

Assessment on Happiness Measurement: A critical review - investigation on existing happiness measurement tools

Ruining Ge

Maple Leaf International Academy Shenzhen, Shenzhen, 518000, China

Abstract. Happiness is undeniably significant for each individual, and it concerns a wide range of aspects of life. Furthermore, happiness can promote features such as health, workplace experience, and family relationships. In general, it contributes to the well-being of the world. In response to the importance of happiness, scholars have persisted to find the true meaning of happiness for thousands of years, and they are dedicated to further interpreting and conceptualizing the term. Throughout the course of time, researchers have developed a variety of happiness measurement tools. The tools serve to provide the opportunity for further study of happiness in a perceptible manner. Even so, questions have been asked on whether happiness can be measured. This essay aligns with the statement that happiness is measurable, and the paper evaluates some of the current measurement tools. Due to the ambiguity and subjectivity of happiness, it can be influenced by many factors. The paper has also recognized certain limitations that exist within these instruments. In addition, this essay provides suggestions on how to enhance and improve future measurement tools for happiness.

Keywords: happiness measurement; perceptible manner; ambiguity; subjectivity.

1. Introduction

Happiness holds profound significance across various dimensions of human life. Primarily, happiness exerts a substantial influence on physical and psychological well-being, supported by robust correlational, longitudinal, and experimental evidence. For instance, individuals with a more optimistic disposition tend to experience longer lives, engage in healthier behaviors, and enjoy enhanced cardiovascular health (Kushlev et al., 2020). Moreover, happiness demonstrates a close association with individuals' work and career experiences. Happier individuals exhibit higher performance levels, greater resilience in dealing with stressful events, and they tend to have positive workplace relationships and job satisfaction (Kun & Gadancz, 2022). Additionally, happiness plays a pivotal role in nurturing family relationships (Quoidbach et al., 2019). Furthermore, the global recognition of happiness is exemplified by the establishment of the International Day of Happiness by the United Nations. In 2015, the UN introduced the 17 Sustainable Development Goals, emphasizing the eradication of poverty, reduction of inequality, and preservation of the planet, as integral components of well-being and happiness pursuits.

2. The Essence of Happiness

Before understanding the meaning of happiness measurement, it is imperative to primarily comprehend the definition of happiness, including its structure and composition. So far, the academic community's research on happiness is mainly based on the following three major concepts: hedonism theory, desire theory, and authentic theory (Bognar, 2010; Heathwood, 2006). The hedonism theory understands happiness as maximizing positive emotions and minimizing unpleasant feelings. Desire theory conceptualizes the term as the fulfillment of desires. Additionally, the authentic theory states the happiness is composed of a pleasant and meaningful life. These basic theories have provided criteria for the direction of happiness measurement (Nandini & Afiatno, 2020). In order to effectively measure happiness, it is essential to explore how these theories can be translated into measurable indicators and dimensions.

The academic community has extensively discussed the content of happiness, focusing on two broad dimensions: self and social relations. Within the individual dimension, autonomy and competence, as suggested by the self-determination theory (SDT), have been identified as essential components of happiness (Ryan & Deci, 2000). Additionally, the quality of relationships has been recognized as a crucial factor connected to happiness. Happiness is also known as affective well-being. The six-dimensional model of well-being by Riff (1989) and the PERMA model by Seligman (2011) both include positive relationships as integral components (Kun & Gadanecz, 2022). The six-dimensional model of well-being introduces dimensions such as self-acceptance, environmental mastery, autonomy, positive relations with others, personal growth, purpose in life (Ryff, 1989). The PERMA model includes positive emotions, engagement, positive relationships, meaning, and accomplishment (Seligman, 2011). These dimensions emphasize the importance of both self and positive relations as being the building blocks of happiness. They also provide a foundation for measuring happiness in various aspects of life.

These models offer valuable insights for developing measurement strategies and tools that can accurately assess happiness. By comprehending the dimensions of happiness, we open up the possibility for more accurate measures of happiness and lay the foundation for developing various kinds of measurement strategies and tools. Understanding the complexities of happiness and its multifaceted nature allows us to strive towards effective measurements that capture its essence.

3. Investigation on Happiness Measurement Tools

The development of happiness measurement tools by scholars has been extensive. However, debates have arisen regarding how happiness should be measured due to factors such as conceptual indistinctness. Scholars have endowed happiness with various definitions, which rendered it a complex construct (Veenhoven & Veenhoven, 1984). As a result, clarity regarding happiness becomes elusive; this often leads to confusion between similar terms such as well-being, happiness, quality of life, and life satisfaction. It is still crucial to acknowledge the diversity of explanations surrounding happiness, as some researchers overlook these distinctions and consider the terms to be interchangeable. The debates and divergent perspectives highlight the challenges and intricacies associated with measuring happiness accurately.

In this section, we conducted a systematic review on the following happiness measurement tools:

1. Subjective Happiness Scale (Lyubomirsky & Lepper, 1999)
2. Oxford Happiness Questionnaire (OHQ) (Hills & Argyle, 2002)
3. Satisfaction With Life Scale (SWLS) (Diener et al., 1985)
4. Shorter version of Happiness At Work (SHAW) (Salas-Vallina & Alegre, 2021)
5. Depression-Happiness Scale (SDHS) (Joseph et al., 2004)
6. Interdependent Happiness Scale (IHS) (Hitokoto & Uchida, 2015)
7. Measurement of objective well-being (Voukelatou et al., 2021)
8. Measurement of subjective well-being (Voukelatou et al., 2021)
9. Psychological Equilibrium Model (PEM) (Galanakis et al., 2020)

Several keywords shown in Table 1 served to provide a guide in our researches. This review focused on the following three questions:

1. What are the current common scales? What is the range of their applications?
2. What are the measurement dimensions and methods of the common scales?
3. What are the limits of the scales?

The field of happiness research has witnessed a significant increase in studies that focus on developing measurement tools. These efforts provide valuable references for further research on happiness (Table 2 in appendix). Systematic reviews have shown that most happiness measurement tools exhibit good reliability, with alpha coefficients ranging from 0.77 to 0.98 (Fadda & Scalas, 2016; Ng Fat et al., 2017). This indicates their consistency and stability over time and in different conditions. Research utilizing these measurement tools has extensively confirmed the link between happiness

and the following aspects: health, positive relationships as well as life satisfaction (Haliwa et al., 2022; Majercakova Albertova & Bolekova, 2022). The findings align with existing theories and life experiences, thereby reflecting the effectiveness of these measurement methods. These studies suggest that measuring happiness is not only a viable concept but also an achievable goal, supported by the empirical evidence and theoretical foundations.

4. Limitations of Happiness Measurement Tools

After analyzing the definition, dimensions, and items of happiness in existing measurement tools, we have identified several limitations in the field of happiness measurement. These limitations underscore the challenges in accurately capturing and quantifying happiness.

First, one of the limitations in measuring happiness is the ambiguity surrounding similar terms; this leads to negligence in certain aspects during measurement. Subjective well-being encompasses various dimensions, including hedonic, eudemonic, and evaluative aspects. The two major perspectives of happiness are the hedonic and the eudemonic. Happiness is widely considered in the sense of well-being (Higgs & Dulewicz, 2014). It is characterized by momentary experiences of positive affect and aims to reduce negative affect (Luhmann, 2017). However, researchers often mistakenly equate happiness with life satisfaction, which is a cognitive evaluation of one's overall life (Diener et al., 1985). These terms cannot be used interchangeably, as happiness represents transient emotional states, while life satisfaction reflects long-term fulfillment of life goals (Badri et al., 2022). The incomplete measurement of happiness that neglects the emotional aspect limits our understanding of this complex construct.

Furthermore, a limitation of current measurement tools is their focus on participants' recent experiences of happiness, neglecting the long-term perspectives. When happiness is investigated on a temporary basis, measurement accuracy can be affected by many unstable and transient factors. Consequently, the results may not accurately represent one's overall happiness state. General happiness is determined by an individual's life experience. Time-indicative words such as "in general", "overall", "often", or "normally" are used to measure happiness in a stable state. However, in reality, individuals' responses on happiness can be affected by many temporary factors; this leads to invalidity and bias which could not be reflected by the index of reliability and validity.

Meanwhile, in the pursuit of measurement stability and objectivity, researchers have made great efforts to define and formulate happiness as one single concept. However, as a highly subjective variable, happiness often faces significant challenges in being transformed into an objective measurement object. For example, missing important information and insufficient examination of individual differences directly undermine the basis of happiness measurement. Therefore, many scientists have turned to focus on the measurement of subjective well-being, leaving the definition of happiness to the respondents.

What's more, the individuals' cognitive levels and educational backgrounds influence their judgement on happiness. For example, people with higher level of cognition will perhaps include their values and meaning of life into their evaluation of happiness. They might not be satisfied with superficial happiness. This subjective interpretation expands the gap between the subjective and objective happiness; for it is unlikely that subjective happiness can reflect the objective status.

In addition, subjective views on happiness are commonly objectified; consequently, objective happiness is being distorted. The fundamental theories and concepts of the measurement tools are also based on the subjective views of people. Therefore, cultural diversity leads to certain bias in measurement.

In summary, the field of happiness measurement faces many limitations. Currently, the measurement tools contain concerning conceptual clarity. What's more, they mostly focus on momentary rather than long-term happiness, and the objectification of subjective views, potential cultural bias are often seen. To advance the field, it is imperative to develop comprehensive measures that encompass the emotional aspect of happiness, acknowledge individual differences, and embrace

the subjective nature of well-being. By addressing these limitations, we can enhance the accuracy and effectiveness of happiness measurement.

5. Discussion

Measuring happiness is crucial, for it provides data support, guidelines for policy development, systematic evaluation of studies, and promotes well-being. It has become an essential tool for human well-being and social development. There has been extensive research exploring the factors influencing happiness, and policies, interventions all rely on the use of happiness measurement tools.

Studies have utilized various quantitative methods to measure happiness, considering different interpretations across multiple dimensions. These measurement instruments demonstrate reliable and valid results, effectively reflecting individual happiness to some extent, as confirmed by analyses.

However, both subjective and objective happiness scales possess limitations that present challenges for further research, application, and evaluation. In East Asian cultures, such as China, perceptions of happiness significantly differ from those in Western countries. While Western-based happiness scales demonstrate high reliability and validity, they cannot be directly applied to Chinese individuals due to cultural differences. This renders such measures misleading when used in different countries. Moreover, it is crucial to recognize that the application of happiness measurement tools perpetually promotes the concept of happiness through specific instruments, potentially influencing societal and individual understandings and giving rise to ethical risks.

Nonetheless, the pursuit of measuring happiness must persist. Quantifying happiness does not aim to provide a precise definition with a universal standard or oversimplify societal understanding; rather, it enables a comprehensive and measurable exploration of happiness. Future research and interventions on happiness demand more precise, localized, and higher-quality measurement approaches. Moreover, researchers should be fully aware of the challenges and limitations associated with measuring happiness using existing tools. It is essential to acknowledge the subjectivity and ambiguity of happiness, as well as the complexity and abstraction inherent in its measurement. Future studies should endeavor to develop happiness measurement tools from various perspectives, including cultural, psychological, and social dimensions.

References

- [1] Badri, M. A., Alkhaili, M., Aldhaheri, H., Yang, G., Albahar, M., & Alrashdi, A. (2022). Exploring the Reciprocal Relationships between Happiness and Life Satisfaction of Working Adults-Evidence from Abu Dhabi. *Int J Environ Res Public Health*, 19(6). <https://doi.org/10.3390/ijerph19063575>
- [2] Bogнар, G. (2010). Authentic Happiness. *Utilitas*, 22(3), 272-284. <https://doi.org/10.1017/S0953820810000191>
- [3] Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49(1), 71-75. https://doi.org/10.1207/s15327752jpa4901_13
- [4] Fadda, D., & Scalas, L. F. (2016). Neuroticism as a Moderator of Direct and Mediated Relationships Between Introversion-Extraversion and Well-Being. *Europe's Journal of Psychology*, 12(1), 49-67. <https://doi.org/10.5964/ejop.v12i1.985>
- [5] Galanakis, M., Kyriazos, T., Stalikas, A., & Tsoli, S. (2020). The recipe for Happiness: A critical review-introduction to a new theoretical model and a new psychometric tool for the measurement of Eudemonia. *Psychology: The Journal of the Hellenic Psychological Society*, 25(1), 190-206.
- [6] Haliwa, I., Spalding, R., Smith, K., Chappell, A., & Strough, J. (2022). Risk and protective factors for college students' psychological health during the COVID-19 pandemic. *Journal of American College Health*, 70(8), 2257-2261. <https://doi.org/10.1080/07448481.2020.1863413>
- [7] Heathwood, C. (2006). Desire satisfactionism and hedonism. *Philosophical Studies*, 539-563.

- [8] Higgs, M., & Dulewicz, V. (2014). Antecedents of well-being: a study to examine the extent to which personality and emotional intelligence contribute to well-being. *The International Journal of Human Resource Management*, 25(5), 718-735.
- [9] Hills, P., & Argyle, M. (2002). The Oxford Happiness Questionnaire: a compact scale for the measurement of psychological well-being. *Personality and individual differences*, 33(7), 1073-1082.
- [10] Hitokoto, H., & Uchida, Y. (2015). Interdependent Happiness: Theoretical Importance and Measurement Validity. *Journal of Happiness Studies*, 16(1), 211-239. <https://doi.org/10.1007/s10902-014-9505-8>
- [11] Joseph, S., Linley, P. A., Harwood, J., Lewis, C. A., & McCollam, P. (2004). Rapid assessment of well-being: The Short Depression-Happiness Scale (SDHS). *Psychol Psychother*, 77(Pt 4), 463-478. <https://doi.org/10.1348/1476083042555406>
- [12] Kun, A., & Gadanez, P. (2022). Workplace happiness, well-being and their relationship with psychological capital: A study of Hungarian Teachers. *Current Psychology*, 41(1), 185-199. <https://doi.org/10.1007/s12144-019-00550-0>
- [13] Kushlev, K., Heintzelman, S. J., Lutes, L. D., Wirtz, D., Kanippayoor, J. M., Leitner, D., & Diener, E. (2020). Does Happiness Improve Health? Evidence From a Randomized Controlled Trial. *Psychological Science*, 31(7), 807-821. <https://doi.org/10.1177/0956797620919673>
- [14] Luhmann, M. (2017). 13 - The development of subjective well-being. In J. Specht (Ed.), *Personality Development Across the Lifespan* (pp. 197-218). Academic Press. <https://doi.org/https://doi.org/10.1016/B978-0-12-804674-6.00013-2>
- [15] Lyubomirsky, S., & Lepper, H. S. (1999). A Measure of Subjective Happiness: Preliminary Reliability and Construct Validation. *Social Indicators Research*, 46(2), 137-155. <https://doi.org/10.1023/A:1006824100041>
- [16] Majercakova Albertova, S., & Bolekova, V. (2022). Relationships between Life Satisfaction, Happiness and Meaning in Life in Pregnancy during COVID-19 Pandemic. *Journal of Happiness and Health*, 2(2), 87-97. <https://doi.org/10.47602/johah.v2i2.20>
- [17] Nandini, D., & Afiatno, B. E. (2020). The determinants of happiness: empirical evidence of Java Island. *Jurnal Ekonika: Jurnal Ekonomi Universitas Kadir*, 5(2), 123-139.
- [18] Ng Fat, L., Scholes, S., Boniface, S., Mindell, J., & Stewart-Brown, S. (2017). Evaluating and establishing national norms for mental wellbeing using the short Warwick–Edinburgh Mental Well-being Scale (SWEMWBS): findings from the Health Survey for England. *Quality of Life Research*, 26(5), 1129-1144. <https://doi.org/10.1007/s11136-016-1454-8>
- [19] Quoidbach, J., Taquet, M., Desseilles, M., de Montjoye, Y.-A., & Gross, J. J. (2019). Happiness and Social Behavior. *Psychological Science*, 30(8), 1111-1122. <https://doi.org/10.1177/0956797619849666>
- [20] 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.
- [21] Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069.
- [22] Salas-Vallina, A., & Alegre, J. (2021). Happiness at work: Developing a shorter measure. *Journal of Management & Organization*, 27(3), 460-480.
- [23] Seligman, M. E. (2011). *Flourish: A visionary new understanding of happiness and well-being*. Simon and Schuster.
- [24] Veenhoven, R., & Veenhoven, R. (1984). The concept of happiness. *Conditions of happiness*, 12-38.
- [25] Voukelatou, V., Gabrielli, L., Miliou, I., Cresci, S., Sharma, R., Tesconi, M., & Pappalardo, L. (2021). Measuring objective and subjective well-being: dimensions and data sources. *International Journal of Data Science and Analytics*, 11(4), 279-309. <https://doi.org/10.1007/s41060-020-00224-2>