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# Relationship Quality, Sleep Quality & Well-Being among Adults: Correlational Analyses

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**Abstract**

Empirical research has shown that quality relationship has been associated with happiness. Relationship is a connection among various psychosocial constructs. Relationship quality is a perceived quality of a close relationship. Relationship quality is also known as relationship satisfaction. It often refers to reflection of people's overall feelings toward relationships. It may be positive or negative. Sleep quality refers to how well one sleep and subjective feel qualitatively well about sleep. Well-being is a state of being healthy, healthy and prosperous including physical, mental, social and spiritual health.

The current paper aims to examine the relationship quality, sleep quality and well being among adults. It also aims to examine the associations among them. Data was collected using purposive sampling. Adults as operationally defined for the current study ranges from 25-40 years of age. The sample as determined by Slovin method was found to be 99. Karl Pearson product moment correlation was used to find the association among the variables under study.

Tools used were Ryff's Psychological Well-Being Scale. Rogge, Finchman, Crasta and Maniaci scale was used to examine the Positive-Negative Relationship Quality Scale (PN-RQ) scale and sleep quality was measured by Hyeryeon. All the tools were having adequate psychometric properties. The results indicate significant positive correlation between well-being and relationship quality. The relationship between well-being and sleep quality and the correlation between relationship quality and sleep quality have been found to be insignificant. The research has implication for training people in improving their relationship quality to improve their well-being.

**Keywords**: well-being, relationship quality, sleep quality.

**Introduction**

Well-being is a positive psychological state experienced by individuals, group of individuals and society at large. It encompasses quality of life and the ability of people and societies to contribute to the world with the sense of meaning and purpose. It is determined by social, economic and environmental factors. Well-being is a sense of feeling well. It includes emotional, physical, social, societal, workplace & spiritual well-being.

Emotional well-being refers to managing the emotions effectively and regulate behavior in such a way leading to experiencing more of positive emotions. Physical well-being refers to engaging in behaviors leading to keeping the functioning of the body healthy like exercising, eating healthy food etc. Social well-being refers to maintaining healthy social connections and ability to have strong social networking. Work place well-being refers to engaging in assigned tasks meaningfully and contribute at the work place meaningfully and keep the interest and work as purposeful. Societal well-being refers to engaging with the community and participate with the community members leading to flourishing of communities and spiritual well-being means engaging in behaviors that lead to purpose and meaning in life thereby leading to happiness.

Relationship quality is studied in behavioral sciences including sociology, communication Psychology and family studies. Relationships form the essence of personality and contribute to the individual's well-being. Research suggests that a wide range of factors have an influence on relationship quality. These include, among others, self-verification and self-enhancement, personality, emotional intelligence, interaction patterns, and partner support. Economic factors also play an important role in determining relationship quality. Relationship quality is a perceived quality of a close relationship. Relationship quality is a broad phrase that can refer to both objective and subjective aspects of a relationship. Relationship quality is also known as relationship satisfaction. It often refers to reflection of people's overall feelings toward relationships. It may be positive or negative.

As sleep is a complex phenomenon, it can be helpful to consider which aspects of sleep one is interested in when studying its relationships to other concepts. Using more than one aspect of sleep also allows for a comprehensive assessment of sleep, and provides the opportunity to investigate how individual components of sleep relate to a construct of interest. Sleep quality refers to how well one sleep and subjective feel qualitatively well about sleep.

Sleep quality, Well – being and Relationship Quality are closely connected; poor or inadequate sleep can cause irritability and stress, while healthy sleep can enhance well-being. Chronic insomnia may increase the risk of developing a mood disorder, such as anxiety or depression. The quality of relationship and support appears to be associated with physical health outcomes and sleep quality. Depression is found to mediate the link between relationship quality and sleep quality. It is found that more specific types of social relationships that may be linked to poor sleep quality and that depression appears to underlie these associations. Definitions of well-being and happiness can be grouped into three categories: normative, affective and cognitive (Diener, 1984). Only the two latter categories, the affective and cognitive, consider the individual's own assessments, and is therefore relevant to subjective well-being. The affective category of happiness

focuses on positive and negative affect, and has more resemblance to how we use the word happiness in everyday discourse. The cognitive category on the other hand, includes definitions that have focused on what make individuals evaluate their life in positive terms. One type of well-being, life satisfaction, falls into this cognitive category of happiness according to Shin & Johnson (1978) and is defined as a judgmental process where individuals assess the quality of their life by using their own criteria. Importantly, the judgement of the degree to which people are satisfied with their life is based on a comparison with a standard set by the individual him or herself, and is not externally imposed (Diener et al., 1985). The relationship quality can moderate the association between mental well-being and relationship status (Carr et al., 2014; Leach et al., 2013), as studies have consistently suggested that individuals who are in happy relationships tend to have better well-being or are less likely to have depression than individuals in unhappy relationships (Leach et al., 2013). There are also studies showing that an unhappy relationship is worse for mental well-being and health than being single or divorced (Holt-Lunstad et al., 2008; Lawrence et al., 2019). Women, in particular, have been found to be affected by the poor relationship quality (Chapman & Guven, 2016; Leach et al., 2013). Lemola et al (2013) in their work found that the relationship between variability in sleep duration and well- being was partially mediated by subjective sleep quality. The findings show that great day-to-day variability in sleep duration more than average sleep duration – is related to poor subjective sleep quality and poor subjective well-being. Zhai et al (2018) found in their work strong association between sleep quality and psychological well-being among the participants. Sachser et al (2021) in their research found that there were fewer well being issues among the young adults. And if they stayed together for a longer time the relationship quality between the younger adults improved as a couple and relationship quality between the older adult couples deteriorated.

## Methodology

The objectives of the research were to examine

1. General Well-being, Relationship Quality and Sleep Quality among adults
2. The relationship between general well being, relationship quality and sleep quality in the sample

### Research Design

The current study used correlation design to study the relationship among the variables.

### Sampling

A sample of 99 adults was taken, and data was collected through purposive sampling. Sample size was determined by Slovin formula. It consists of males and females individuals. The age group lied between 25-40 years old. The data was collected in group.

**Hypotheses**

H1: There will be a significant correlation between well-being and relationship quality.

H2:There will be a significant correlation between well-being and sleep quality.

H3: There will be a significant correlation between relationship quality and sleep quality.

**Tools**

1. Ryff's Psychological Well-Being Scale: Developed by Ryff (2007). The Scales of Psychological Well-being (PWB) which is composed of six sub-scales in accordance with the six factors of positive functioning, namely autonomy, environmental mastery, personal growth, purpose in life, positive relations with others and self-acceptance. Respondents rate how strongly they agree or disagree with 42 statements using a 7-point scale (1 = strongly agree; 7 = strongly disagree).. Internal consistencies varied between 0.87 and 0.96 and test-retest reliability coefficients ranged between 0.78 and 0.97 for six subscales. These results demonstrate that the scale is a valid and reliable instrument.

2. The Positive-Negative Relationship Quality (PN-RQ) Scale –
   Developed by Rogge, Fincham, Crasta, and Maniaci (2017) The Positive-Negative Relationship Quality Scale (PN-RQ; Rogge et al., 2017) 3 is an item response theory-optimized bidimensional scale that allows researchers to assess positive relationship quality and negative relationship quality independently. For all items, responses are given values on a 0 to 5 point scale with 0 = Not at all True and 5 = Completely True. The items of the positive subscale are summed to create a total where higher scores indicate greater positive relationship qualities. The items of the negative subscale are summed separately to create a total where higher scores reflect greater negative relationship qualities. Correlation between PN-RQ positive and negative subscales was r = −0.63. PN-RQ positive and negative scales were r = 0.70 and r = −0.59, respectively.
3. Sleep Quality Scale –
   Developed by Hyeryeon et al (2006) the Sleep Quality Scale consists of 28 items, the SQS evaluates six domains of sleep quality: daytime symptoms, restoration after sleep, problems initiating and maintaining sleep, difficulty waking, and sleep satisfaction. Using a four-point, Likert-type scale, respondents indicate how frequently they exhibit certain sleep behaviors (0 = "few," 1 = "sometimes," 2 = "often," and 3 = "almost always"). Scores on items belong to factors 2 and 5 (restoration after sleep and satisfaction with sleep) and are reversed before being tallied. Total scores can range from 0 to 84, with higher scores demoting more acute sleep problems. It has an an internal consistency of .92, a test-retest reliability of .81.

**Analysis of Data**

The data were analyzed using descriptive statistics like mean, SD, and correlational analysis was used to examine the relationships among the variables.

## Results & Discussion

The primary aim of the present study was to investigate the relationship between psychological well-being and relationship quality and sleep quality among adults.

**Table: 1Descriptive statistics and correlation between sleep quality, psychological well-being and relationship quality are given below:**

| Variable | n | M | SD | 1 | 2 | 3 |
|---|---|---|---|---|---|---|
| 1. Sleep Quality | 99 | 160.08 | 13.23 | - | | |
| | | 1 | | | | |
| 2. Well-Being | 99 | 16.0 | 18.03 | -.017 | - | |
| 3. Relationship Quality | 99 | 52.84 | 6.89 | -0.054 | .236* | - |

***Correlation is significant at 0.05 levels (2 tailed)**

The table 1, reveals the significant correlation has been found between relationship quality and psychological well-being r = .236 (significant at 0.05 level). It means that if relationship quality increases, psychological well-being also increases and vica versa. Therefore, H1 has been supported which stated that there is a significant correlation between well- being and relationship quality.

The table 1 also indicates that the Pearson product moment correlation between sleep quality and psychological well-being came out to be r = -.017 which is insignificant. It means there is no association between sleep quality and psychological well-bein in the current research. Therefore, H2 which says, there will be a significant correlation between well-being and sleep quality has not been supported.

The table 1 also indicates that the relationship Quality didn't show any significant correlation with sleep quality. It means there is no association between these variables in this research. Hence, H3 which says, there will be a significant correlation between relationship quality and sleep quality has not been supported.

According to hypothesis 1, there will be a significant correlation between well-being and relationship quality. Results revealed a significant positive relationship between the variables. Having a good relationship with your family is really vital to your social life. Because of this, people can grow into well-rounded individuals with strong personalities and the ability to adapt well to new situations. Many dimensions, such as resiliency, coherence, and compassion for oneself and others, make up a comprehensive sample of health – promoting traits that have not been studied in connection with the perceived quality of family connections and collective family efficacy. Three studies by Grevenstein, et. al. (2019) evaluated whether the Evaluation of Social Systems Scale (EVOS) – a relatively new measure that assesses the perceived quality of family interactions – was associated with these beneficial health-related traits. While university students participated in studies 1 and 2 (N =207) and 3 (N = 305) by completing paper-and-pencil questionnaires, participants in research 3 (N = 528) were drawn from a more diverse pool of people. Reducing psychological distress (r =.30 to.37), increasing life satisfaction (r = 0.40), strengthening resilience (r = 0.37), sense of coherence (r = 0.37), self-compassion (r = 0.33), optimism (r = 0.32), general self-efficacy (r = 0.27), and self-esteem (r = 0.34) were all associated with better family relationships. Family environments are not only important for psychological health and quality of life, but also for individual adaptability and well-being, according to the findings of this study. When creating and providing preventative interventions for families, this should be taken into consideration.

Second hypothesis suggested that there will be a significant correlation between well-being and sleep quality. According to the results, the relationship between the two variables is not significant. Sawczuk (2018) conducted a study to find out if training load, sleep length, and three different measures of daily well-being, recovery, and tiredness have any link to each other in young athletes. Three maximum countermovement jumps (CMJs), the daily well-being questionnaire (DWB), the perception of recovery status (PRS) scale, and information on training loads the day before as well as sleep length were collected from 52 young athletes over a seven-week period in this study. Training and sleep were assessed as predictive factors using partial correlations, linear mixed models and magnitude-based inferences (CMJ, DWB, and PRS). Training (r = -.09; -.06) and sleep (r = -.01; -.06) had no effect on CMJ at all. When it came to sleep, but not training, the DWB showed an association with sleep (r =.28;.05, minor). To put it another way, there was no correlation between PRS and training (r = 0.23;.05, tiny) and sleep (r = 12; 0.66) The DWB was sensitive to low sleep (d = 0.33; 0.11) in comparison to moderate sleep, whereas the PRS was sensitive to high (d = 0.36; 0.11) and low (d = 0.29; 0.17) training in comparison to moderate sleep. The PRS is a simple training response monitor, but the DWB may provide a better picture of the overall well-being

of the athlete. In this sample, the CMJ was not linked with training or sleep response.

Lastly it was hypothesised that there will be a significant correlation between relationship quality and sleep quality. Findings revealed that there is no significant relationship between the variables. Coronavirus illness 2019, previously known as SARS- CoV-2 and 2019 novel coronavirus (2019-nCoV), was initially discovered in Wuhan City, China in December 2019 and is now known as COVID-19. For determining the structural link between observed variables, structural equation modelling (SEM) is a multivariate analysis method Medical staff treating COVID-19 patients in Wuhan, China, in January and February of 2020 were the focus of this observational study, which used SEM to examine the impact of social support on sleep quality and function. Medical professionals who treated patients with COVID-19 infection took part in a cross-sectional, one-month study. The Self – Rating Anxiety Scale (SAS), the General Self-Efficacy Scale (GSES), the Stanford Acute Stress Reaction (SASR) questionnaire, the Pittsburgh Sleep Quality Index (PSQI), and the Social Support Rate Scale (SSRS) were used to measure anxiety, self-efficacy, stress, sleep quality, and social support. There were interactions between these parameters found using Pearson's correlation analysis and SEM. Self-efficacy and sleep quality were positively associated with levels of social support for medical staff, but levels of worry and stress were negatively associated. Anxiety was strongly linked to levels of stress, which had a negative impact on self-efficacy and sleep quality. Social support and sleep quality were mediated by anxiety, stress, and self-efficacy. Stress, anxiety, and self-efficacy levels among Chinese healthcare workers caring for patients infected with COVID-19 in January and February 2020 were linked to sleep quality and social support, according to SEM. (Xiao, 2020).

**Conclusions**

The current research revealed a significant positive relationship between well-being and relationship quality. Along with this, the relationship between well-being and sleep quality was not found to be significant. Lastly findings revealed that there is no significant relationship between relationship quality and sleep quality.

**Area of improvements, Implications and Future Direction**

From the current study it can be concluded that:

1. The limitations of the present study are: small sample size, questionnaires not adapted to Indian population, limited geographical area, and presented challenge of obtaining authentic data for the study, and geographical study area was limited, therefore, the result cannot be generalized to a larger population.
2. The present study also did not consider the role of socio-demographic variables factors like support from family and friends, field of study and work, and age.
3. To improve well-being of people they should be trained in relationship enrichment as it is expected to improve their well-being.

4. In order to overcome the above-mentioned limitations, further researchers are recommended to use larger sample size to improve population representation, use scales and questionnaires that are adapted to Indian population, collect data offline in standardized situation, and from a larger geographical area. Along with this, role of socio-demographic variables factors like support from family and friends, field of study and work, and age can be considered.

## References


- Weinberg, M. K., Noble, J. M., & Hammond, T. G. (2016). Sleep well feel well: An investigation into the protective value of sleep quality on subjective well-being. *Australian journal of Psychology, 68*(2), 91-97.

- Zhai, K., Gao, X., & Wang, G. (2018). The role of sleep quality in the psychological well-being of final year UndergraduateStudents in China. *International journal of environmental research and public health, 15*(12), 2881.

- Zhang, X., Wang, Y., Lyu, H., Zhang, Y., Liu, Y., & Luo, J. (2020). The influence of COVID-19 on well-being.

- Hyun, S., Hahm, H. C., Wong, G. T. F., Zhang, E., & Liu, C. H. (2021). Psychological correlates of poor sleep quality among US young adults during the COVID-19 pandemic. *Sleep medicine, 78*, 51-56.

- Gupta, R., Grover, S., Basu, A., Krishnan, V., Tripathi, A., Subramanyam, A., ... & Avasthi, A. (2020). Changes in sleep pattern and sleep quality during COVID-19 lockdown. *Indian Journal of Psychiatry, 62*(4), 370.

- Balzarini, R. N., Muise, A., Zoppolat, G., Di Bartolomeo, A., Rodrigues, D. L., Alonso- Ferres, M., ... & Slatcher, R. B. (2020). Love in the time of COVID: Perceived partner responsiveness buffers people from lower relationship quality associated with COVID- related stressors.

- Birditt, K., Turkelson, A., Fingerman, K., Polenick, C., & Oya, A. (2020). Age differences in COVID-19 stress and social ties during the COVID-19 pandemic: Implications for well-being. *Innovation in Aging, 4*(Suppl 1), 963.

- Sachser, C., Olaru, G., Pfeiffer, E., Brähler, E., Clemens, V., Rassenhofer, M., ... & Fegert, J. M. (2021). The immediate impact of lockdown measures on mental health and couples' relationships during the COVID-19 pandemic-results of a representative population survey in Germany. *Social Science & Medicine, 278*, 113954.

- Kaimal, D., Sajja, R. T., & Sasangohar, F. (2017, September). Investigating the effects of social media usage on sleep quality. In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 61, No. 1, pp. 1327-1330). Sage CA: Los Angeles, CA: SAGE Publications.

- O'Reilly, M., Dogra, N., Whiteman, N., Hughes, J., Eruyar, S., & Reilly, P. (2018). Is social media bad for mental health and wellbeing? Exploring the perspectives of adolescents. *Clinical Child Psychology and Psychiatry, 23*(4), 601-613.

- Baglioni, C., Nanovska, S., Regen, W., Spiegelhalder, K., Feige, B., Nissen, C.,
- … Riemann, D. (2014a). Sleep and psychiatric disorders: A meta-analysis of the last 20 years of research. *Journal of Sleep Research, 23*, 80-80.

- Panzeri, M., Ferrucci, R., Cozza, A., & Fontanesi, L. (2020). Changes in sexuality and quality of couple relationship during the Covid-19 lockdown. *Frontiers in Psychology, 11*, 2523.

- Franceschini, C., Musetti, A., Zenesini, C., Palagini, L., Scarpelli, S., Quattropani, M. C., ... & Castelnuovo, G. (2020). Poor sleep quality and its consequences on mental health during the COVID-19 lockdown in Italy. *Frontiers in Psychology*, 3072.

- Evans, S., Alkan, E., Bhangoo, J. K., Tenenbaum, H., & Ng-Knight, T. (2021). Effects of the COVID-19 lockdown on mental health, wellbeing, sleep, and alcohol use in a UK student sample. *Psychiatry Research*, 298, 113819.

- Trabelsi, K., Ammar, A., Masmoudi, L., Boukhris, O., Chtourou, H., Bouaziz, B., ... & ECLB-COVID19 Consortium. (2021). Sleep quality and physical activity as predictors of mental wellbeing variance in older adults during COVID-19 lockdown: ECLB COVID-19 international online survey. *International Journal of Environmental Research and Public Health, 18*(8), 4329.

- Hyun, S., Hahm, H. C., Wong, G. T. F., Zhang, E., & Liu, C. H. (2021). Psychological correlates of poor sleep quality among US young adults during the COVID-19 pandemic. *Sleep Medicine, 78*, 51-56.

- Grevenstein, D., Bluemke, M., Schweitzer, J., & Aguilar-Raab, C. (2019). Better family relationships—higher well-being: the connection between relationship quality and health related resources. *Mental health & Prevention, 14*, 200160.

- Sawczuk, T., Jones, B., Scantlebury, S., & Till, K. (2018). Relationships between training load, sleep duration, and daily well-being and recovery measures in youth athletes. *Pediatric Exercise Science*, *30*(3), 345-352.

- Xiao, H., Zhang, Y., Kong, D., Li, S., & Yang, N. (2020). The effects of social support on sleep quality of medical staff treating patients with coronavirus disease 2019 (COVID-19) in January and February 2020 in China. Medical science monitor: *International Medical Journal of Experimental and Clinical Research, 26*, 923549-1.