep quality.

Variable	Level of Sleep Quality	N	Mean	SD	t	p
Happiness	Excellent Sleep Quality	40	214.300	10.457	3.666	0.01
	Poor Sleep Quality	40	204.225	13.883		

Significant Level at 0.05=1.990, 0.01=2.639

Table 4 shows the difference in happiness between adults of excellent and poor sleep quality. The mean score of adults with excellent sleep quality is 214.300 and a standard deviation is 10.457 on happiness, whereas the mean score of adults with poor sleep quality is 204.225 with a standard deviation of 13.883. The obtained t-value is 3.666, which is significant at the 0.01 significance level. Therefore, it is concluded that there is significant difference in happiness between adults of excellent and poor sleep quality. Based on this analysis, hypothesis no. 3. *The adults of excellent sleep quality will be more happiness than the adults of poor sleep quality* is



accepted. Because, the adults of excellent sleep quality has been found more happiness than the adults of poor sleep quality.

Table 5: Shows the difference in happiness among the adults of moderate and poor sleep quality.

Variable	Level of Sleep Quality	N	Mean	SD	t	p
Happiness	Moderate Sleep Quality	40	211.825	9.562	2.851	0.01
	Poor Sleep Quality	40	204.225	13.883		

Significant Level at 0.05=1.990, 0.01=2.639

Table 4 shows the difference in happiness between adults of moderate and poor sleep quality. The mean score of adults with excellent sleep quality is 211.825 and a standard deviation is 9.562 on happiness, whereas the mean score of adults with poor sleep quality is 204.225 with a standard deviation of 13.883. The obtained t-value is 2.851, which is significant at the 0.01 significance level. Therefore, it is concluded that there is significant difference in happiness between adults of excellent and poor sleep quality. Based on this analysis, hypothesis no. 4. *The adults of moderate sleep quality will be more happiness than the adults of poor sleep quality is accepted.* Because, the adults of moderate sleep quality has been found more happiness than the adults of poor sleep quality.

Conclusions:

1. There is significant difference found in the level of happiness among adults of excellent, moderate, and poor sleep quality. The adults of excellent sleep quality, and moderate sleep quality has found higher level happiness than adults of poor sleep quality.
2. There is no significant difference in happiness between adults of excellent and moderate sleep quality.
3. There is significant difference in happiness between adults of excellent and poor sleep quality. The adults of excellent sleep quality has been found more happiness than the adults of poor sleep quality.
4. There is significant difference in happiness between adults of excellent and poor sleep quality. The adults of moderate sleep quality has been found more happiness than the adults of poor sleep quality.

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