ABW 508 ANALYTICS LAB

WORK-LIFE BALANCE PREDICTION MODEL BASED ON LIFE AND JOB SATISFACTION SCORE

Student Name:	Dimas Suryadiyanto
Matric No:	P-EM0971/22
Programme Study:	Master of Business Analytics
Email:	suryadiyanto.dimas@student.usm.my
Submission Year:	2024
Supervisor:	Professor Dr. Azizah Omar Marketing Section School of Management 11800 Penang, Malaysia. Email: aziemar@usm.my

Semester 1
Academic Session 2023/2024
School of Management
Universiti Sains Malaysia

Table of Contents

List of Figures

List of Table

Acknowledgement

I would like to extend my deepest gratitude to a number of people whose assistance, support, and guidance were invaluable during the course of this research.

First and foremost, my sincere thanks go to my academic advisor, Prof. Dr. Azizah Omar, whose expertise and knowledge were paramount in providing a well-rounded experience throughout this research project. Her patience, encouragement, and critical insights have been a great source of inspiration and have made this study a reality.

Special thanks are due to Pacmann, especially Adit and Cahya for their materials in The Introduction to Machine Learning class that helped me to build a solid foundation on how to create machine learning model from data preparation until interpreting the result.

Finally, I must express my very profound gratitude to my family for providing me with unfailing support and continuous encouragement throughout my period of study and through the process of researching and writing this research project. This accomplishment would not have been possible without them.

Dimas Suryadiyanto

January, 2024

Chapter 1

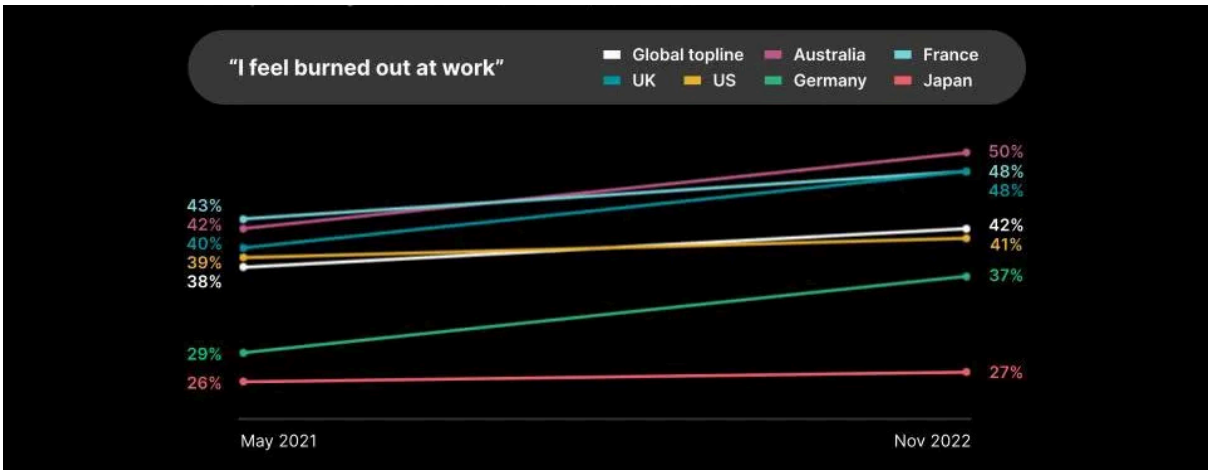
INTRODUCTION

1.1 Background

Burnout rates are steadily rising on a global scale. Future Forum (2023) reports a marginal 2% rise in burnout instances within the workforce, marking the highest level since May 2021. Presently, a significant portion of the labour force, specifically 42%, is experiencing burnout.

Figure 1.

The rise of a number of burnout workers



Note. The chart was showcased during the Future Forum Pulse, namely Wave 9, which took place from November 16th to December 22nd, 2022. The total number of completed replies for this research study was 10,243.

According to the same research, women and workers under the age of 30 are more prone to experiencing burnout compared to other persons. Around 48% of persons between the ages of 18 and 29 reported experiencing fatigue, while only 40% of individuals aged 30 and older did so. In addition, women (46%) reported a higher prevalence of burnout compared to males (37%).

Women and younger individuals in the workforce are more prone to burnout compared to other groups, mostly due to a confluence of multiple factors. According to experts, the COVID-19 pandemic and economic concerns have increased stress and decreased interest among these particular individuals (Overton, 2023).

Employee burnout statistics reveal that various factors contribute to the disproportionate experience and impact of stress among different groups. Nevertheless, burnout can also be influenced by several factors, including demanding job conditions, external stresses, and individual attitudes. According to the 2022 Asana study, persons who experience burnout are also likely to encounter reduced morale (36% of people), lower engagement (30%), higher rates of errors (27%), and breakdowns in communication (25%). Furthermore, there is a greater likelihood (25%) that they will voluntarily terminate their employment with the organization. According to the 2023 Deloitte/Workplace Intelligence poll, 47% of employees had voluntarily left their jobs in the past owing to the negative effects on their well-being. In addition, a significant proportion of employees, namely 57%, are currently considering quitting their existing employment to obtain a job that provides improved support for their general well-being.

The incidence of burnout is increasing due to the enduring stress of meeting deadlines, achieving goals, and responding to emails at any time. Therefore, achieving work-life balance in the modern office is a challenging endeavour (Corporate Wellness Magazine, 2023). Concerning further aspects of work-life balance, Tugsal (2017) argues that in order to guarantee the sustained profitability and effectiveness of companies, employees have begun to dedicate more time to their work within the office or carry out work-related duties at home. Moreover, other circumstances impact the balance between work and personal life, encompassing daily issues such as childcare or taking care of ageing relatives, alongside household duties like cleaning and shopping.

The notion of Work-life Balance has gained recognition as a crucial aspect for both organizations and individuals in recent decades. Research has demonstrated that it effectively improves staff productivity, thereby having a favourable impact on corporate performance ((Murthy & Guthrie, 2012). The organization's successful implementation of a work-life balance plan allows employees to actively participate in the community, while also

effectively controlling expenses and reducing employee turnover, thereby improving productivity (R. Helmle et al., 2014).

Effectively managing the welfare and efficiency of employees presents a considerable obstacle in the realm of human resource management. Employee engagement is widely regarded as a dependable indicator of strong mental well-being (Nielsen et al., 2008). The optimal physical and mental health of employees is of utmost importance, as studies have demonstrated its direct impact on the financial success of a company. Studies have shown that people who have positive emotions and have reduced stress levels in both their work and personal lives are more likely to be content with their professions. The level of contentment experienced by individuals can significantly influence their total state of welfare and the achievements of their company (Koubova and Buchko, 2013).

Although work engagement, career satisfaction, and subjective well-being are consistently correlated and reflect stable patterns within persons across time, scholars and practitioners primarily focus on employee engagement. This is due to the fact that individuals who are engaged exhibit elevated levels of motivation and demonstrate increased levels of interest in their work and the groups they belong to (Shaffer et al., 2015). These individuals exhibit increased productivity and a greater inclination to beyond their expected contributions, bolstering the organization's ability to survive and thrive (Shaffer et al., 2015; Obeidat et al., 2018).

1.2 Problem Statement

Historically, human resource practitioners have typically focused on evaluating past performance and providing rewards as a means of incentivizing improved performance. However, this fails to recognize the inherent interests of employees who perform the tasks, thereby making it inadequate (Tamunomiebi & Oyibo, 2020). Currently, organizational policies are designed to establish a favourable atmosphere for enhancing employee motivation, utilizing both internal and external methods, to enhance and maximize performance (Tamunomiebi & Oyibo, 2020). Following Thevanes and Mangaleswaran (2018), firms are prioritizing the implementation of various high-performance human relations strategies and initiatives to enhance employee performance. Work-life balance is recognized as a crucial instrument in achieving this goal.

In modern times, achieving a harmonious equilibrium between work and personal life has increasingly emerged as a prominent priority for both employers and employees across many businesses. Recently, there has been a surge in the contemplation of the impact that work has on both the family and personal lives of employees. Consequently, this circumstance has prompted much research on the work-life balance of persons in the workplace. Particularly in the contemporary global business landscape, there is a notable blending of professional responsibilities with personal responsibilities. Advancements in technology and intense competition have expanded the scope of labour beyond the office space. Consequently, the burden of work on employees' personal lives is often substantial (Uzoechi & Babatunde, 2012). Hence, attaining work-life equilibrium in the current era of rapid globalization and intense competition, while also striking a harmonious blend between one's professional and personal life, poses a formidable task for the majority of individuals in the workforce (Sivatte, Gordon, Rojo, & Olmos, 2015).

1.3 Objective of The Study

This study aims to investigate the correlation and predictive relationship between individuals' personal and professional lives, and how these factors impact their work-life balance and overall life satisfaction.

Another purpose is to generate insights that will aid companies or mental health service providers with employee wellness programs in developing tailored programs to enhance the efficacy of their initiatives.

1.4 Conclusion

In general, the increasing prevalence of burnout worldwide, as shown by Future Forum (2023), indicates a significant issue impacting 42% of the labour force, particularly affecting women and persons below the age of 30 who are more vulnerable to it. Studies conducted by Asana (2022) and Deloitte/Workplace Intelligence (2023) have identified contributing elements that highlight the intricate nature of burnout and its consequences, which include reduced morale and higher rates of resignation.

The modern work environment, marked by ongoing demands and difficulties in attaining a healthy work-life equilibrium, emphasizes the need to tackle this matter. This research seeks to investigate the association between work-life balance and personal and professional lives, highlighting the interdependence of these areas, while acknowledging their significance for individuals and companies.

Regarding the problem statement, traditional methods of assessing employee performance are deemed insufficient, leading to a shift towards establishing a favourable atmosphere that fosters motivation and exceptional performance. The contemporary setting emphasizes the importance of achieving a harmonious equilibrium between work and personal life, as a result of the integration of professional and personal obligations propelled by technological progress and fierce competition.

The study aims to elucidate the complex interrelationships between personal and professional lives, investigating their influence on work-life balance and overall life satisfaction. The ultimate goal of the insights provided is to help companies and mental health service providers customize wellness programs to be more effective in addressing these crucial challenges.

Chapter 2

LITERATURE REVIEW

2.1 Work-Life Balance

Barrera (2007) defined work-life balance as the collaborative effort of employers and employees to establish arrangements that consider both the business requirements and the personal lives of employees. This formulation explicitly assigns the duty of attaining equilibrium to both the employer and the employee. Nevertheless, certain authors delineate it such that the onus of attaining equilibrium is assigned to the employee, for instance. Kirchmeyer (2000) defined well-being as the attainment of fulfilling experiences in all areas of life. This demands the effective allocation of personal resources, such as energy, time, and commitment, across different domains. Work-life balance can be defined also as the degree to which an individual is actively involved and equally content with their professional responsibilities and family responsibilities (Greenhaus et al., 2003).

An alternative perspective on work-life balance is that it encompasses two main aspects: active involvement in both work and nonwork activities, and a lack of conflict between these two domains (Sirgy & Lee, 2017). To attain work-life balance, individuals must actively participate in social roles both in their professional life and in their personal life outside of work. Participating in many roles enhances performance in those roles, leading to enjoyment that extends to various areas of life (Kirchmeyer 2000). Work-life conflict leads to significant stress and diminishes pleasure in both work and non-work domains (Fisher et al., 2009). Work-life balance encompasses the interplay of intense involvement in both work and nonwork areas, as well as the absence of conflicts between work-related responsibilities and other social obligations in one's personal life (Sirgy & Lee, 2017).

2.2 Life Satisfaction

Life satisfaction refers to the cognitive aspect of subjective work-life balance, which involves an individual's evaluation of their overall well-being, health, social relationships, life value, and self-contentment (Dimec, Mahnič, Marinšek, Masten & Tušak, 2008). Life satisfaction is a broad concept that refers to a universal sentiment and outlook on life, which can range from

negative to positive. It encompasses contentment regarding past experiences, prospects, and how others perceive an individual's existence (Diener, 1984).

Diener (1984) identifies three primary factors that determine life satisfaction. The primary factor is that satisfaction is subjective, indicating that the experience of satisfaction is based on an individual's perception. The second factor to consider is that subjective satisfaction is influenced by positive criteria. The third clause asserts that subjective contentment encompasses a comprehensive evaluation of all aspects of an individual's life. Other research also indicates that those who experience higher levels of life satisfaction also tend to experience higher levels of job satisfaction. Similarly, those who are more content with their work also tend to have higher levels of overall life satisfaction (Rus & Tos, 2005). Furthermore, the equilibrium between work and personal life has an impact on both the contentment derived from one's occupation and the overall contentment in life (Kashyap, Joseph & Deshmukh, 2016).

2.3 Job Satisfaction

The topic of job satisfaction has long been a subject of interest for scholars due to its crucial impact on organizational effectiveness (Maslow, 1981). Job satisfaction is a multifaceted and intricate notion that is subject to individual interpretation. It is frequently examined in the context of motivation, but it is distinct from it. It can be understood as an individual's ability to see and understand things, as well as their internal sensations and emotions. This can be associated with a person's sense of accomplishment (Mullins, 2005). There are two distinct attitudes towards the job: one is good, and the other is negative. The citation is from Abdul, Ismail, and Jaafar's work in 2010. It is universally recognized that individuals tend to have a positive attitude towards their jobs when they experience a high level of job satisfaction. Conversely, individuals tend to have a negative attitude towards their job when they are dissatisfied with it. The term "employees' attitude" is often used interchangeably with the concept of employee job satisfaction (P. Robbins & Coulter, 2004).

Job satisfaction can also be defined as a pleasurable emotional state (Al Jenaibi, 2010) and is a strong indicator of organizational citizenship behaviour (Gyekye & Haybatollahi, 2015) . Curral & Organ (1988) proposed that job satisfaction consists of two elements: an emotional component and a non-emotional (cognitive) component. The affective component pertains to

the employees emotional condition, whereas the non-affective (cognitive) component relates to the satisfaction derived from evaluating job performance. Alotaibi (2001) have identified job satisfaction as a prominent subject of interest in the fields of industrial/organizational psychology, organizational behaviour, and social psychology. This aspect has been extensively studied in the literature of these disciplines. Job satisfaction significantly influences evaluations of the work environment (Sharma and Singh, 2016) and typically enhances employee performance (Al Jenaibi, 2010). Job satisfaction is influenced by the emotional connection that person has with their employer and their work. This connection is affected by various elements, both intrinsic and extrinsic, that provide rewards. Payment is a significant determinant of job satisfaction since it serves a crucial role in meeting employees' fundamental requirements, including food, shelter, clothes, and symbols of social standing (Frame & Hartog, 2003).

2.4 Work-Life Balance to Employee Performance

Amidst the current era of technological progress and global interconnectedness, there is a growing preoccupation with how individuals can effectively balance their personal lives and achieve exceptional professional performance. This has prompted academics to investigate whether these objectives are contradictory or mutually beneficial (Koubova & Buchko, 2013). The challenge of achieving a proper equilibrium between individual effort and the resulting advantages is closely linked to the lack of control over workload and insufficient energy to meet personal requirements and obligations. According to Johari et al. (2018), the presence of an imbalance between the effort exerted and the corresponding rewards leads to weariness, diminished performance, and a deterioration in the overall quality of life. Work-life imbalance in the workplace is primarily influenced by technological advancements, giving rise to three main challenges.

The primary issue is the potential dangers to work-life balance caused by advancements in the workplace. Another concern is the unpredictable nature of work activities, particularly those involving technology, which requires constant knowledge improvement. Lastly, there are anxieties related to changing work demands (Helmleet al., 2014). Regrettably, certain supervisors exhibit hesitancy in implementing flexible arrangements, citing concerns of hasty decision-making and potential misuse of these protocols (Susana & Ramón, 2013). The

work-life balance has a significant impact on the attitudes, behaviours, and well-being of employees, as well as the overall effectiveness of the organization.

Au and Ahmed (2014) argue that organizations should adopt new management processes that offer both collective and managerial support. The attitudes of supervisors towards the work-life conflict experienced by their workers significantly influence the advancement of their careers (Au & Ahmed, 2014). In recent years, there has been significant scrutiny of the work-life balance, with a special focus on enhancing the flexibility of paid employment and enhancing working conditions. Employees who had excessive workloads were shown to have a bad work-life balance, were less likely to be fully engaged in their occupations, and exhibited subpar job performance.

Furthermore, stress is a significant aspect of an individual's professional well-being, similar to emotional weariness. In the context of hotel employees, stress has been found to have a detrimental impact on their overall quality of life (Lawson et al., 2013). Furthermore, hotel staff have observed that the overflow of stress intensifies the strain on their work-life balance. (Hon & Chan, 2013).

The importance of work-life balance has been recognized by businesses and individuals for several decades. The impact of work-life balance on employee productivity and organizational performance has been well-established (Semlali & Hassi, 2016). Ogechi and Nwaeke (2019) discovered that in Nigeria, part-time work and delegation of jobs improve employees' task completion about work-life balance (WLB) and job performance. Organizations must establish a work-life balance strategy that effectively enables employees to maintain social connections with society, while also managing costs and turnover, and enhancing productivity (Helmle et al., 2014).

Chapter 3

METHODOLOGY

3.1 Data Collection

The research presented here utilized data from the individual lifestyle and well-being database accessible on Kaggle. The data was collected between 2015 and 2021, encompassing 15,972 survey replies. These responses consist of 24 variables related to both life and career happiness.

The dataset originates from a survey conducted by Authentic Happiness, which investigated life happiness. Unfortunately, the survey and the website URL were no longer accessible to the researcher while the data was collected in November 2023.

The dataset quantifies life and job satisfaction across the following five dimensions:

1. Physical Awareness, which mirrors physical fitness and healthy lifestyle choices.
2. Mental awareness reflects one's ability to welcome good feelings effectively.
3. Expertise refers to the level of knowledge and skill in a particular area. It involves the ability to continuously improve and do something distinctive.
4. Social Connection, evaluating the robustness of your social network and propensity to explore the world.
5. Life meaning, the purpose is to assess the level of empathy, benevolence, and the extent to which they are fulfilling their ideal lifestyle.

Although the description does not provide information about the independent and dependent variables, the researcher utilizes the work_life_balance_score as the dependent variable and other variables as independent variables, except for age and gender. The dataset's characterization is provided in Table 1, which includes details about the data type and a brief explanation of the attributes.

Table 1

Data type of attributes of the individual lifestyle and well-being dataset

Attributes	Dimensions	Data Type	Measurement Type
ACHIEVEMENT	Expertise	Integer	Ordinal
SUFFICIENT_INCOME	Expertise	Integer	Ordinal
PERSONAL_AWARDS	Expertise	Integer	Ordinal
TO_DO_COMPLETED	Expertise	Integer	Ordinal
DONATION	Life Meaning	Integer	Ordinal
LIVE_VISION	Life Meaning	Integer	Ordinal
TIME_FOR_PASSION	Life Meaning	Integer	Ordinal
LOST_VACATION	Life Meaning	Integer	Ordinal
DAILY_STRESS	Mental Awareness	Integer	Ordinal
FLOW	Mental Awareness	Integer	Ordinal
DAILY_SHOUTING	Mental Awareness	Integer	Ordinal
WEEKLY_MEDITATION	Mental Awareness	Integer	Ordinal
FRUITS_VEGGIES	Physical Awareness	Integer	Ordinal
BMI_RANGE	Physical Awareness	Integer	Ordinal
DAILY_STEPS	Physical Awareness	Integer	Ordinal
SLEEP_HOURS	Physical Awareness	Integer	Ordinal
PLACES_VISITED	Social Connection	Integer	Ordinal
CORE_CIRCLE	Social Connection	Integer	Ordinal

SUPPORTING_NETWORKS	Social Connection	Integer	Ordinal
SOCIAL_NETWORK	Social Connection	Integer	Ordinal
AGE	-	Integer	Nominal
GENDER	-	String	Nominal
WORK_LIFE_BALANCE_SCORE	-	Integer	Ratio

There are no missing values in any of the variables. However, we choose to exclude the Timestamp characteristics as they do not contribute to the research. The dataset has 15,792 rows; after removing the Timestamp, it is reduced to 23 columns.

Since the url of the survey isn't available anymore, the interpretation of the attributes quite challenging. So the interpretation of the result is based on assumption and knowledge of the researcher itself. The interpretation of the data that use the Likert Scale could be looked in the table below:

Table 2

Interpretation of attributes in the dataset

Attributes	Min	Max	Notes
FRUITS_VEGGIES	0	5	0 - Consume very few fruits or vegetables, 5 - Consume a significant amount of fruits or vegetables
DAILY_STRESS	0	5	0 - Walk very few steps daily, 10 - Walk a significant number of steps daily
PLACES_VISITED	0	10	0 - Rarely visit new places, 10 - Frequently visit new places
CORE_CIRCLE	0	10	0 - Very few close connections, 10 - Large and close social circle
SUPPORTING_OTHERS	0	10	0 - Rarely help others achieve a better life, 10 - Frequently help others achieve a better life
SOCIAL_NETWORK	0	10	0 - Limited social interactions, 10 - Extensive social interactions during a typical day

ACHIEVEMENT	0	10	0 - No remarkable achievements, 10 - Numerous remarkable achievements
BMI_RANGE	1	2	1 - BMI within the healthy range, 2 - BMI outside the healthy range
DONATION	0	5	0 - Rarely donate time or money to good causes, 5 - Frequently donate time or money to good causes
TODO_COMPLETED	0	10	0 - Unable to complete tasks on the to-do list, 10 - Consistently completes all tasks on the to-do list
FLOW	0	10	0 - Rarely experience "flow," 10 - Frequently experience "flow" during the day
DAILY_STEPS	1	10	1 - Walk very few steps daily, 10 - Walk a significant number of steps daily
LIVE_VISION	0	10	0 - No clear life vision, 10 - Life vision is very clear for many years ahead
SLEEP_HOURS	1	10	1 - Very little sleep, 10 - Sufficient sleep duration
LOST_VACATION	0	10	0 - Never lose vacation days, 10 - Consistently lose all available vacation days
DAILY_SHOUTING	0	10	0 - Never shout or sulk, 10 - Shout or sulk frequently
SUFFICIENT_INCOME	1	2	1 - Income is not sufficient to cover basic expenses, 2 - Income is sufficient to cover basic expenses
PERSONAL_AWARDS	0	10	0 - No recognitions received, 10 - Numerous recognitions received
TIME_FOR_PASSION	0	10	0 - No time spent on passion, 10 - Spends a significant amount of time daily on passion
WEEKLY_MEDITATION	0	10	0 - Rarely have the opportunity for self-reflection, 10 - Frequently have the opportunity for self-reflection

Prior to processing the data, the researcher will reclassify the attributes of DAILY_SHOUTING and LOST_VACATIONS, as they indicate that greater values are associated with negative meanings. For instance, if the Likert Scale ranges from 0 to 10, selecting answer 0 will be converted to 10, and vice versa.

To summarize, the comprehensive Likert scale includes a wide range of factors that allow for a detailed assessment of an individual's accomplishments, financial stability, personal acknowledgment, lifestyle preferences, emotional welfare, health behaviors, and social

involvement. This comprehensive method guarantees a comprehensive comprehension of an individual's experiences and choices across multiple dimensions of life.

3.2 Data Preprocessing & Transformation

The original file has 15,972 rows and 24 columns. There are no missing values in each column. However, one of the entries in the DAILY_STRESS column has to be eliminated because it contains an erroneous value. The value should be numeric within the range of 0 to 10. However, the value provided, "1/1/00", is invalid. After deletion, the dataset consists of 15,971 rows with the same amount of columns.

Upon completing the data cleaning process, the column containing categorical data such as DATE, GENDER, and AGE is eliminated to facilitate the creation of the machine learning model. Hence, the independent variables to be utilized in the modeling process encompass all columns, with the exception of WORK_LIFE_BALANCE_SCORE, which will serve as the dependent variable.

The train-to-test ratio is 70:30, indicating that the train dataset contains 11,180 items and the test dataset contains 4,791 entries. Before performing the test, it is essential to check if the data is need to be scaled using the sklearn library or not. To ensure that all variables have an equitable impact on the modelling process, this research will only use the variables that have similar range of Likert Scale from 0 until 10, so the variables that will be use are only 'PLACES_VISITED', 'CORE_CIRCLE', 'SUPPORTING_OTHERS', 'SOCIAL_NETWORK', 'ACHIEVEMENT', 'TODO_COMPLETED', 'FLOW', 'DAILY_STEPS', 'LIVE_VISION', 'SLEEP_HOURS', 'LOST_VACATION', 'DAILY_SHOUTING', 'PERSONAL_AWARDS', 'TIME_FOR_PASSION', and 'WEEKLY_MEDITATION'.

3.3 Descriptive Analysis

In order to do a descriptive analysis, the researcher will employ multiple approaches, including data distribution analysis. This involves studying the distribution of important numerical variables through the use of histograms or box plots. The second approach involves conducting categorical data analysis, specifically examining the "AGE" and

"GENDER" columns to gain insights into their distribution. The third approach involves conducting correlation analysis to examine the relationship between different parameters, specifically in regard to the "WORK_LIFE_BALANCE_SCORE".

3.4 Regression Analysis

The main aspect of the research methodology comprised employing an Ordinary Least Squares (OLS) regression model. The objective of this model was to evaluate the correlation between several lifestyle and job satisfaction factors (independent variables) and the work-life balance score (dependent variable). The model was defined by specifying an ordinary least squares (OLS) model with the dependent variable being the WORK_LIFE_BALANCE_SCORE (WLBS), and including pertinent independent variables that have a Likert Scale value while ignoring 'Date', 'AGE', and 'GENDER'.

The dataset indicates that the WLBS is a continuous variable, as seen by its numerical range and decimal precision. OLS regression is the most appropriate modelling technique because the outcome variable is continuous. Ordinary Least Squares (OLS) regression is an appropriate technique for forecasting a continuous dependent variable by utilizing one or more independent variables (Wooldridge, 2015). It is frequently used in statistical analysis for this objective. Utilizing OLS regression on this dataset will allow us to calculate the linear correlation between the independent variables and the WLBS. This analysis will offer valuable insights into the correlation between changes in predictors and changes in individuals' work-life balance.

Hence, the equation of the Ordinary Least Squares (OLS) model employed in this study can be expressed as follows:

$$WLBS = \beta 0 + \beta 1\chi 1 + \beta 2\chi 2 + \ldots\ldots + \beta n\chi n + \varepsilon$$

To assess the model, the researcher will meticulously examine the coefficients, significance levels, and R-squared value of the model to obtain a deeper understanding of how each independent variable affects the WLBS. The researcher will employ the Python programming language and the Jupyter Notebook to conduct the modelling. More precisely, the researcher will utilize the statsmodel library to import the OLS package and carry out the analysis.

Chapter 4

RESULTS

4.1 Descriptive Analysis Result

4.1.1 Descriptive Statistics & Distribution Plot

This section aims to establish a preliminary comprehension of the dataset by calculating measures of central tendency (mean, median, and mode) and dispersion (standard deviation and variance) for quantitative variables. Additionally, it will generate distribution plots for the numerical variables.

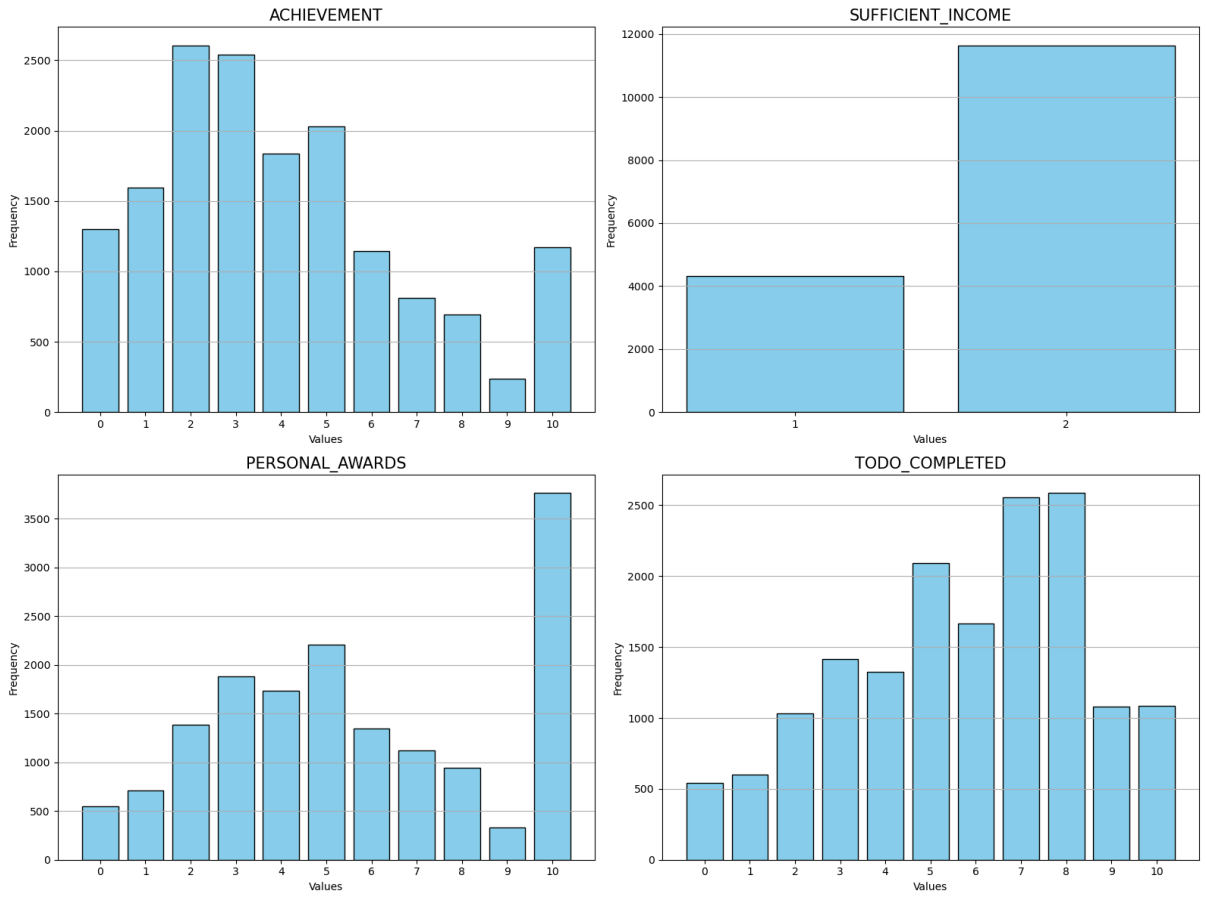
Table 3

Descriptive Statistics for Expertise Dimension

	N	Range	Minimum	Maximum	Mean	Mode	Std. Deviation	Variance
ACHIEVEMENT	15971	10	0	10	4.01	2	2.755	7.59
SUFFICIENT_INCOME	15971	1	1	2	1.73	2	0.444	0.197
PERSONAL_AWARDS	15971	10	0	10	5.71	10	3.089	9.545
TODO_COMPLETED	15971	10	0	10	5.74	8	2.624	6.886

Figure 2

Histogram Distribution for Expertise Dimension



In the expertise dimension, variables such as ACHIEVEMENT and PERSONAL_AWARDS have a somewhat consistent distribution with little deviations, suggesting a range of experiences in terms of accomplishments and accolades. The variable SUFFICIENT_INCOME exhibits a bimodal distribution, indicating a distinct separation in how individuals perceive their financial sufficiency. TODO_COMPLETED is uniformly distributed, indicating diverse levels of work completion.

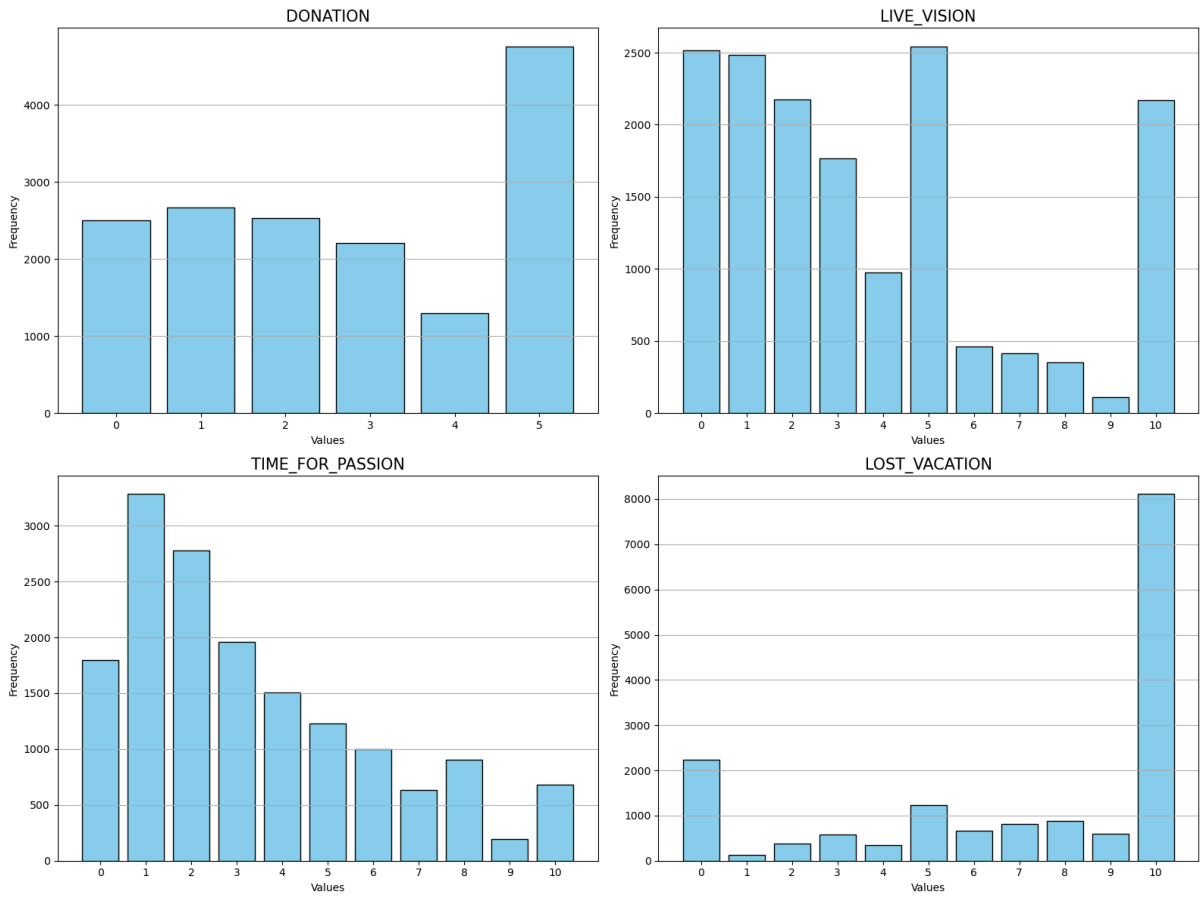
Table 4

Descriptive Statistics for Life Meaning Dimension

	N	Range	Minimum	Maximum	Mean	Mode	Std. Deviation	Variance
DONATION	15971	5	0	5	2.72	5	1.852	3.428
LIVE_VISION	15971	10	0	10	3.75	5	3.231	10.440
TIME_FOR_PASSION	15971	10	0	10	3.33	1	2.729	7.448
LOST_VACATION	15971	10	0	10	2.90	0	3.692	13.630

Figure 3

Histogram Distribution for Life Meaning Dimension



In terms of the dimension of life meaning, the variables DONATION and TIME_FOR_PASSION display a positive skew, indicating a higher frequency of lower levels

of donation and less time dedicated to pursuing passions. On the other hand, LIVE_VISION and LOST_VACATION have a more even distribution, suggesting a range of clarity in life vision and variations in the utilization of vacation time.

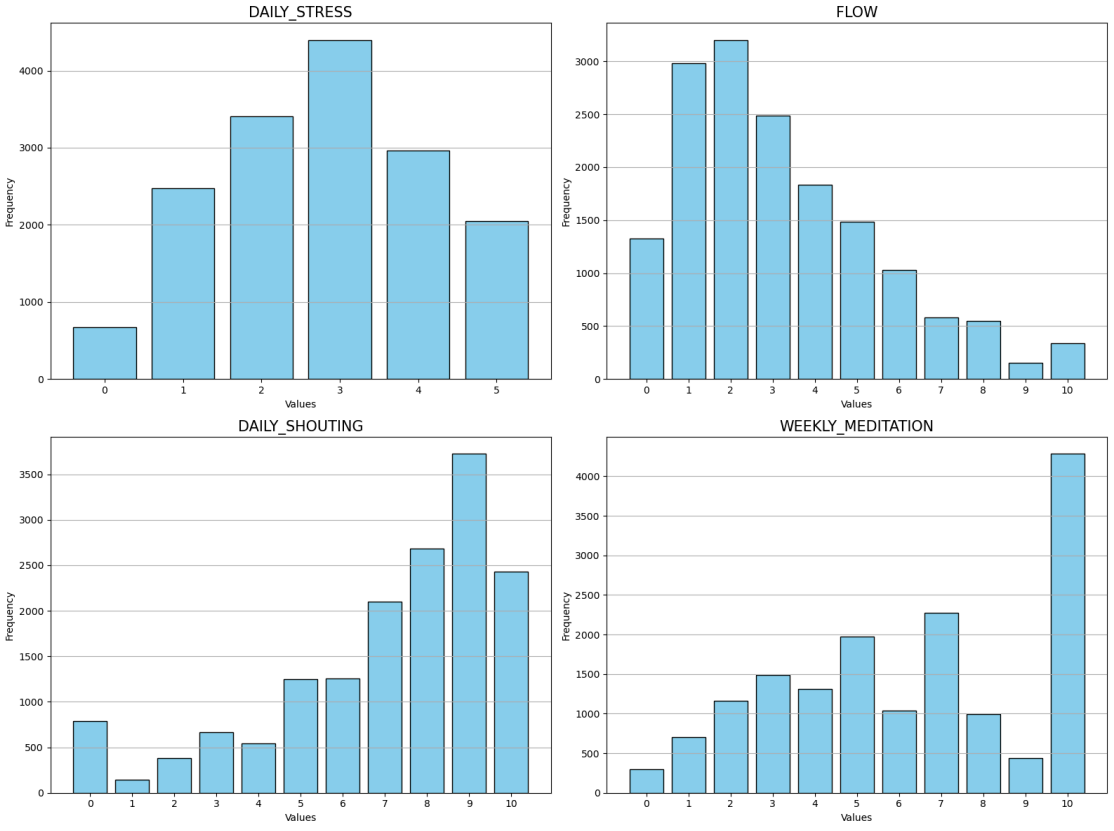
Table 5

Descriptive Statistics for Mental Health Awareness Dimension

	N	Range	Minimum	Maximum	Mean	Mode	Std. Deviation	Variance
DAILY_STRESS	15971	5	0	5	2.79	3	1.852	1.870
FLOW	15971	10	0	10	3.19	2	3.231	5.556
DAILY_SHOUTING	15971	10	0	10	2.93	1	2.729	7.162
WEEKLY_MEDITATION	15971	10	0	10	6.23	10	3.692	9.099

Figure 4

Histogram Distribution for Mental Awareness Dimension



The analysis in the mental health awareness dimension indicates a small rightward deviation in the variables DAILY_STRESS and DAILY_SHOUTING, indicating moderately elevated stress levels and less frequent instances of screaming. Additionally, there is a wide variety of experiences reported for the variables FLOW and WEEKLY_MEDITATION.

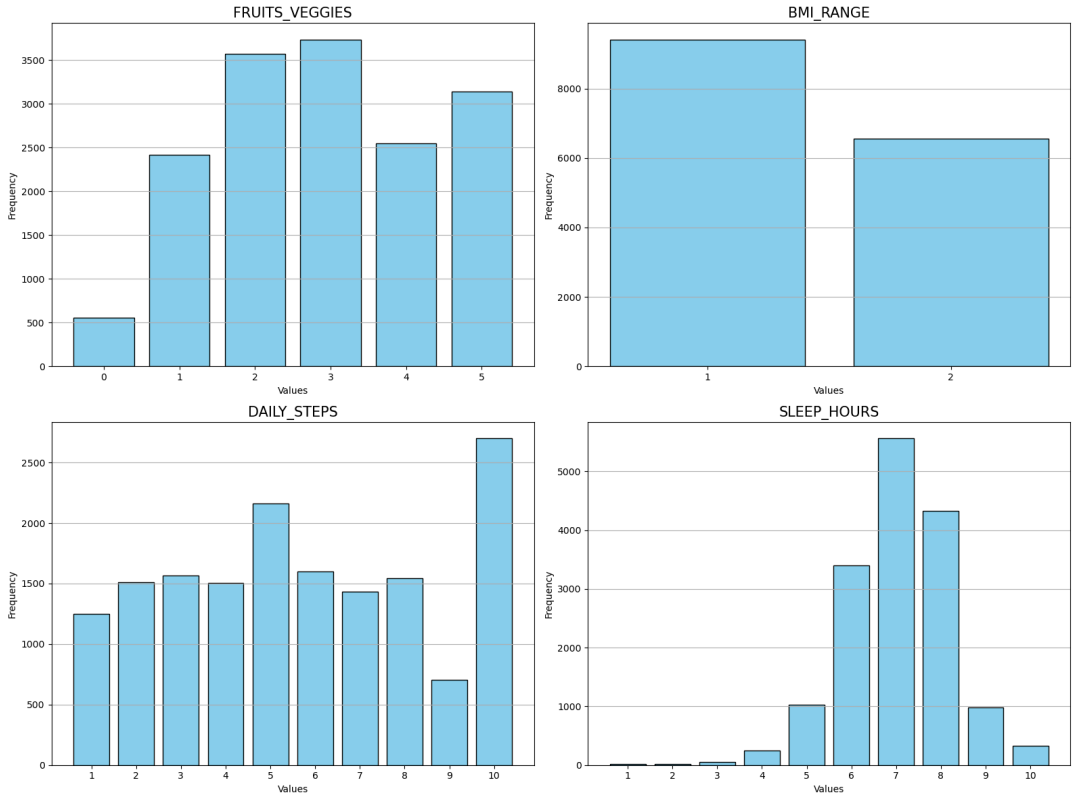
Table 6

Descriptive Statistics for Physical Health Awareness Dimension

	N	Range	Minimum	Maximum	Mean	Mode	Std. Deviation	Variance
FRUITS_VEGGIES	15971	5	0	5	2.92	3	1.443	2.081
BMI_RANGE	15971	1	1	2	1.41	1	0.492	0.242
DAILY_STEPS	15971	9	1	10	5.70	5	2.891	8.358
SLEEP_HOURS	15971	9	1	10	7.04	7	1.199	1.438

Figure 5

Histogram Distribution for Physical Health Awareness Dimension



In the dimension of physical health awareness, the variables FRUITS_VEGGIES and SLEEP_HOURS exhibit minor right-skewness, suggesting a tendency towards moderate consumption of fruits and vegetables and regular durations of sleep. The BMI_RANGE exhibits a bimodal distribution, indicating the presence of two prominent groups categorized by body mass index. On the other hand, the DAILY_STEPS follows a uniform distribution, demonstrating diverse levels of physical activity.

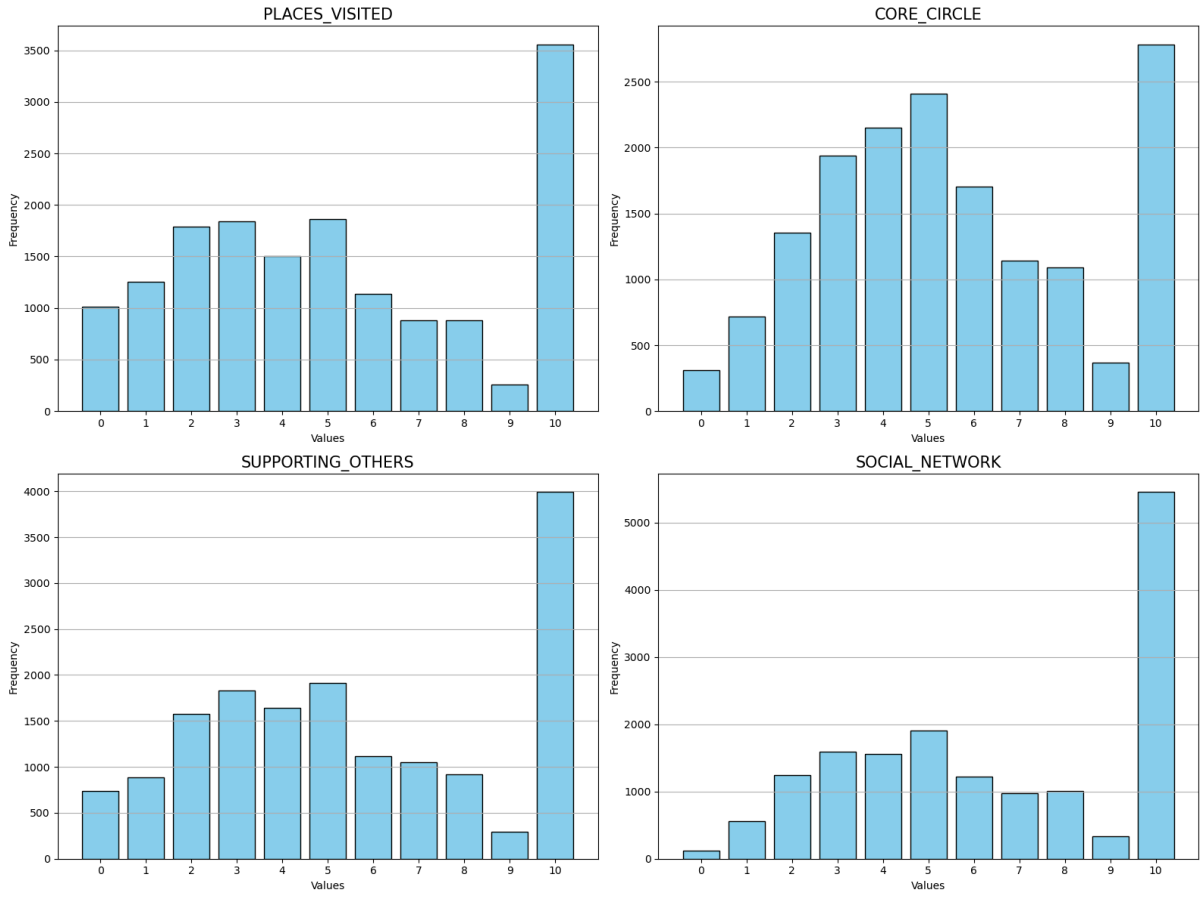
Table 7

Descriptive Statistics for Social Connection Dimension

	N	Range	Minimum	Maximum	Mean	Mode	Std. Deviation	Variance
PLACES_VISITED	15971	10	0	10	5.23	10	3.312	10.968
CORE_CIRCLE	15971	10	0	10	5.51	10	2.840	8.067
SUPPORTING_OTHERS	15971	10	0	10	5.62	10	3.242	10.510
SOCIAL_NETWORK	15971	10	0	10	6.47	10	3.087	9.527

Figure 6

Histogram Distribution for Social Connection Dimension



The variables related to the social connection dimension, such as PLACES_VISITED and SOCIAL_NETWORK, exhibit a slight right skew, indicating that most individuals have moderate travel experiences and social network sizes. On the other hand, CORE_CIRCLE and SUPPORTING_OTHERS show a more even distribution, suggesting a diverse range of core social circle sizes and levels of support provided to others.

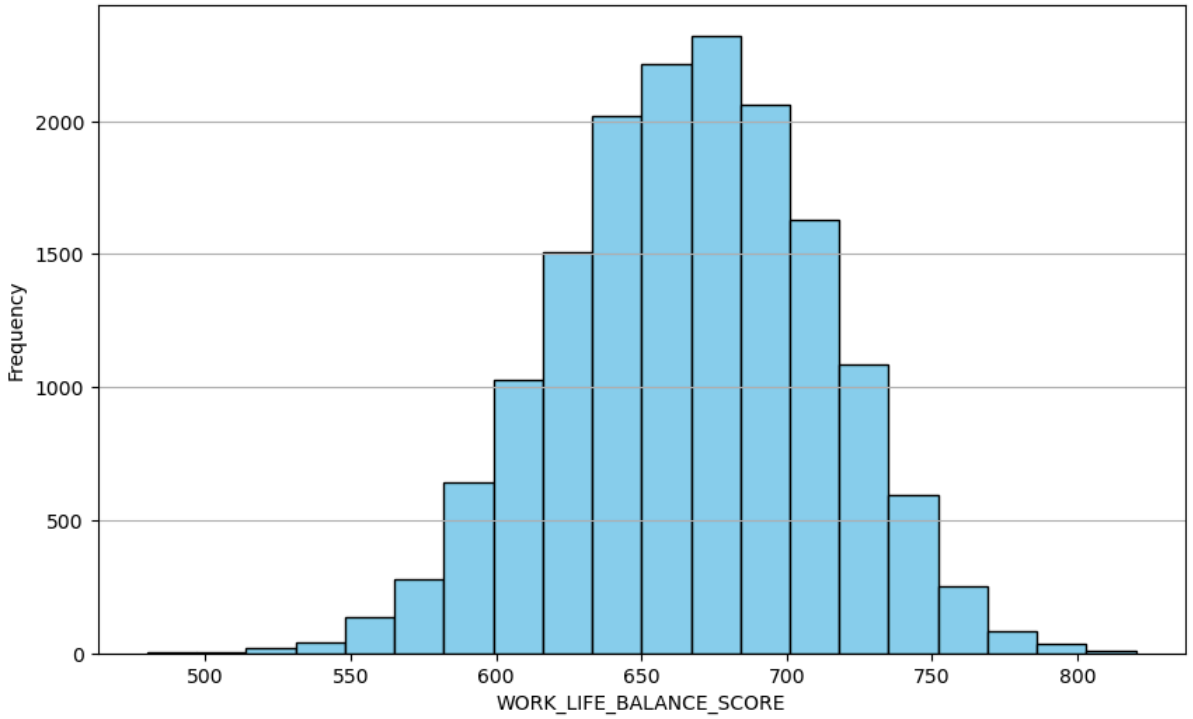
Table 8

Descriptive Statistics for Work Life Balance Score

	N	Range	Minimum	Maximum	Mean	Mode	Std. Deviation	Variance
WORK_LIFE_BALANCE_SCORE	15971	340	480	820	666.3	641	45.03	2027.28

Figure 7

Histogram Distribution for Work Life Balance Score



Finally, the WORK_LIFE_BALANCE_SCORE tends to have higher scores, following a distribution that is mostly normal but slightly skewed towards the higher end. This indicates that a considerable percentage of people experience a favorable work-life balance.

In general, these distributions offer a thorough summary of the information, showcasing a combination of normal, skewed, bimodal, and uniform distributions across several aspects of life. Every variable exhibits distinct attributes, highlighting the variety in experiences, behaviors, and perceptions among individuals.

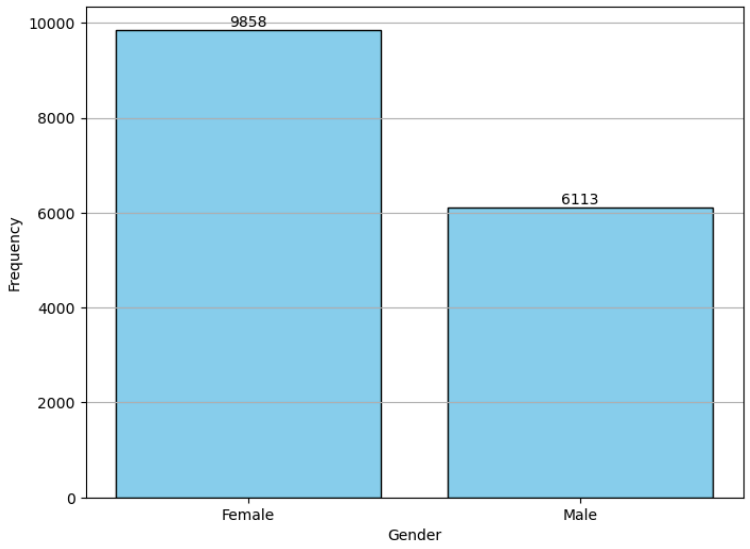
4.1.2 Categorical Data Analysis

An essential aspect of analyzing this dataset is conducting categorical data analysis, which is particularly important for comprehending the demographic aspects represented by variables like AGE and GENDER. Such analysis is essential as it provides valuable information about the composition and diversity of the participants in the study, which serves as a basis for future investigation and interpretation.

By conducting a comprehensive examination of these categorical factors, we can guarantee that subsequent analyses take into account the subtle distinctions across various demographic groups, resulting in stronger and more contextually appropriate results. Furthermore, this study is crucial for recognizing demographic trends and patterns, which are vital for customizing strategies, policies, or services to address the distinct requirements and characteristics of various sectors within the population.

Figure 8

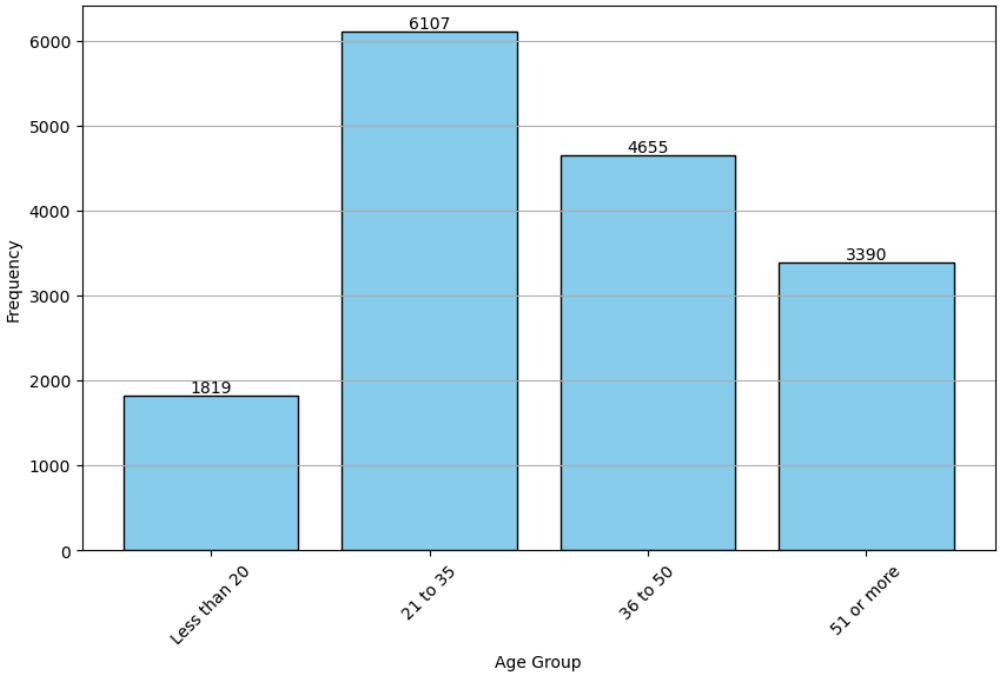
Bar Chart Distribution for Gender



The dataset exhibits a greater ratio of female respondents in comparison to male respondents, with females comprising around 61.72% (9,858) and males comprising 38.28% (6,113). The gender distribution should be taken into account when evaluating other studies, since it can have an impact on the overall trends and insights obtained from the dataset.

Figure 9

Bar Chart Distribution for Age Group



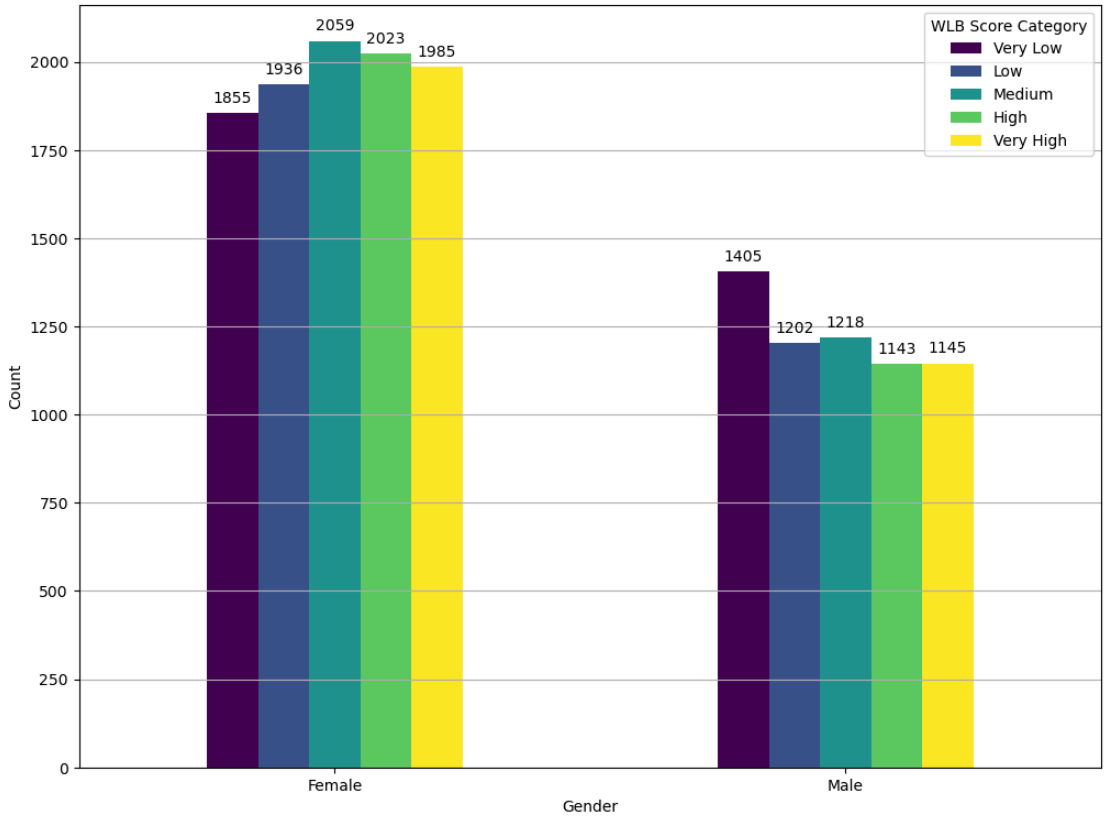
The dataset displays a varied age distribution, with the most significant segment consisting of individuals aged 21 to 35, constituting approximately 38.24% of the participants. The subsequent notable demographic consists of individuals between the ages of 36 and 50, with those aged 51 or above following suit. The group with the lowest representation is individuals aged below 20. The presence of individuals from various age groups indicates a wide spectrum of life phases and encounters, which is crucial for comprehending trends and inclinations concerning different factors, such as the equilibrium between work and personal life, lifestyle decisions, and social relationships.

The next step involves analyzing the AGE_GROUP and GENDER variables in relation to the WORK_LIFE_BALANCE_SCORE. The score in the work-life balance variable will be categorized using quintiles, resulting in the following categories:

- 1st Quintile (Q1): 'Very Low' (scores in the lowest 20%)
- 2nd Quintile (Q2): 'Low' (scores between the 20th and 40th percentile)
- 3rd Quintile (Q3): 'Medium' (scores between the 40th and 60th percentile)
- 4th Quintile (Q4): 'High' (scores between the 60th and 80th percentile)
- 5th Quintile (Q5): 'Very High' (scores in the highest 20%)

Figure 10

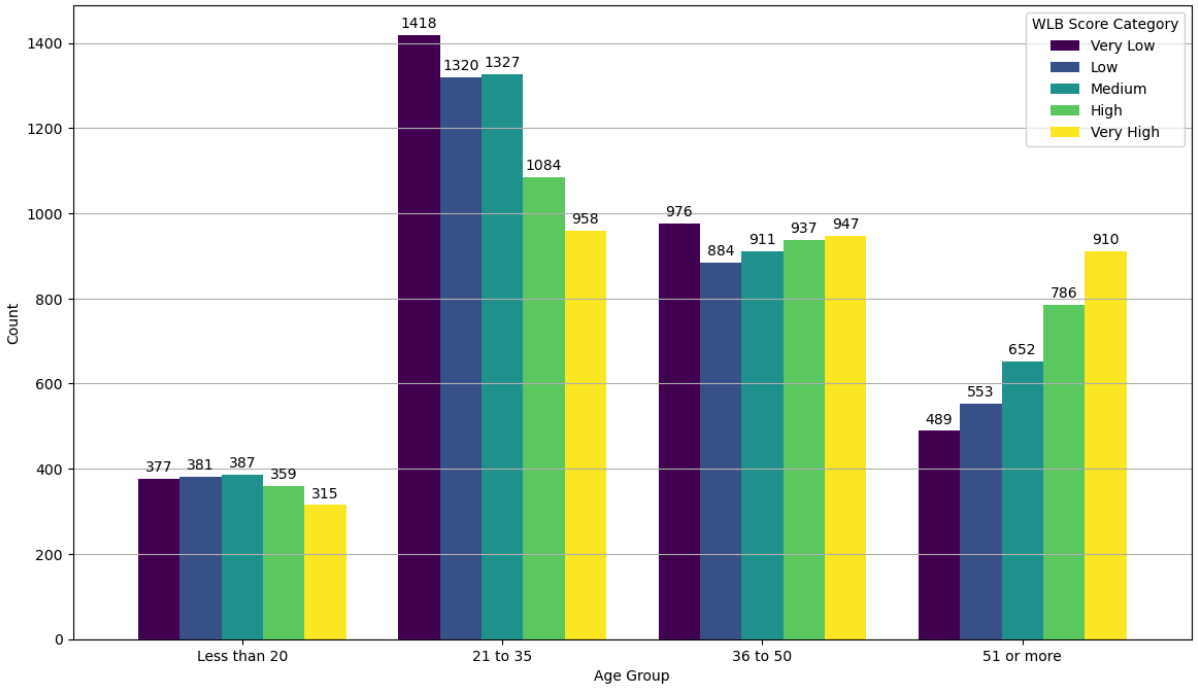
Histogram Distribution for Gender and Work Life Balance Score



The examination of work-life balance scores, divided into quintiles, among different genders and age groups in the dataset, has shown significant patterns. Regarding gender, female participants had a fairly even distribution across the quintile categories, but with a notable clustering in the 'High' and 'Very High' categories. This indicates that a considerable number of female respondents experience a favorable work-life balance. In contrast, male participants exhibited a comparable trend, albeit with a somewhat smaller proportion in the 'Very High' category, suggesting a somewhat less inclination to claim the utmost levels of work-life balance.

Figure 11

Histogram Distribution for Age Group and Work Life Balance Score



Upon analyzing the distribution by age groups, it was observed that each group exhibited distinct patterns. Individuals below the age of 20 were more commonly observed in the 'Low' and 'Medium' classifications, suggesting that younger individuals may encounter difficulties in attaining a high level of work-life balance. The age range between 21 and 35 exhibits the highest prevalence of low scores in work-life balance. This suggests that currently, individuals may find it challenging to achieve a work-life balance, possibly due to being in the first stages of establishing their career trajectory. Individuals between the ages of 36 and 50 displayed a wide range of outcomes, with a significant proportion falling into higher categories. This indicates a positive correlation between age, career stability, and a better balance between work and personal life. Notably, persons who were 51 years old and older were mostly classified as 'High' or 'Very High' in terms of work-life balance. This suggests a tendency towards improved balance between work and personal life in later stages of life, either due to more stable situations or changed priorities.

Overall, these demographic findings demonstrate that age and gender can greatly influence perceptions of work-life balance. They emphasize the importance of employing subtle and

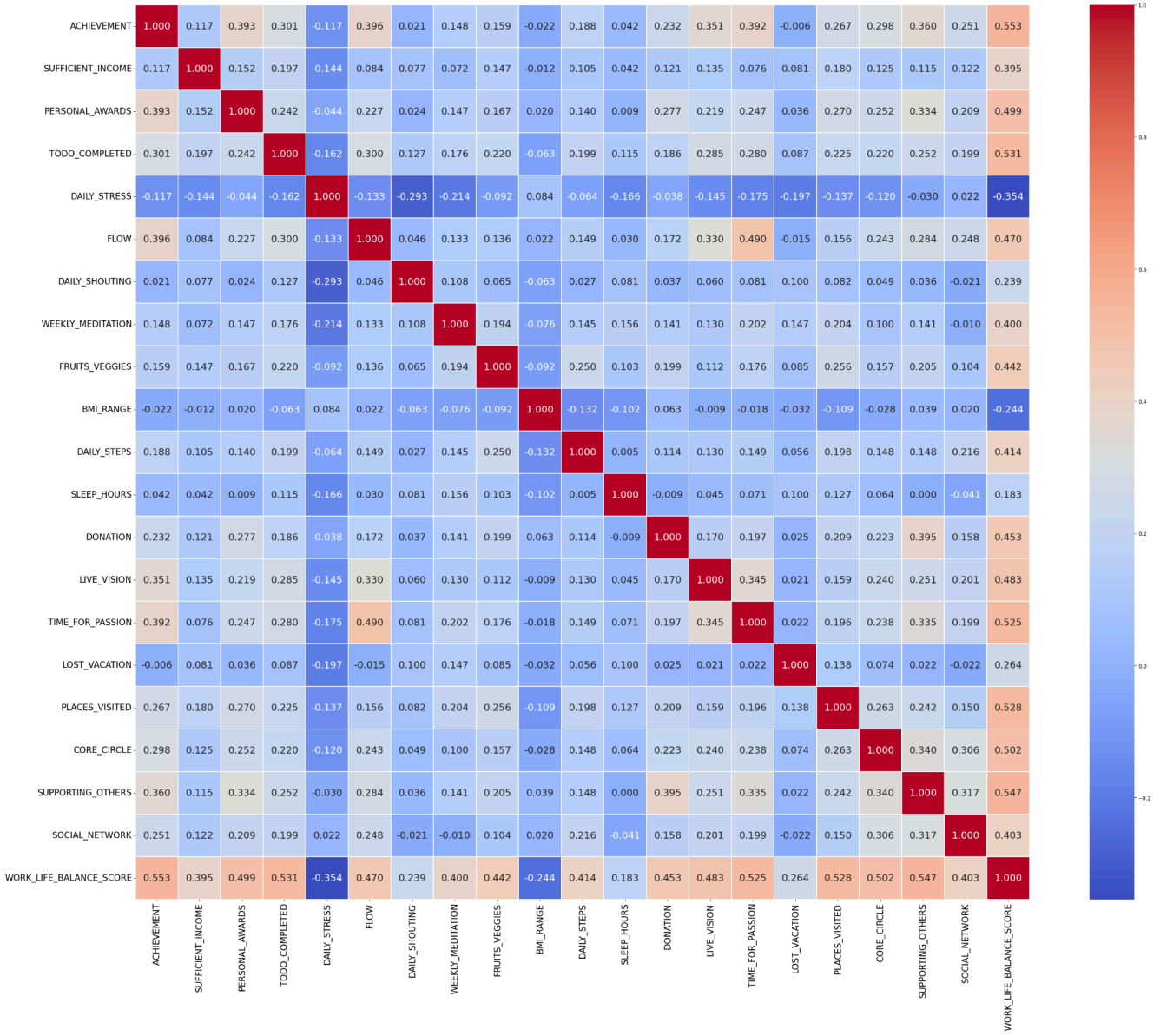
sophisticated methods in work-life balance programs and policies, recognizing the unique difficulties and expectations that various demographic groups may face. Comprehending this is vital for developing successful approaches to improve the integration of work and personal life among different groups of people.

4.1.3 Correlation Plot

The Spearman Correlation Heatmap was employed to ascertain the rank-order associations among a collection of well-being metrics. These metrics include several areas such as personal achievements, financial sufficiency, stress levels, social relationships, and choices related to one's way of life. The variables "DAILY_SHOUTING" and "LOST_VACATION" have been recoded to reverse the negative consequences associated with greater values.

Figure 12

Spearman Correlation Heatmap Plot



The correlation heatmap displays a complex network of connections between different aspects of well-being in the dataset. Significantly, variables relating to personal achievement, such as 'ACHIEVEMENT', 'PERSONAL_AWARDS', and 'TODO_COMPLETED', have a robust positive correlation, indicating that persons who excel in one of these areas are likely to perform well in the others. The set of variables is positively correlated with the 'WORK_LIFE_BALANCE_SCORE', suggesting that a feeling of achievement is frequently associated with a view of work-life balance. However, the variable 'DAILY_STRESS'

contradicts this pattern by displaying an inverse correlation with the 'WORK_LIFE_BALANCE_SCORE'. This finding supports the common assumption that elevated stress levels might erode one's perception of equilibrium.

Social factors exhibit a positive correlation among themselves, suggesting that individuals with larger social networks tend to provide more assistance to others and have larger core social circles. Additionally, social factors show a less prominent but nonetheless favorable association with work-life balance. This indicates that social interaction plays a role in enhancing life satisfaction, but it is not the primary determinant. There is a positive correlation between lifestyle factors such as diet, body mass index, and sleep hours. However, their direct influence on work-life balance is not as significant. This implies that although these factors contribute to a healthy lifestyle, they do not directly indicate how individuals perceive their work-life balance.

Overall, the heatmap provides a visual representation of the interconnections between several aspects of life, such as individual achievements, stress levels, social relationships, and lifestyle decisions, which collectively impact the overall notion of work-life balance. The intricate interaction between many factors underscores the diverse aspects of personal well-being and emphasizes the significance of a comprehensive strategy in addressing measures to improve one's quality of life.

4.2 Regression Analysis Result

The current section focuses on the results that were obtained from our Ordinary Least Squares (OLS) regression analysis, which aims to reveal the elements that influence work-life balance, as indicated by the WORK_LIFE_BALANCE_SCORE. Below is the figure for the result that generated using Python.

Figure 13

Ordinary Least Square Regression Result

OLS Regression Results

Dep. Variable:	WORK_LIFE_BALANCE_SCORE	R-squared:	0.901
Model:	OLS	Adj. R-squared:	0.901
Method:	Least Squares	F-statistic:	8685.
Date:	Thu, 11 Jan 2024	Prob (F-statistic):	0.00
Time:	10:17:50	Log-Likelihood:	-58572.
No. Observations:	14373	AIC:	1.172e+05
Df Residuals:	14357	BIC:	1.173e+05
Df Model:	15		
Covariance Type:	nonrobust		

	coef	std err	t	P>|t|	[0.025	0.975]
const	487.4166	0.850	573.412	0.000	485.750	489.083
PLACES_VISITED	2.5042	0.040	62.905	0.000	2.426	2.582
CORE_CIRCLE	2.0381	0.048	42.862	0.000	1.945	2.131
SUPPORTING_OTHERS	2.1501	0.043	49.788	0.000	2.065	2.235
SOCIAL_NETWORK	1.6341	0.043	37.849	0.000	1.550	1.719
ACHIEVEMENT	1.8365	0.053	34.732	0.000	1.733	1.940
TODO_COMPLETED	2.5770	0.051	50.143	0.000	2.476	2.678
FLOW	1.5837	0.061	25.879	0.000	1.464	1.704
DAILY_STEPS	2.6708	0.043	61.440	0.000	2.586	2.756
LIVE_VISION	1.8919	0.041	46.364	0.000	1.812	1.972
SLEEP_HOURS	2.8141	0.102	27.505	0.000	2.614	3.015
LOST_VACATION	1.9731	0.033	59.741	0.000	1.908	2.038
DAILY_SHOUTING	2.4091	0.045	53.008	0.000	2.320	2.498
PERSONAL_AWARDS	1.9687	0.044	44.699	0.000	1.882	2.055
TIME_FOR_PASSION	1.8117	0.053	34.168	0.000	1.708	1.916
WEEKLY_MEDITATION	2.2803	0.042	54.044	0.000	2.198	2.363

Omnibus:	196.697	Durbin-Watson:	2.016
Prob(Omnibus):	0.000	Jarque-Bera (JB):	182.338
Skew:	-0.236	Prob(JB):	2.55e-40
Kurtosis:	2.714	Cond. No.	160.

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

Mean Squared Error: 207.90897462178057

Our study project's regression model has an R-squared score of 0.901, indicating excellent explanatory power. The model explains 90.1% of the variation in the

'WORK_LIFE_BALANCE_SCORE', indicating a significant link between predictor factors and response variables. However, the model's Mean Squared Error (MSE) is 207.91, indicating a significant error average. As the 'WORK_LIFE_BALANCE_SCORE' ranges from 480 to 820, the Root Mean Squared Error (RMSE) is 14.42. For instance, precise forecasts demand a narrower error margin, therefore the model may need further modification to improve predictive accuracy.

For the regression coefficients, the results yielded valuable insights. Every coefficient signifies the anticipated alteration in the work-life balance score when there is a one-unit modification in the relevant predictor, while keeping all other factors constant. The five highest factors such as sleep hours, daily steps, the numbers of completed daily task, the frequency of visiting new places, and daily shouting have notable impacts on work-life balance. These coefficients, supported by low p-values, confirm the statistical importance of these factors. The model's capacity to measure the influence of each factor provides a comprehensive perspective on the elements that contribute to work-life balance, a vital aspect for comprehending employee welfare.

In summary, this outcome can be understood within the framework of the model equation as follows:

WLBS = 487.4166 + 2.5042 (PLACES_VISITED + 2.0381 (CORE_CIRCLE) +.....+ epsilon

Chapter 5

CONCLUSIONS

5. Summary

The employment of Ordinary Least Squares (OLS) regression in this study has provided a robust analysis of the factors influencing work-life balance, as captured by the Work-Life Balance Score (WLBS). Through careful consideration of various lifestyle and job satisfaction aspects, this research has quantified the extent to which personal and professional dimensions correlate with and predict work-life balance and overall life satisfaction.

The results underscore the significance of specific factors, such as sufficient income, stress levels, and social support, highlighting their predictive power in determining work-life balance. The positive coefficients for variables like achievement and social networking point to their beneficial impact, while negative coefficients for variables such as daily stress reveal the adverse effects these can have on an individual's balance between work and life.

By addressing these key aspects, companies have the opportunity to craft targeted interventions to enhance employee well-being. Moreover, the insights garnered from this analysis are instrumental for businesses that offer well-being services, enabling them to refine their offerings to more effectively bolster a healthy work-life balance.

This research has fulfilled its two main objectives: to explore the interconnectedness of personal and professional life factors with work-life balance, and to provide strategic insights for the enhancement of employee wellness programs. These objectives have been achieved by employing rigorous statistical analysis using the Python programming language and its libraries, illustrating the practical implications of the identified relationships.

In conclusion, this research has not only achieved its intended objectives but has also contributed valuable knowledge to the domain of employee well-being, offering a data-driven foundation for the development of effective wellness initiatives within the workplace.

5.1 Limitations

Although our model demonstrates strong predictive ability, the ideal R-squared value indicates a potential issue of overfitting, which may restrict the model's capacity to apply to fresh data. Furthermore, the utilization of ordinal data as if it were continuous inside the ordinary least squares (OLS) framework, along with departures from assumptions of homoscedasticity and normal distribution, emphasize the necessity for meticulous interpretation of the outcomes. These characteristics indicate that our model, however perceptive, may not comprehensively encompass the intricate dynamics of work-life balance.

5.2 Future Research

Subsequent investigations should prioritize the resolution of these constraints. This involves investigating alternate modeling techniques that are more appropriate for ordinal data and doing cross-validation or testing the model on a separate dataset to evaluate its capacity to be applied to other situations. The second suggestion is to standardise the size of all attributes, hence facilitating the interpretation of calculations in the modelling process.
In addition, conducting longitudinal research could offer more profound understanding of the impact of job and lifestyle changes on work-life balance, potentially uncovering causal connections. Conducting such study would not only confirm and expand upon our discoveries, but also provide more detailed advice to corporations and service providers regarding the welfare of their employees. The primary objective is to cultivate a setting where achieving work-life balance is not merely a desire but a concrete and attainable actuality for the workforce.

References

Al Jenaibi. (2010, July 28). Job Satisfaction: Comparisons Among Diverse Public Organizations in the UAE. *MANAGEMENT SCİENCE AND ENGİNEERİNG*, *4*(3). https://doi.org/10.3968/j.mse.1913035X20100403.007

Alotaibi, A. G. (2001, September). Antecedents of Organizational Citizenship Behavior: A Study of Public Personnel in Kuwait. *Public Personnel Management*, *30*(3), 363–376. https://doi.org/10.1177/009102600103000306

Broocks, A., Bandelow, B., Pekrun, G., George, A., Meyer, T., Bartmann, U., Hillmer-Vogel, U., & Rüther, E. (1998, May). Comparison of Aerobic Exercise, Clomipramine, and Placebo in the Treatment of Panic Disorder. *American Journal of Psychiatry*, *155*(5), 603–609. https://doi.org/10.1176/ajp.155.5.603

Brower, T. (2022, July 24). *Burnout Is A Worldwide Problem: 5 Ways Work Must Change*. Forbes. https://www.forbes.com/sites/tracybrower/2022/07/24/burnout-is-a-worldwide-problem-5-ways-work-must-change/?sh=25e660996c1e

Burnout Statistics You Should Know to Keep Employees Engaged. (n.d.). Asana. Retrieved January 1, 2024, from https://resources.asana.com/americas-anatomy-of-work-burnout-ebook.html

Byrne, A., & Byrne, D. (1993, September). The effect of exercise on depression, anxiety and other mood states: A review. *Journal of Psychosomatic Research*, *37*(6), 565–574. https://doi.org/10.1016/0022-3999(93)90050-p

Chaki, D., Das, A., & Zaber, M. (2015, December 11). A comparison of three discrete methods for classification of heart disease data. *Bangladesh Journal of Scientific and Industrial Research*, *50*(4), 293–296. https://doi.org/10.3329/bjsir.v50i4.25839

Currall, S. C., & Organ, D. W. (1988, June). Organizational Citizenship Behavior: The Good Soldier Syndrome. *Administrative Science Quarterly*, *33*(2), 331. https://doi.org/10.2307/2393071

Dunn, A. L., Trivedi, M. H., Kampert, J. B., Clark, C. G., & Chambliss, H. O. (2005, January). Exercise treatment for depression. *American Journal of Preventive Medicine*, *28*(1), 1–8. https://doi.org/10.1016/j.amepre.2004.09.003

Fisher, G. G., Bulger, C. A., & Smith, C. S. (2009, October). Beyond work and family: A measure of work/nonwork interference and enhancement. *Journal of Occupational Health Psychology*, *14*(4), 441–456. https://doi.org/10.1037/a0016737

Frame, P., & Hartog, M. (2003, October). From rhetoric to reality. Into the swamp of ethical practice: implementing work‐life balance. *Business Ethics: A European Review*, *12*(4), 358–368. https://doi.org/10.1111/1467-8608.00337

Freeman, M. P., Hibbeln, J. R., Wisner, K. L., Davis, J. M., Mischoulon, D., Peet, M., Keck, P. E., Marangell, L. B., Richardson, A. J., Lake, J., & Stoll, A. L. (2006, December 15). Omega-3 Fatty Acids: Evidence Basis for Treatment and Future Research in Psychiatry. *The Journal of Clinical Psychiatry*, *67*(12), 1954–1967. https://doi.org/10.4088/jcp.v67n1217

Future Forum Pulse Winter Snapshot - Future Forum. (2023, February 15). Future Forum. https://futureforum.com/research/future-forum-pulse-winter-2022-2023-snapshot/

Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2003, December). The relation between work–family balance and quality of life. *Journal of Vocational Behavior*, *63*(3), 510–531. https://doi.org/10.1016/s0001-8791(02)00042-8

Gyekye, S. A., & Haybatollahi, M. (2015, May 11). Organizational citizenship behaviour. *International Journal of Organizational Analysis*, *23*(2), 285–301. https://doi.org/10.1108/ijoa-08-2012-0586

Hon, A. H. Y., & Chan, W. W. (2013, March 4). The Effects of Group Conflict and Work Stress on Employee Performance. *Cornell Hospitality Quarterly*, *54*(2), 174–184. https://doi.org/10.1177/1938965513476367

Johari, J., Yean Tan, F., & Tjik Zulkarnain, Z. I. (2018, January 8). Autonomy, workload, work-life balance and job performance among teachers. *International Journal of Educational Management*, *32*(1), 107–120. https://doi.org/10.1108/ijem-10-2016-0226

Koubova, V., & Buchko, A. A. (2013, June 14). Life‐work balance. *Management Research Review*, *36*(7), 700–719. https://doi.org/10.1108/mrr-05-2012-0115

Lapin, I., & Oxenkrug, G. (1969, January). INTENSIFICATION OF THE CENTRAL SEROTONINERGIC PROCESSES AS A POSSIBLE DETERMINANT OF THE THYMOLEPTIC EFFECT. *The Lancet*, *293*(7586), 132–136. https://doi.org/10.1016/s0140-6736(69)91140-4

Lawson, K. M., Davis, K. D., Crouter, A. C., & O'Neill, J. W. (2013, June). Understanding work-family spillover in hotel managers. *International Journal of Hospitality Management*, *33*, 273–281. https://doi.org/10.1016/j.ijhm.2012.09.003

Maslow, A. H. (1981, January 1). *Motivation And Personality*. Prabhat Prakashan. http://books.google.ie/books?id=DVmxDwAAQBAJ&printsec=frontcover&dq=Motivation+and+personality+(1st+ed.).&hl=&cd=1&source=gbs_api

Mullins, L. J. (2005, January 1). *Management and Organisational Behaviour*. Financial Times/Prentice Hall. http://books.google.ie/books?id=SmvuAAAAMAAJ&q=Management+%26Organisational+Behaviour+(7th+ed.)&dq=Management+%26Organisational+Behaviour+(7th+ed.)&hl=&cd=4&source=gbs_api

Murthy, V., & Guthrie, J. (2012, October 26). Management control of work‐life balance. A narrative study of an Australian financial institution. *Journal of Human Resource Costing & Accounting*, *16*(4), 258–280. https://doi.org/10.1108/14013381211317248

Navigating Work-Life Balance: Tips for Preventing Burnout in the Modern Workplace. (n.d.). Corporate Wellness | Employee Well-Being. https://www.corporatewellnessmagazine.com/article/navigating-work-life-balance-tips-for-preventing-burnout-in-the-modern-workplace

New Deloitte Research Reveals Employee Well-being Worsening at Some Companies, Uncovering a Pressing Need for Greater Organizational Accountability and Transparency. (n.d.). Deloitte United States. https://www2.deloitte.com/us/en/pages/about-deloitte/articles/press-releases/new-deloitte-research-reveals-employee-well-being-worsening-at-some-companies-uncovering-a-pressing-need-for-greater-organizational-accountability-and-transparency.html

Nielsen, K., Randall, R., Yarker, J., & Brenner, S. O. (2008, January). The effects of transformational leadership on followers' perceived work characteristics and psychological well-being: A longitudinal study. *Work & Stress*, *22*(1), 16–32. https://doi.org/10.1080/02678370801979430

Obeidat, A. M., Abualoush, S. H., Irtaimeh, H. J., Khaddam, A. A., & Bataineh, K. A. (2018). The role of organisational culture in enhancing the human capital applied study on the social security corporation. *International Journal of Learning and Intellectual Capital*, *15*(3), 258. https://doi.org/10.1504/ijlic.2018.094718

Ogechi, & Nwaeke. (2019). Assessment of work-life balance and employees' job performance in oil servicing companies in the Niger Delta region of Nigeria. *IARD International Journal of Economics and Business Management*, *5*(3).

Overton, J. (2023, August 15). *Employee burnout statistics for 2023*. Limeade. https://www.limeade.com/resources/blog/employee-burnout-statistics-for-2023/

Pasamar, S., & Valle Cabrera, R. (2013, November 11). Work-life balance under challenging financial and economic conditions. *International Journal of Manpower*, *34*(8), 961–974. https://doi.org/10.1108/ijm-07-2013-0172

R. Helmle, J., C. Botero, I., & R. Seibold, D. (2014, October 7). Factors that influence perceptions of work-life balance in owners of copreneurial firms. *Journal of Family Business Management*, *4*(2), 110–132. https://doi.org/10.1108/jfbm-06-2014-0013

R. Helmle, J., C. Botero, I., & R. Seibold, D. (2014, October 7). Factors that influence perceptions of work-life balance in owners of copreneurial firms. *Journal of Family Business Management*, *4*(2), 110–132. https://doi.org/10.1108/jfbm-06-2014-0013

Robbins, S. P., & Coulter, M. K. (2005, January 1). *Management*. Prentice Hall. http://books.google.ie/books?id=01aSQgAACAAJ&dq=Management+(8th+ed.)&hl=&cd=4&source=gbs_api

Sánchez-Villegas, A., Delgado-Rodríguez, M., Alonso, A., Schlatter, J., Lahortiga, F., Majem, L. S., & Martínez-González, M. A. (2009, October 1). Association of the Mediterranean Dietary Pattern With the Incidence of Depression. *Archives of General Psychiatry*, *66*(10), 1090. https://doi.org/10.1001/archgenpsychiatry.2009.129

Shaffer, M. A., Sebastian Reiche, B., Dimitrova, M., Lazarova, M., Chen, S., Westman, M., & Wurtz, O. (2015, October 8). Work- and family-role adjustment of different types of global professionals: Scale development and validation. *Journal of International Business Studies*, *47*(2), 113–139. https://doi.org/10.1057/jibs.2015.26

Singh, Y. K., Sinha, N., & Singh, S. K. (2017). Heart Disease Prediction System Using Random Forest. *Communications in Computer and Information Science*, 613–623. https://doi.org/10.1007/978-981-10-5427-3_63

Sirgy, M. J., & Lee, D. J. (2017, February 8). Work-Life Balance: an Integrative Review. *Applied Research in Quality of Life*, *13*(1), 229–254. https://doi.org/10.1007/s11482-017-9509-8

Stathopoulou, G., Powers, M. B., Berry, A. C., Smits, J. A. J., & Otto, M. W. (2006). Exercise Interventions for Mental Health: A Quantitative and Qualitative Review. *Clinical Psychology: Science and Practice*, *13*(2), 179–193. https://doi.org/10.1111/j.1468-2850.2006.00021.x

Tamunomiebi, M. D., & Oyibo, C. (2020, April 5). Work-Life Balance and Employee Performance: A Literature Review. *European Journal of Business and Management Research*, *5*(2). https://doi.org/10.24018/ejbmr.2020.5.2.196

Tugsal, T. (2017, March 16). Work-Life Balance and Social Support as Predictors of Burnout: An Exploratory Analysis. *International Journal of Academic Research in Business and Social Sciences*, *7*(3). https://doi.org/10.6007/ijarbss/v7-i3/2699

Wooldridge, J. M. (2013, June 25). *Introductory Econometrics: A Modern Approach*. Cengage Learning.

http://books.google.ie/books?id=GHoJzgEACAAJ&dq=Introductory+Econometrics.&hl=&cd=1&source=gbs_api