

Well-being: A Conceptual Framework

Iqra Zaffar

Department of Management Studies, Central University of Kashmir (India)

ABSTRACT

Well-being is fundamental for the overall progress of an individual and is considered a benchmark of societal progress. While measuring well-being, researchers take into consideration both the objective and subjective well-being. This paper aims to create a theoretical framework by identifying the dimensions of objective and subjective well-being and distinguishing between them. The study also highlights the approaches adopted for measuring objective and subjective well-being. The paper intends to draw attention to the unfamiliar factors of well-being which will help in contributing to future research.

Keywords: Happiness, Objective well-being, Subjective well-being, Well-being, Well-being dimensions

1. INTRODUCTION

Traditionally, policy-makers and economists have considered the gross domestic product (GDP) as an indicator of societal well-being because of its strong linkages with living standards. However, critics argue that GDP is a weak and misleading indicator of well-being (Fleurbaey, 2009), and additional statistical tools should be used to measure well-being. Hence, theorists and researchers suggested including both subjective and objective measures for measuring the overall well-being.

Defining objective well-being has always been challenging for researchers, and that's why researchers focus on defining the dimensions of objective well-being. Objective well-being involves measurement through cardinal measures including economic, environmental and social statistics. Conversely, subjective well-being considers ordinal measures like the emotions, experiences, and feelings individuals experience (van Hoorn, 2007). Conventionally well-being was considered as uni-dimensional and was linked to material/ financial well-being. This concept relied on the assumption that an increased income leads to more consumption of goods and services which increases the utility. But this concept is flawed as it does not encompass all the aspects of human life. Hence, instead of depending on a single dimension, researchers have universally accepted well-being as multi-dimensional, which comprises all aspects of human life (see Table 1).

Table 1: Evolution of the definition and measurement of Well-being

Period	Definition	Measurement
1950's	Economic well-being	GDP growth
1960's	Economic well-being	GDP per capita growth
1970's	Basic needs	GDP per capita growth + Basic goods
1980's	Economic well-being	GDP per capita growth and rise of non-monetary factors
1990's	Human development/capabilities	Human development and sustainability
2000's	Universal rights, livelihood, freedom	MDGs and new and new areas such as risk and empowerment

Source: Sumner (2006, p. 56)

Researchers have always considered defining objective well-being as an uphill task and have limited themselves to exploring and defining its dimensions (Dodge *et al.* 2012). Earlier, the measurement of objective well-being was limited to the GDP. However, it was considered essential to include the quality of living and the material living conditions. The OECD, the UNDP and the ISTAT subsequently identified six dimensions which collectively represent objective well-being including, health, safety, politics, job-opportunities, environment and socio-economic development (Voukelatou *et al.*, 2020). "The objective approach investigates the objective dimensions of a good life, whereas the subjective approach examines people's subjective evaluations of their own lives" (Voukelatou *et al.*, 2020,

p. 2). To get a complete understanding of an individual's well-being, it is crucial to consider their perceived well-being, referred to as subjective well-being.

According to Veenhoven (1984), happiness is synonymous to subjective well-being and can be defined as how individual rates their quality of life favourably. This concept differs from GDP, which does not explain an individual's perception of well-being (Stiglitz *et al.*, 2009). Subjective well-being comprises of five dimensions: the role of human genes (Bartels & Boomsma, 2009), universal needs (Tay & Diener, 2011), social environment (Powdthavee, 2010), political environment (Radcliff & Shufeldt, 2016; Veenhoven, 2015) and the economic environment (Diener *et al.*, 2013). Usually, both objective and subjective well-being is measured through surveys (Deaton, 1997). The data provided through these surveys is accurate, but logistically conducting such surveys frequently is not possible. In recent years, researchers have tried to do away with the traditional survey method and tried to adopt innovative approaches for measuring well-being. Many projects have been initiated to supplement and provide answers regarding subjective and objective well-being (Voukelatou *et al.*, 2020).

2. OBJECTIVE

The present study aims at providing a theoretical framework for subjective, objective well-being and their dimensions. It also seeks to discuss and highlight indicative and existing studies of value to the research community. It will facilitate policy-makers in devising policies which will help in improving societal well-being.

3. METHODOLOGY

Research articles related to well-being were identified using databases like springer link, wiley online library, science direct, etc. Since the paper focused on well-being, objective well-being and subjective well-being (happiness) the keyword combination of these words was used to identify relevant articles. Articles published between 1980 and 2020 were focused on.

This paper has been divided into two sections. The first section critically analyzes the measures and dimensions of objective well-being. The next section is dedicated to subjective well-being, its dimensions and measures. The last section provides a discussion about the study and highlights the opportunities of future research.

4. LITERATURE REVIEW

Measures & Dimensions of Objective Well-Being

Defining objective well-being using a single definition is quite challenging because of which researchers have identified measurable dimensions (Dodge *et al.*, 2012; Alkire, 2002). Traditionally objective well-being has been measured by conducting surveys focusing on income and consumption. These surveys tend to be very time consuming and expensive, making it difficult for organizations to get information frequently (Solomon, 2001). Researchers have proposed many alternate methodologies to overcome this issue, including traditional survey methods and new data sources (Blumenstock, 2016). A recent report by the United Nations (2014) also encouraged researchers to embrace this change and adopt new ways of investigation when it comes to health and well-being.

Dimensions of Objective Well-Being

Over the past few years, organizations have sought to identify and define the various correlates and aspects essential for improving societal well-being and which will enable comparisons between countries. Different institutions have identified different dimensions of well-being like the OECD (2011a) well-being framework highlights eleven dimensions, while the UNDP (2015) has identified 17 goals. Because of the lack of unanimity, the present research has identified and suggested the following measurable dimensions of well-being:

Health. The primary indicator of well-being is health. Previous research has shown that good health brings many benefits from increased life-span, better social relationships to increased job opportunities (Helliwell, 2019). The improvement in health care facilities over the past 50 years has made the diagnosis and treatment of illness accurate and quick. Such a transformation of the health care sector has also helped reduce the mortality rate. Furthermore, according to the UNDP sustainable goals report (2016), education and awareness about chronic and communicable diseases have also increased, contributing significantly to the community's health. For example, many diseases like hypertension, diabetes and hyperlipidemia have modifiable risk factors, and a significant improvement can be brought about by introducing lifestyle changes. The plethora of information available because of the internet has also helped people change their lifestyle and improve their well-being.

Opportunities for Employment. Job opportunities contribute to an individual's health, social and financial stability and play a vital role in adding to society's economic and political stability (Voukelatou *et al.*, 2020). Employment opportunities include the rate of employment, the work quality and work-life balance. The employment rate is a crucial determinant used by policy-makers for avoiding social-exclusion and poverty. Countries like Iceland, Sweden, Norway,

etc., have high employment rates, leading to higher long-term growth, reduced financial inequality and poverty (Voukelatou *et al.*, 2020). The work quality relies on the organization climate, work arrangements, employee support, job satisfaction, rewards and compensation (Sinha, 2012). The final determinant is the work-life balance, which reduces stress levels at work, improves employee commitment, reduces work-to-family and family to work conflict (Smith & Gardner, 2007). Countries, where employees have an outstanding work-life balance, have attained it by reducing the working hours, introducing flexible working arrangements and focusing more on quality than quantity for helping employees strike a balance (Srinivasan & Kurey, 2014)

Socio-economic Development. Socio-economic factors positively affect social well-being (Voukelatou *et al.*, 2020). According to the OECD (2011b), the available income, wealth and expenditure (consumption) are the main determinants of economic well-being. While the income helps in gauging an individual's purchasing power, wealth includes savings like gold, loans, mutual funds, shares, etc., which helps when an individual experiences financial difficulties (OECD, 2011c). Consumption expenditure consists of the goods and services an individual spends on making his life comfortable (Voukelatou *et al.*, 2020). It helps determine the social status and living conditions of a person.

Environment. The environment has given us all the essentials, including air, water, and food required to survive. Any degradation in the quality of the natural habitat adversely affects the health and well-being of people. The quality of air, soil, biodiversity, climate, etc. determine the condition of the environment (ISTAT, 2015). According to the OECD better life index (2011d), the degrading quality of the environment has severely impacted the human life-span, and the number of premature deaths has increased to one million. Hence, policy-makers must consider environmental factors as they are essential for societal well-being.

Safety. Safety includes criminality and violence (ISTAT, 2015). Criminality is defined as the risk of being physically assaulted/abused, and becoming prey to crimes like sex-trafficking, child abuse, bonded/ forced labour, homicides, thefts, etc. (OECD, 2011e). The other factor is violence which comprises of aggressive behaviour within and outside the family (Amerio & Roccato, 2007). The lack of security affects the happiness and well-being of individuals and can cause anxiety, depression and hamper daily activities. At the same time, criminality can impact the well-being of people connected to the victim, directly or indirectly through social networking sites. (Voukelatou *et al.*, 2020).

Politics. Political stability is one of the essential factors that impacts objective well-being. According to MacCulloch (2017), political stability includes freedom of citizens, quality of governance, political parties, and affiliations. Veenhoven (2009) states that freedom positively contributes to societal well-being, and it has been found that democratic nations produce better policy outcomes, and the citizens are also more involved in political processes than in communist countries. People expect more transparency from the government; the fair political participation helps improve public policies, minimizes fraud/corruption, decreases the cost of transactions and directly contributes to societal well-being (Voukelatou *et al.*, 2020). Voter turnout is one of the best ways of measuring political engagement (OECD, 2011f). The second determinant is governance quality, which comprises corruption control, effective governance and regulatory quality (MacCulloch, 2017). According to Djankov *et al.* (2002), governance quality helps reduce corruption, builds trust, improves social connectedness and increases citizen participation in decision-making, which eventually helps improve societal well-being.

Furthermore, when citizens are treated as partners by governance bodies and are included while developing rules and regulations, they are more likely to comply (Blondel *et al.*, 2015). Political party affiliations also influence well-being; individuals tend to be happier when the party in power shares a similar ideology. For example, left-wing supporters tend to worry more about unemployment and would be satisfied if the party in power shared their concerns (MacCullough, 2017). However, sometimes the charisma of the leader wins supporters irrespective of party affiliations.

Measures and Dimensions of Subjective Well-Being

Subjective well-being is considered a synonymous term for happiness. Happiness is a fundamental life-goal in people's lives, and many philosophers have given varying definitions for it (Voukelatou, 2020). Aristotle defined happiness as 'eudaimonia' which considers happiness a virtue and an end (Burger, 2009). However, in recent studies, researchers have identified correlates and determinants of well-being which provide a view separate from Aristotle's definition (Voukelatou *et al.*, 2020). Some researchers have defined happiness as life-satisfaction while some suggest that it is a favourable evaluation of life quality (Veenhoven, 1984). According to Veenhoven (2009), these evaluations are influenced by an individual's moods, emotions, feelings, thoughts, and life expectations. These components determine an individual's overall happiness and compared to the objective measures (e.g. GDP, income, etc.) they help map changes in well-being as well (Frey & Stutzer, 2002). Since happiness is subjective, self-reporting scales like the positive and negative affect (PANAS) scale are used to measure it (Watson & Clark, 1999). These self-evaluations are considered reliable as they provide accurate and stable data, which helps conduct cross-cultural surveys (Diener *et al.*, 2018). Self-reporting surveys like the Gallup World Poll, the World Values survey, etc. have helped map happiness at the grass-root levels (Voukelatou *et al.*, 2020). Such surveys can yield faulty results as they are influenced by the individual's mood (Deaton & Stone, 2016). To overcome this problem researchers prefer the longitudinal approach like

Ecological Momentary Assessment (EMA) where the respondents rate their feelings at the end of their activities to increase the accuracy and reduce recall biases (Kahneman *et al.*, 1999). Similarly, some researchers suggest that global reports are more accurate than any other method (Shiffman *et al.*, 2008). Keeping in view these observations, a multi-method assessment is suggested for assessing happiness, which considers both the global and momentary assessments (Tay *et al.*, 2014).

Dimensions of Subjective Well-being

Researchers have identified determinants of subjective well-being that positively and negatively impact it (Diener & Seligman, 2004). Some of these determinants reflect the psychologist's point of view, while some reflect the economist's opinion (Dolan *et al.*, 2008). Most of these determinants have been identified using traditional surveys and are as follows:

Genes. Previous studies have shown that genes play an important role in determining an individual's happiness; however, there is no consensus among researchers (Bartels *et al.*, 2010; Nes & Røysamb, 2015). According to some studies, 40 per cent of the variation in an individual's happiness scores arises from genetics (Bartels *et al.*, 2009). For example, an individual's personality also impacts their happiness as people with extraverted personalities tend to be happier than introverted ones (Costa & McCrae, 1980). Similarly, people with low self-esteem are more likely to suffer from depression (Dolan *et al.*, 2008). Researchers have also found linkages between the age, gender and the level of happiness amongst people. Some studies have shown that happiness and age have a linear relationship (Deaton & Tortora, 2015), while some have shown that the relationship follows a U-shaped curve (Dolan *et al.*, 2008). In case of gender, some studies have shown that women are happier than men, but other studies have contradicted these results (Dolan *et al.*, 2008). Hence, it is essential to keep in mind the context while interpreting these results.

Needs. Fulfillment of basic needs (like shelter and food) and psychological needs (including autonomy, relatedness and competence) is essential for attaining subjective well-being (Kendrick *et al.*, 2010). A study conducted by Tay *et al.* (2011) showed that positive life-evaluations are associated with fulfilling basic and psychological needs while high positive affect is related to social needs fulfillment. The difference in individual well-being arises because of the difference in satisfaction of needs (Veenhoven & Ehrhardt, 1995). It is also essential that each of these needs is fulfilled, as they are not dependent on each other (Veenhoven & Ehrhardt, 1995).

Social Environment. The social environment is an amalgamation of many factors that affect the happiness of an individual. According to Voukelatou *et al.* (2020), elements in the social environment like education, employment/financial opportunities, marital status, health, climate, etc. all impact individuals' happiness to varying degrees depending on the context and culture. Many studies have been conducted which have linked happiness to education but have got contradicting results (Powdthavee, 2010). While some studies have suggested a negative correlation, some suggest that the two are unrelated (Nikolaev, 2015). Some researchers found that highly educated people experience more positive emotions, lesser negative affect, get more job opportunities, have happier marriages and are financially strong (Cuñado & de Gracia, 2012).

Another critical determinant of subjective well-being is health (Voukelatou *et al.* (2020). Mental health has a stronger correlation with happiness than physical health (Dolan *et al.*, 2008). According to Ferrer-i-Carbonell and Gowdy (2007), health-conscious people tend to exercise more which helps reduce stress levels, making them happier.

Happiness has also been linked to climate and weather conditions, as researchers suggest that extreme weather conditions deteriorate an individual's happiness (Rehdanz & Maddison, 2005). Furthermore, studies have shown that living in an urban or rural setting also impacts happiness (Hudson, 2006). For example, a survey conducted by Hayo (2004) showed that people living in rural areas were happier than those living in urban areas.

Economic Environment. Income is the primary elements in the economic environment which influences the happiness of an individual. According to Veenhoven (1991), an individual's happiness depends upon the satisfaction of needs (basic and psychological) which is only possible when they have a source of income. According to a longitudinal study conducted on lottery winners, it was found that people who won lotteries were happier than those who did not (Gardner & Oswald, 2007). However, according to Easterlin (1974), happiness and income have a positive relationship only in the short-run, and over time there is no association between the two. Hence, the relationship must be interpreted with care. Another important factor is employment. People who are employed tend to be happier than unemployed individuals (Wijnngaards *et al.*, 2019). Knabe *et al.* (2016) has linked employment with increased cognitive and affective well-being.

Political Environment. Many elements within the political environment have an impact on the happiness of an individual (Radcliff & Shufeldt, 2016). According to Radcliff *et al.* (2016), people tend to be happier in countries that provide them political freedom to initiate change that shapes the political system. A study conducted in developed countries showed that political freedom and happiness had a positive relationship (Veenhoven, 2015). Another important determinant is social hierarchy which comprises of power and prestige (Voukelatou *et al.*, 2020). Previous

research has shown that people tend to be dissatisfied and unhappy while living in hierarchal societies (Brule & Veenhoven, 2010). Social trust and the quality of governance also impact subjective well-being (Bartolini *et al*, 2017; Ott, 2010).

CONCLUSION

The main aim of this study was to provide researchers a theoretical framework on objective and subjective well-being and identify the dimensions relevant for their measurement. Researchers can utilize this paper to gain a deeper understanding about well-being. However, this is not a complete review of the studies on well-being. The aim of this study was to provide a reference point for future research. This topic shows a huge research potential and researchers can focus on studying the impact well-being has on the working population in organisation settings. Moreover, most of the studies have focused on self-reports while studying subjective well-being which is time-consuming and expensive. It also fails to capture the emotional/ structural components of well-being. Hence, future researchers can adopt innovative methods which will be inclusive of both. It is also essential that researchers take ethical concerns into consideration while using such innovative approaches.

REFERENCES

- [1] Alkire, S. (2002). Dimensions of human development. *World development*, 30(2), 181-205.
- [2] Amerio, P., & Roccato, M. (2007). Psychological reactions to crime in Italy: 2002–2004. *Journal of Community Psychology*, 35(1), 91-102.
- [3] Bartels, M., & Boomsma, D. I. (2009). Born to be happy? The etiology of subjective well-being. *Behavior genetics*, 39(6), 605-615.
- [4] Bartels, M., Saviouk, V., De Moor, M. H., Willemsen, G., van Beijsterveldt, T. C., Hottenga, J. J., ... & Boomsma, D. I. (2010). Heritability and genome-wide linkage scan of subjective happiness. *Twin Research and Human Genetics*, 13(2), 135-142.
- [5] Bartolini, S., Mikucka, M., & Sarracino, F. (2017). Money, trust and happiness in transition countries: evidence from time series. *Social indicators research*, 130(1), 87-106.
- [6] Blondel, V. D., Decuyper, A., & Krings, G. (2015). A survey of results on mobile phone datasets analysis. *EPJ data science*, 4(1), 10.
- [7] Blumenstock, J. E. (2016). Fighting poverty with data. *Science*, 353(6301), 753-754.
- [8] Brulé, G., & Veenhoven, R. (2012). Why are Latin Europeans less happy? The impact of hierarchy. *Polyphonic anthropology—theoretical and empirical cross-cultural fieldwork*, InTech, Rijeka, 203-216.
- [9] Burger, R. (2009). *Aristotle's Dialogue with Socrates: On the "Nicomachean Ethics"*. University of Chicago Press.
- [10] Costa, P. T., & McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: happy and unhappy people. *Journal of personality and social psychology*, 38(4), 668.
- [11] Cuñado, J., & de Gracia, F. P. (2012). Does education affect happiness? Evidence for Spain. *Social indicators research*, 108(1), 185-196.
- [12] Deaton, A. (1997). *The analysis of household surveys: a microeconomic approach to development policy*. The World Bank.
- [13] Deaton, A. S., & Tortora, R. (2015). People in sub-Saharan Africa rate their health and health care among the lowest in the world. *Health Affairs*, 34(3), 519-527.
- [14] Deaton, A., & Stone, A. A. (2016). Understanding context effects for a measure of life evaluation: How responses matter. *Oxford Economic Papers*, 68(4), 861-870.
- [15] Diener, E., & Seligman, M. E. (2004). Beyond money: Toward an economy of well-being. *Psychological science in the public interest*, 5(1), 1-31.
- [16] Diener, E., Oishi, S., & Tay, L. (2018). Advances in subjective well-being research. *Nature Human Behaviour*, 2(4), 253-260.
- [17] Diener, E., Tay, L., & Oishi, S. (2013). Rising income and the subjective well-being of nations. *Journal of personality and social psychology*, 104(2), 267.
- [18] Djankov, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2002). The regulation of entry. *The quarterly Journal of economics*, 117(1), 1-37.
- [19] Dodge, R., Daly, A. P., Huyton, J., & Sanders, L. D. (2012). The challenge of defining wellbeing. *International journal of wellbeing*, 2(3).
- [20] Dolan, P., Peasgood, T., & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of economic psychology*, 29(1), 94-122.
- [21] Easterlin, R. A. (1974). Does economic growth improve the human lot? Some empirical evidence. In *Nations and households in economic growth* (pp. 89-125). Academic Press.
- [22] Faggiolani, C. (2016). The Fair and Sustainable BES-Wellness Report in Italy. *Libraries today*, 34, 19-26.
- [23] Ferrer-i-Carbonell, A., & Gowdy, J. M. (2007). Environmental degradation and happiness. *Ecological economics*, 60(3), 509-516.

- [24] Fleurbaey, M. (2009). Beyond GDP: The quest for a measure of social welfare. *Journal of Economic literature*, 47(4), 1029-75.
- [25] Frey, B. S., & Stutzer, A. (2002). What can economists learn from happiness research?. *Journal of Economic literature*, 40(2), 402-435.
- [26] Gardner, J., & Oswald, A. J. (2007). Money and mental wellbeing: A longitudinal study of medium-sized lottery wins. *Journal of health economics*, 26(1), 49-60.
- [27] Hayo, B. (2004). Happiness in Eastern Europe. Working Paper No. 12.
- [28] Helliwell, J. F. (2019). *Measuring and using happiness to support public policies* (No. w26529). National Bureau of Economic Research.
- [29] Hudson, J. (2006). Institutional trust and subjective well-being across the EU. *Kyklos*, 59(1), 43-62.
- [30] Kahneman, D., Diener, E., & Schwarz, N. (Eds.). (1999). *Well-being: Foundations of hedonic psychology*. Russell Sage Foundation.
- [31] Kenrick, D. T., Griskevicius, V., Neuberg, S. L., & Schaller, M. (2010). Renovating the pyramid of needs: Contemporary extensions built upon ancient foundations. *Perspectives on psychological science*, 5(3), 292-314.
- [32] Knabe, A., Schöb, R., & Weimann, J. (2016). Partnership, gender, and the well-being cost of unemployment. *Social Indicators Research*, 129(3), 1255-1275.
- [33] MacCulloch, R. (2017). How political systems and social welfare policies affect well-being: A literature review. *The Handbook of Well-being*, edited by Ed Diener, Shige Oishi and Louis Tay, Forthcoming, Motu Working Paper, 17-14.
- [34] Nes, R. B., & Røysamb, E. (2015). The heritability of subjective well-being: Review and meta-analysis. *The genetics of psychological wellbeing: The role of heritability and genetics in positive psychology*, 75-96.
- [35] Nikolaev, B. (2015). Living with mom and dad and loving it... or are you?. *Journal of Economic Psychology*, 51, 199-209.
- [36] Organization for Economic Cooperation and Development Oecd. (2011d). OECD Better Life Index: Environment. *OECD Report*. Accessed on Nov 2020 from <http://www.oecdbetterlifeindex.org/topics/environment/>.
- [37] Organization for Economic Cooperation and Development Oecd. (2011c). OECD Better Life Index: Income. *OECD Report*. Accessed on Nov 2020 from <http://www.oecdbetterlifeindex.org/topics/income/>.
- [38] Organization for Economic Cooperation and Development Oecd. (2011e). OECD Better Life Index: Safety. *OECD Report*. Accessed on Nov 2020 from <http://www.oecdbetterlifeindex.org/topics/safety/>.
- [39] Organization for Economic Cooperation and Development Oecd. (2011 f). OECD Better Life Index: Civic Engagement. *OECD Report*. Accessed on Oct 2020 from <http://www.oecdbetterlifeindex.org/topics/civic-engagement/>.
- [40] Organization for Economic Cooperation and Development Oecd. (2011b). *How's Life?: Measuring Well-being*. OECD Publishing.
- [41] Ott, J. C. (2010). Good governance and happiness in nations: Technical quality precedes democracy and quality beats size. *Journal of Happiness Studies*, 11(3), 353-368.
- [42] Powdthavee, N. (2010). How much does money really matter? Estimating the causal effects of income on happiness. *Empirical economics*, 39(1), 77-92.
- [43] Radcliff, B., & Shufeldt, G. (2016). Direct democracy and subjective well-being: the initiative and life satisfaction in the American states. *Social Indicators Research*, 128(3), 1405-1423.
- [44] Rehdanz, K., & Maddison, D. (2005). Climate and happiness. *Ecological Economics*, 52(1), 111-125.
- [45] Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist*, 55(1), 68.
- [46] Shiffman, S., Stone, A. A., & Hufford, M. R. (2008). Ecological momentary assessment. *Annu. Rev. Clin. Psychol.*, 4, 1-32.
- [47] Sinha, C. (2012). Factors affecting quality of work life: Empirical evidence from Indian organizations. *Australian Journal of Business and Management Research*, 1(11), 31-40.
- [48] Smith, J., & Gardner, D. (2007). Factors affecting employee use of work-life balance initiatives.
- [49] Solomon, D. J. (2001). Conducting web-based surveys. *Practical assessment research and evaluation*, 7(19).
- [50] Srinivasan, A., & Kurey, B. (2014). Creating a Culture of Quality. *Havard Business Review*. Accessed on Nov 2020 from <https://hbr.org/2014/04/creating-a-culture-of-quality>.
- [51] Stiglitz, J. E., Sen, A., & Fitoussi, J. P. (2009). Report by the commission on the measurement of economic performance and social progress.
- [52] Sumner, A. (2006). "Economic Well-being and Non-economic Well-being". In Mark McGillivray and Matthew Clarke, eds. *Understanding Human Well-Being*. Helsinki: UNU Wider.
- [53] Tay, L., & Diener, E. (2011). Needs and subjective well-being around the world. *Journal of personality and social psychology*, 101(2), 354.
- [54] Tay, L., Chan, D., & Diener, E. (2014). The metrics of societal happiness. *Social Indicators Research*, 117(2), 577-600.
- [55] United Nations Development Program. (2015). UNDP Sustainable Development Goals. *United Nations Reports*. Accessed on Oct 2020 from <https://sustainabledevelopment.un.org/sdgs>.
- [56] United Nations. (2014). A world that counts: mobilizing the data revolution for sustainable development.

Technical Report.

- [57] Van Hoorn, A. (2007). A short introduction to subjective well-being: Its measurement, correlates and policy uses. In *Trabajo presentado en la International conference: Is happy measurable and what do those measures mean for policy*.
- [58] Veenhoven, R. (1984). The concept of happiness. In *Conditions of Happiness* (pp. 12-38). Springer, Dordrecht.
- [59] Veenhoven, R. (1991). Is happiness relative?. *Social indicators research*, 24(1), 1-34.
- [60] Veenhoven, R. (2009). How do we assess how happy we are? Tenets, implications and tenability of three theories. *Happiness, economics and politics*, 45-69.
- [61] Veenhoven, R. (2015). Social conditions for human happiness: A review of research. *International Journal of Psychology*, 50(5), 379-391.
- [62] Veenhoven, R., & Ehrhardt, J. (1995). The cross-national pattern of happiness: Test of predictions implied in three theories of happiness. *Social indicators research*, 34(1), 33-68.
- [63] Voukelatou, V., Gabrielli, L., Miliou, I., Cresci, S., Sharma, R., Tesconi, M., & Pappalardo, L. (2020). Measuring objective and subjective well-being: dimensions and data sources. *International Journal of Data Science and Analytics*, 1-31.
- [64] Watson, D., & Clark, L. A. (1999). The PANAS-X: Manual for the positive and negative affect schedule-expanded form.
- [65] Wijngaards, I., Hendriks, M., & Burger, M. J. (2019). Steering towards happiness: An experience sampling study on the determinants of happiness of truck drivers. *Transportation research part A: policy and practice*, 128, 131-148.