

The Behavioural Determinants of Subjective Well-Being: A Normative Analysis

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Abstract

The term Subjective wellbeing can be understood as a state of positive mental health and how people evaluate their quality of life. The episode of subjective well-being incorporates with several important aspects to measure quality of life of the people such as happiness, satisfaction with life, hedonic level, moral etc. In order to find out the quality of life of the people we cannot ignore the importance of sleep quality. Therefore, the present study tried to find out different factors which influence wellbeing or life satisfaction of people. The study was based on primary data and data are collected on the basis of a well-structured questionnaire. Collected data are analysed by using statistical tools like percentage, correlation and regression analysis. The study find out that wellbeing or life satisfaction of the people are influenced by sleep quality of the people as well as income of the people. The study result indicates that wellbeing, happiness or life satisfaction of the people are not only dependent on quantitative variables but also on qualitative variables. Therefore, wellbeing of the people cannot be judged by any single aspect of life but it is multidimensional in nature.

Keywords: Subjective Wellbeing, Life Satisfaction, Happiness, Sleep Quality, Quality of life.

1. Introduction

By stepping towards the behavioural economics dimensions there are a series of questions like what is a good life or well-being, what are the important attributes which influence well-being, how to measure well-being and so on. The contemporary debate among Philosophers and academics on some key issues like whether well-being is related to people's happiness or just a human virtue, subjective feelings and emotion or objective conditions.

Modern day researchers are looking up to behavioural economics as an alternative paradigm to answer contemporary economic questions put by the changing time and temper. Now a days a number of countries looking beyond the GDP by measuring the well-being of the people of an economy. The reason behind looking beyond the GDP of an economy is to bring changes in the measures of success. As we know GDP is an instrument which is basically used to measure economic growth of an economy. But, the picture of GDP of a country does not show a comprehensive measure of success. It failed to measure different important components of well-being like health, education, happiness, life

satisfaction of the people etc. Therefore, it is high time to look beyond the objective measure of growth by understanding the concept of subjective well-being.

“Subjective well-being involves the various ways that people experience in their whole lives. The term subjective well-being assumes that people can meaningfully evaluate their own lives and experience” (Tov & Deiner, 2013). According to researchers from Psychology, hedonic and eudaimonic are the two main streams to understand the concept of subjective well-being.

1.1. Defining Subjective Well-being

The term subjective well-being was propounded by Deiner (1984) as a means to understand how people evaluate their quality of life. The term well-being can be defined as the combination of feeling good and functioning better. Simply put the term subjective well-being can be understood as a state of positive mental health.

The World Health Organization (WHO) defines positive mental health as “a state of well-being in which the individual person realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.

The episode of subjective well-being incorporate within its ambit several important aspects or measures of quality of life of the people such as happiness, satisfaction with life, hedonic level, moral etc. According to Andrew and Withey (1976), subjective well-being has three important components namely, Life Satisfaction (LS), Positive Affect (PA) and Negative Affect (NA). These three components are assessed separately by the researchers for better evaluation.

1.2. Life Satisfaction – A Component of Subjective Well-Being

Life satisfaction can be defined as a contentment with or acceptance of one's life circumstances or the fulfilment of one's need in his entire span of life. Simply we can understand the term life satisfaction as a subjective evaluation process to derive or evaluate quality of life of a person.

Life satisfaction is perpetually used as a synonym for happiness. It indicates to what extent people are happier in their life. The term happiness and satisfaction are interlinked with each other because when a person gets pleased by consuming something which defines fulfilment of expectations and fulfilment of need or expectation lead to being happy in our life.

“Life satisfaction is one of the important or stable components of subjective well-being. In this study to measure life satisfaction of the people SWLS (Satisfaction with Life Scale) were used. Life satisfaction can also be seen as an important indicator of positive subjective well-being.” (Deiner & Deiner, 1995).

1.3. Subjective Well-being vs. Sleep Quality

According to Chin Moi Chow “sufficient sleep is as much as necessary for good health as good nutrition and daily exercise have been.” The term sleep is considered as pillar of good health. Therefore, a person having good sleep resulting in good health and good health leads to good functioning and workability of a body. Contrarily, insufficient sleep leads to number of negative health issues which ultimately reduce working capacity of a person.

For a country like India Sleep deprivation is one of the major problems as it holds second position after Japan in the list of sleep deprivation. There are a number of health issues associated with sleep deprivation like stress, depression, Anxiety etc.

In order to find out the quality of life of the people we cannot ignore the importance of sleep quality. A good quality of sleep represents a good healthy lifestyle and it is very essential for physical, mental and emotional well-being. Therefore, it's an imperative to look into the psychological effect of sleep quality in measuring life satisfaction of people.

The immediate emergence of behavioural economics broadly focused on Psychological research. In order to understand the impact of subjective well-being in our day to day life the present study is an attempt to look into the matter of subjective well-being, its role and impact in the socio-economic life of the people.

2. Review of Literature

Taylor, S.E & Brown, J.D. (1988) in their paper “Illusion & Well-being: A Psychological perspective on Mental Health” stated that majority of happy people having positive conceptions about themselves, optimism about the future and they have better control power to control power to control themselves as well as what goes on around them. High self-esteem is also one of the important characteristics of happy people.

Sfateu et al. (2014) in their paper “The Concept of Well-being in Relation to Health and Quality of life” try to examine the relation exist between well-being and quality of life. The study found out that the term well-being firmly tied with health and the quality of life. The concept of well-being has two dimensions, one is subjective and another one is objective. The study also stated that positive experience of a person led to a high level of well-being and a low level of well-being associated with negative experience of a person.

Sundriyal, R. and Kumar, D.R. (2014) in their paper “Happiness and Well-being” tried to explain several basic interlinked elements of happiness and well-beings. The study also used Maslow’s (1970) Hierarchical Needs Model to explain the link that exists between happiness and well-being. The study found out that happiness and well-being is a state of mind which is build up by three basic interlinked elements such as physical or structural health, psychological or mental health and social health. The study also stated that physical and psychological health is the foundation element of social health and social health leads to the stage of well-being and happiness.

Anand, P. (2016) in his study titled “Happiness, Well-being and Human Development: The Case for Subjective Measures” stated that education lead to enhancement of capabilities; therefore it should lead to more favourable assessment of well-being. He also stated that unemployment is known to be a significant driver of unhappiness, particularly for the people of younger generation.

Jalali, Z. and Heidari, A. (2016) in their paper “The Relationship between Happiness, Subjective Well-being, Creativity and Job Performance of Primary School Teachers in Ramhormoz City” tried to find out the relationship that exists between happiness, subjective well-being, creativity and job performance of primary school teachers in Ramhormoz city. The study found out that happiness and subjective well-being are the strongest predictors of job performance and there is significant relationship between happiness, subjective well-being, creativity and job performance of primary school teachers in Ramhormoz city.

Muresan et al. (2021) in their paper “The Road from Money to Happiness” tried to ascertain the link between salary and happiness through an exploratory study. The study found out that there was a positive relationship between salary and life satisfaction, salary and financial satisfaction, financial satisfaction and happiness, and salary and happiness.

Lyubomirsky, S. & Layous, K. (2013) in their paper “How do Simple Positive Activities Increase Well-Being?” tried to explore the role of positive activities to increase well-being by taking a model which postulates four important variable such as positive emotions, positive thought, positive behaviours and need satisfaction. The study stated that positive activities, such as expressing gratitude or practicing kindness led to increase positive emotions, positive behaviours, positive thoughts and need satisfaction, all of these ultimately enhance well-being.

3. Statement of the problem

The emerging behavioural economic dimension is focusing basically on qualitative aspects on different grounds to understand the real meaning of perceived success in human life. There are a number of studies trying to cover different aspects of subjective well-being to evaluate or determine the quality of life of people. In order to determine the quality of life of the people it’s necessary to find out answer of some questions like, what are the impacts of subjective well-being in the socio-economic life of the people? How happiness and quality of sleep influences certain variables like income and age?

4. Objectives of the study

The main objectives of the present study are:

1. To ascertain how subjective well-being impact the socio-economic life of the people.
2. To analyse how quality of sleep influences quality of life of the people.

5. Hypotheses of the study

Based on above objectives the important hypotheses of the study are:

H₀₁- There is a significant relationship exists between life satisfaction and socio-economic characteristics like age and income of the people.

H₀₂- There is a significant relationship exists between life satisfaction and quality of sleep of the people.

6. Methodology

In order to understand the importance of qualitative or subjective aspects in behavioural economics, researcher are primarily focusing on concepts like happiness, sleep deprivation, life satisfaction, self- control, self-efficacy, decision making capacity etc. The present study has tried to understand the concept of subjective well-being and its role and impact on socio-economic life of the people. The present study is based on primary data. A self -structured questionnaire used to collect data from the respondents. Data are collected from 100 respondents from three important places of Angul Districts namely Athmallik NAC, Malipadar village and Aida village.

For data collection the present study has adopted the interview method as primary method of data collection and the respondents were selected through convenience sampling method. After collection of raw data from the study area data are recorded by creating a master table in MS-Excel. Data normality and validity were tested through the help of SPSS. Cronbach Alpha was used for reliability analysis of the data.

There are number of standardized scales developed by the American Psychological Association to measure subjective aspects of living. In order to measure life satisfaction of the people SWLS scale has been adopted. For the measurement of sleep quality of respondents the standard Pittsburgh Sleep Quality Index (PSQI) was used.

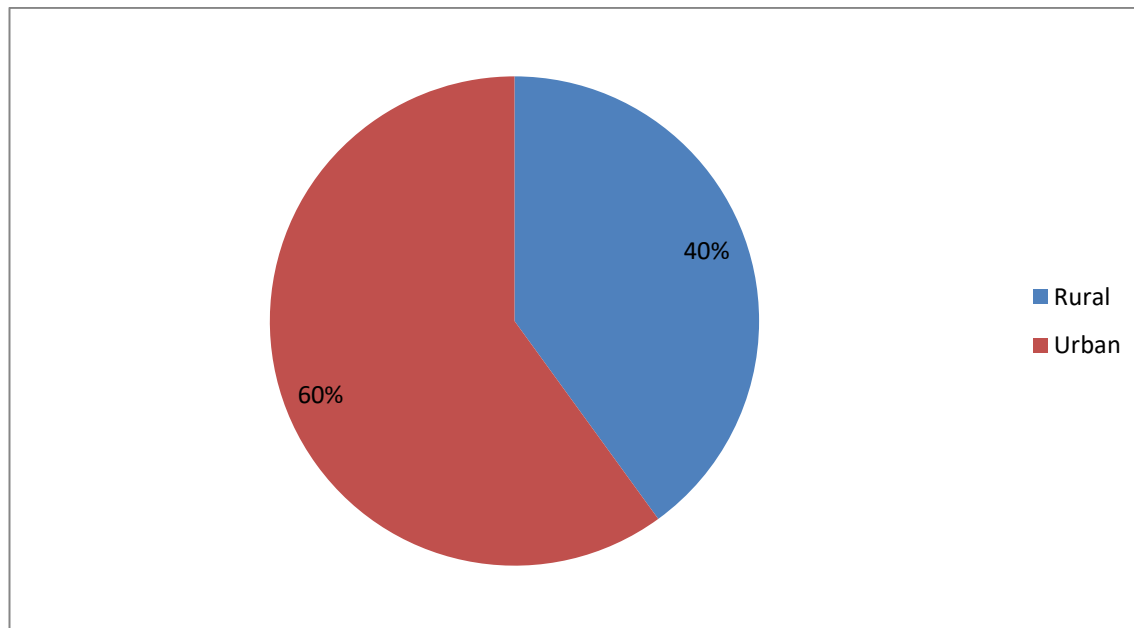
For the analysis of data descriptive statistics such as percentage, correlation, regression, multiple correlations and multiple regressions were used to understand the impact of subjective well-being on the socio-economic life of the people.

7. Data Analysis and Interpretation

The behavioural economics dimension basically giving importance to the qualitative or subjective attributes which based upon individuals attitude and behaviour. In order to understand the importance of subjective well-being in determining or evaluating the quality of life, this study is based on primary data collected by Shraddhanjali Mishra and Dr. Uma Charan Pati for M.Phil. dissertation work titled "The Economics of Sleep: A Behaviorist Perspective". For the analysis of data statistical tools like percentage, regression and correlation are used and for the representation of data bar diagram and pie chart have been used.

7.1. Sample distribution according to Region: Data are collected from both rural and urban areas.

Figure-1: Sample distribution according to Region

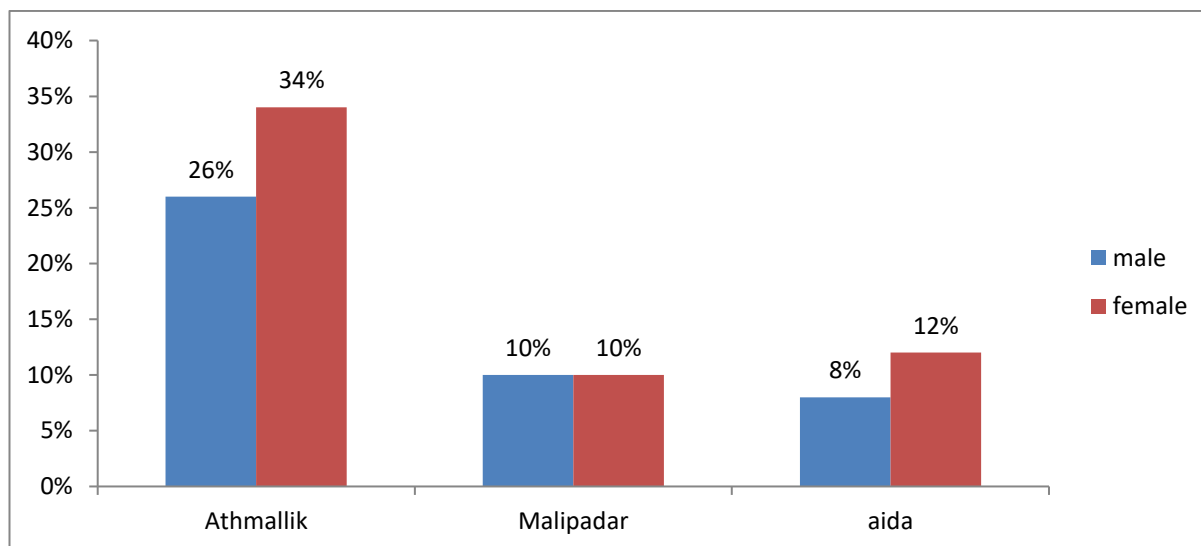


Source: Compiled from primary data, 2023

From above figure it is clear that 40% respondents are taken from rural areas and remaining 60% are from urban areas.

7.2. Demographic Study based on Gender: Data are collected from both male and female respondents.

Figure-2: Demographic profile based on gender

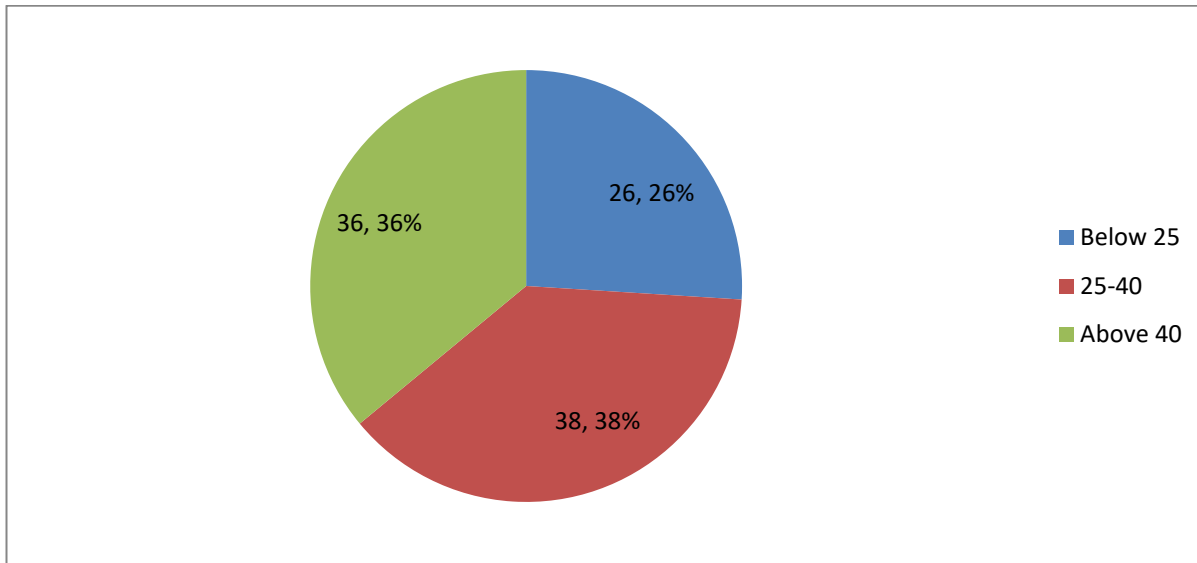


Source: Compiled from primary data, 2023

Above figure shows the demographic profile of the study area based on gender. Above figure indicates that from Athmallik NAC 26% respondents are male and 34% respondents are female. From Malipadar village 10% respondents are male and 10% respondents are female. And from Aida village 8% respondents are male and 12% respondents are female.

7.3. Demographic study based on Age Group: Sample data are recorded and represented on the basis of three different age groups that are below 25 years, above 25 years and below 40 years and above 40 years.

Figure-3: Demographic profile based on age group



Source: Compiled from primary data, 2023

From the above pie chart it is clear that highest percentage of respondents are from the age group of 25-45 which is 38%, 36% of respondents are in the age group of above 40 and only 26% of respondents are in the age group of below 25.

7.4. Demographic Profile based on Educational Qualification: In order to understand the demographic profile on the basis of educational qualification of the respondents of the study area the sample data are classified into three groups based on educational qualification of respondents namely, illiterate, up to 10th and higher education.

Table-1: Sample distribution according to educational qualification

Sl. No	Educational Qualification	No. of respondents	Percentage
1	Illiterate	19	19%
2	Up to 10 th	16	16%
3	Higher	65	65%
Total		100	100%

Source: Compiled from primary data, 2023

As per the above table higher percentage of respondents are having higher level of educational qualification which is 65%. Only 16% respondents are having up-to 10th level of educational qualification and remaining 19% are illiterate.

7.5. Monthly Income of the Respondents: Income is believed to have a significant influence on people's life satisfaction as well as sleep quality. So information on respondent's monthly income levels is collected. Respondents are categorized into three income groups like below 9000, between 9000 and 30,000 and above 30,000.

Table – 2: Sample distribution according to monthly income of the respondents

Sl.no	Income	No. of respondents	Percentage
1	Below 9000	33	33%
2	9000-30,000	42	42%
3	Above 30,000	25	25%
Total		100	100%

Source: Compiled from primary data, 2023

Above table information stated that highest percentage of respondents fall in the monthly income range of 9000-30000 which is 42% of the total per cent. Another 33% respondent's income range is below-9000 and remaining 25% respondents monthly income range is 25%.

7.6. Life Satisfaction Measurement of the Respondents: To measure life satisfaction of the people one standardized scale namely SWLS (Satisfaction with Life Scale) developed by Danier in 1985 was used. It's a 7-point Likert Scale and the scale consists of five questions.

Table –3: Sample distribution according to satisfaction with life scale

Category of SWLS	Number Of Respondents	Percentage
Extremely satisfied	9	9%
Slightly satisfied	14	14%
Satisfied	56	56%
Neutral	4	4%
Dissatisfied	8	8%
Slightly dissatisfied	9	9%
Extremely dissatisfied	0	0%
Total	100	100%

Source: Compiled from primary data, 2023

Above table indicates that higher percentages of respondents are satisfied with their life which is 56% of the total whereas 14% of respondents are slightly satisfied, 9% are extremely satisfied, 8% are dissatisfied with their life, 4% respondents are in neutral and remaining 9% respondents are slightly dissatisfied with their life.

7.7. Sample Distribution According To Pittsburg Sleep Quality Index: In order to find out the good quality sleepers and bad quality sleepers the Pittsburg sleep quality index has been used.

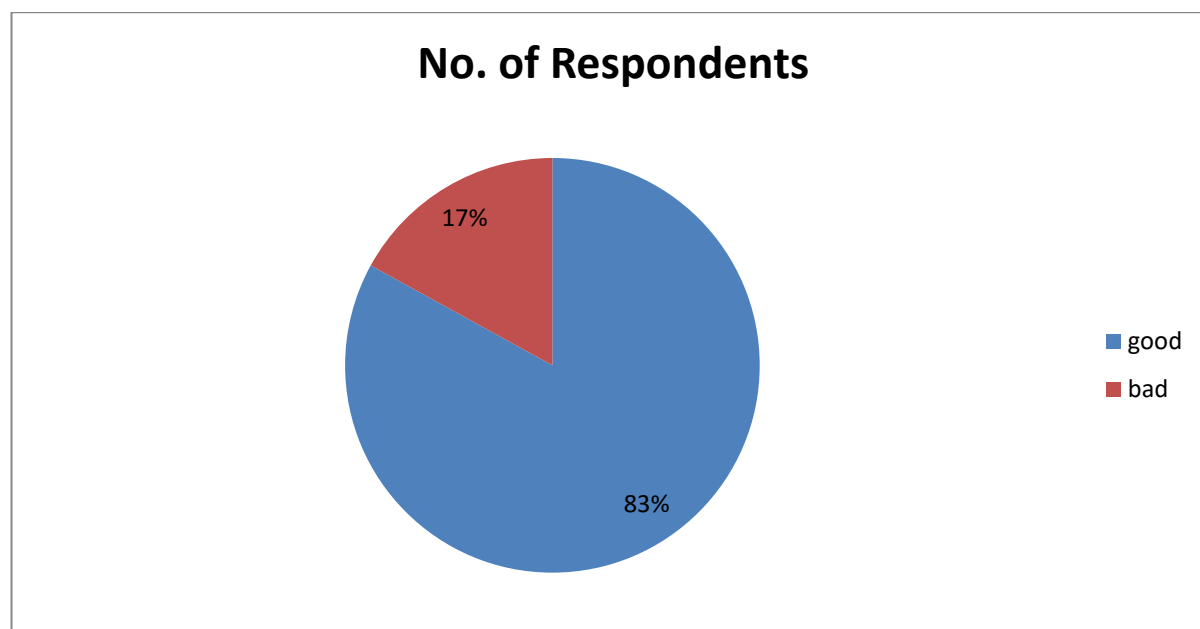
Table-4: Sample distribution according to Pittsburg Sleep Quality Index

SLEEP QUALITY	GOOD	BAD	TOTAL
No of respondents (%)	83%	17%	100%

Source: Compiled from primary data, 2023

From above table it is clear that more than 80% respondents having good quality of sleep and remaining 17% having bad quality of sleep.

Figure –4: Sample distribution for Pittsburg Sleep Quality Index



Source: Compiled from primary data, 2023

Above pie diagram indicates that majority of respondents are having good quality of sleep which is 83% and only small portion of respondents having lower or bad quality of sleep which is 17% of total per cent.

7.8. CORRELATION BETWEEN SWLS AND AGE:

Table-5: CORRELATION BETWEEN SWLS AND AGE

	SWLS	AGE
SWLS PEARSON CORRELATION SIG.(2-TAILED)	1	.248 .013
N	100	100
AGE PEARSON CORRELATION SIG.(2-TAILED)	.248 .013	1

TAILED)		100
N	100	

*CORRELATION IS SIGNIFICANT AT THE 0.01 LEVEL (2-TAILED)

Source: Compiled from primary data, 2023

Above correlation result indicate that there exists a positive correlation between SWLS and Age of the respondents in the study area. Higher the age, better is the status of people in terms of life satisfaction. Hence, the U-hypothesis in happiness measurement is not a reality in India.

7.9. RESULT OF REGRESSION: LIFE SATISFACTION (DEPENDENT) & AGE (INDEPENDENT)

MODEL SUMMERY

MODEL	R	R SQUARE	ADJUSTED SQUARE	R	STD. ERROR OF THE ESTIMATE
1	.248	.061	.052		5.52270

A.DEPENDENT VARIABLE SWLS

B.INDEPENTDENT VARIABLE AGE

Above regression result shows that age factor put only 6% of impact on life satisfaction of the peoples of study area. It implies that although age and happiness are positively related, the strength of relationship is poor in the study area. Hence, we can draw home the point that happiness or life satisfaction can't be seen in terms of age of the people alone. There are other significant factors which must be explored to understand the problem in proper perspective.

7.10. REGRESSION BETWEEN LIFE SATISFACTION AS (DEPENDENT) VARIABLE AND SLEEP QUALITY AS (INDEPENDENT) VARIABLE

MODEL SUMMERY

MODEL	R	R SQUARE	ADJUSTED SQUARE	R	STD ERROR IN THE ESTIMATE
1	.091	.008	-.002		5.677

Predictors sleep quality

DEPENDENT VARIABLE LIFE SATISFACTION

INDEPENDENT VARIABLE SLEEP QUALITY

Regression result stated that sleep quality of the people also impacting life satisfaction or wellbeing of the people. As the regression analysis based on behavioural attributes its R Square value is very minimal. Here we accept H_0 as there is a relationship exist between life satisfaction and sleep quality of the people.

7.11. REGRESSION OF LIFE SATISFACTION (DEPENDENT VARIABLE) SLEEP QUALITY, INCOME (INDEPENDENT VARIABLES)

MODEL SUMMERY

MODEL	R	R SQUARE	ADJUSTED R SQUARE	STD ERROR OF THE ESTIMATE
1	.159	.025	.005	5.657

PREDICTORS (SLEEP QUALITY) AS WELL AS (INCOME)

When we take life satisfaction as a dependent variable and sleep quality & income as independent variables, the regression results stated that both the R square as well as Adjusted R square values are showing increasing tendency. So, what is drawn from the result is that life satisfaction of the people depends on both qualitative as well as quantitative aspects of life.

7.12. LIFE SATISFACTION (DEPENDENT VARIABLE) SLEEP QUALITY, INCOME, AGE (INDEPENDENT VARIABLES)

MODEL SUMMERY

MODEL	R	R SQUARE	ADJUSTED R SQUARE	STD ERROR OF THE ESTIMATE
1	.293	.086	.057	5.508

PREDICTORS- SLEEP QUALITY, INCOME, AGE

When we again add one extra independent variable i.e. age in the above regression model the result shows that there is again increase in the R square as well as Adjusted R Square values. Therefore, here we can infer that life satisfaction or wellbeing of the people are not only influenced or depend on single factor but by multiple factors. Hence, the hypothesis H_01 is accepted as there is a significant relationship exist between life satisfaction and socio-economic factors like age and income of the people.

7.13. Multiple correlation between SWLS, SLEEP QUALITY, INCOME and AGE (INDEPENDENT VARIABLES)

Correlations

		SWLS	Sleep Quality	Income	AGE
SWLS	Pearson Correlation	1	-.159	.275*	.201
	Sig. (1-tailed)		.164	.043	.107
	N	40	40	40	40
Sleep Quality	Pearson Correlation	-.159	1	-.233	.150
	Sig. (1-tailed)	.164		.074	.177
	N	40	40	40	40
Income	Pearson Correlation	.275*	-.233	1	.098
	Sig. (1-tailed)	.043	.074		.273
	N	40	40	40	40
AGE	Pearson Correlation	.201	.150	.098	1
	Sig. (1-tailed)	.107	.177	.273	
	N	40	40	40	40

*. Correlation is significant at the 0.05 level (1-tailed).

From the multiple correlation result it is clear that there is having a significant association between life satisfaction (SWLS), sleep quality, income and age. Therefore, here we accept the hypotheses H_01 and H_02 .

8. Findings of the Study

From the results involving the use of correlation and regression analysis we infer the following-

1. From the result of correlation analysis it is clear that there is having a positive correlation between SWLS (Life satisfaction) and Age of the respondents in the study area. Meaning thereby the U-hypothesis of Gallop Study on happiness is not found in the Indian context.
2. Although R Square and Adjusted R Square value are very low as the regression analysis is based on subjective behavioural variables but addition of extra variables like age and income as independent variables has increased the Adjusted R square value. Therefore, regression result stated that wellbeing or life satisfaction of people is not a single-factor phenomena rather it is conditioned by multiple factors mostly of behavioural types.
3. Further, life satisfaction or wellbeing of people is not only influenced by quantitative variables but qualitative variables do impact it in multiple ways.
4. The results throw lights on the linkages between happiness and sleep quality. People across different age groups and from rural to urban areas have reported the strong linkages between sleep quality and the psycho-economic satisfaction with life. How happy people are dependent to a major extent on their sleep quality and related behavioural variables.

9. Conclusion

The present study aims to explore different factors which influence well-being or life satisfaction of the respondents. what is inferred from the study is that life satisfaction or well-being of the people is not only limited to quantitative factors like income or age but also qualitative factors like sleep quality do have a major impact. Therefore, here we conclude that well-being or happiness of the people is measured in terms of GDP or National income and also qualitative factors like Gross National Happiness, Sleep Quality of people etc. In the world of 21st century youth of the country are facing many problems such as stress, anxiety, depression etc. which are the negative factors of their life and because of these constraints they are not happy or less satisfied with their life. So, in order to make development in the country we can't ignore the importance of behavioural economic aspects of living and sustenance like emotion, believes, perception, asymmetric information, identity aspect of behaviour and so on.

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