



Can Happiness be Measured? A Review of Research on Happiness Measures

Ruohan Li
(Keystone Academy)

ABSTRACT:

Happiness is becoming an increasingly important matter. Although happiness can still be measured in relative values, the accuracy of the measurement is largely hindered by its abstract nature and the intricacy of the factors influencing it. This essay addresses the main challenges and limitation of measuring happiness, and possible ways to enhance the accuracy of happiness measurements.

KEYWORDS: Happiness; Measures; Challenges and limitations

Received 15 Oct., 2023; Revised 29 Oct., 2023; Accepted 31 Oct., 2023 © The author(s) 2023.

Published with open access at www.questjournals.org

I. INTRODUCTION

Happiness is becoming an increasingly important matter as we proceed into the post-materialistic phase where basic economic and physical security are met. We develop more entertainment activities, travel more to see the world around us, and seek for higher aspirations in life. These are all examples of how we are pursuing different types of happiness. Happiness can be defined as “the degree to which an individual judges the overall quality of his life-as-a-whole favorably” [1]. Happiness may seem to be a straightforward concept for most people as it is experienced in day-to-day life, but it can be difficult to measure accurately. Though happiness can still be measured in relative values, the accuracy of the measurement is largely hindered by its abstract nature and the intricacy of the factors influencing it. In this essay, I’m going to identify the main challenges and limitation of measuring happiness, and possible ways to enhance the accuracy of happiness measurements.

COMPONENTS OF HAPPINESS & MEASURES

The two distinct aspects that are associated with the extent of happiness are cognitive component and affective component. The cognitive component is about “contentment” which is the degree to which an individual sees him/her-self being successful and his/her goals being achieved and is usually the result of hard-working and intentional intellectual activity [2]. “Contentment” in this case refers to the feeling when hard work pays off. The affective component is the “hedonic level of affect” or pleasantness; it is the degree to which an experience leads pleasant feelings and positive emotions to an individual, and this usually happens without conscious thinking and awareness [3]. For example, eating delicious food is an event that may contribute to the increase of hedonic level. Affective and cognitive components are independent of each other, so should both be taken into consideration when speaking about the “overall” happiness.

Limited empirical research has been done to measure contentment. Contentment can only be measured through interrogations like questionnaires, since people have different aspirations and life experiences and it is very unlikely that a person, even expert, can correctly estimate the effect of a specific achievement to the level of contentment of another [4]. One of the very few contentment research is done by Cantril & Roll which first ask them to enumerate their aspirations and then state their current stand on their progress of achieving the aspirations on a scale of 1 to 10 [5]. Regardless of the quality of the questions, the number scale is posing problems to the accuracy of happiness measurement, which is going to be discussed in the next section, yet few effective methods of measuring contentment are developed.

The hedonic level of affect and contentment are fundamentally different but are both components of happiness, so measuring both indexes separately is crucial in attempts of obtaining valid results from tests. Hedonic level of affect can be measured in 2 ways, interrogation and observation of non-verbal behaviors. An experiment of these two methods combined is done by Wessman & Ricks [6]. Intensive clinical interviews were done by Wessman and Ricks over a course of 3 years. The interviewees were asked direct and indirect questions

associated with their level of happiness (mostly hedonic level of affect). The main problem with this kind of questioning is with the happiness scale.

LIMITATIONS OF HAPPINESS MEASURES

Currently, the most used way of measuring happiness is self-reports which often involves multiple-item scales or other single-answer questions [7]. Some reports are designed to have the respondents rate themselves on number scales to indicate their feeling from worst possible to best possible towards an event or situation. Other reports, like PANAS, ask the respondents to choose an option that most closely describe the extent of his/her feeling towards a certain situation or event from a list of descriptive phrases provided [8]. While both scales of measuring generate quantitative results of the relative values of happiness, they have problems that interfere with the accuracy of happiness measurement. For example, the General Happiness Scale is a commonly used tests of happiness created by Sonja Lyubomirsky, and uses a number scale from 1 to 7 [9]. Questions like “compare to most of my peers, I consider myself...’ Select 1–7, where 1 is least happy and 7 is most happy” are given on the test [10]. The problem with this number-scale test is that while numbers are separated into 7 discrete levels, feelings and emotions are in continuous spectrums, so most of the times, respondents would have to round their quantifications to match the numbers provided. In other words, does a person rated a 5 from the test has exactly the same level of happiness as another person that was also rated a 5? Thus, the answers in numbers can’t reflect the respondents’ true feeling accurately. Moreover, very extreme emotions are difficult to express and emphasize in such number-scale tests, which is also a notable issue since extreme emotions can be crucial in determining the overall happiness level of the individual.

VALIDITY OF RESPONSES

Most happiness evaluations are self-reported based on the questionnaire given, and this has led to high likelihood of obtaining invalid results due to biases. Common sources of bias include defensive responses of the respondents, stereotypical responses, and effect of time emphasis.

To begin with, defensive response is often referred to as “defensive or submissive behaviors in response to what a person perceives as a threat” [11]. Defensive response in the mind happens when individuals are disappointed with life but can’t handle this outcome. One of the mind defensive response is distortion. When a distortion response is performed, the individual is prone to believe what is less threatening to them, even if it is known to be false, instead of accepting what is true, because she/he is afraid of confronting her/his unhappiness [12]. Furthermore, studies also show that people who see themselves as unhappy most likely are unable to fully recognize their unhappiness, because they are subconsciously reluctant to do so [13]. An example of this could be students often choose to blame their teachers and the exam itself for their low grades rather than looking at their own problems, in order to feel better about themselves; however, deep in their heart, they should know the low grades are due to their own mistakes. Whether the mind defensive response is intentionally or unintentionally performed, repressing the effects of negative events or consciously altering the truth will no doubt affect the result of happiness measurement by overstating happiness. Thus, the test result after distortion process will no longer be the true level of happiness of the respondents, while the presence of such responses is hard to detect and avoid.

In addition to brain defensive responses, stereotype is another factor that may negatively impact the validity of the measurement. For those respondents who are not fully aware of their real state of happiness in life might fall into the trap of stereotype. When these respondents see a question that they don’t have a clear answer to on a happiness test, they are likely to compare their own situation to the generalized standards and produce answers that don’t really fit their actual state of well-being [14]. For instance, it is generally perceived that marriage brings happiness. This is true in many cases, but it is not necessarily a cause-and-effect relationship. In the Netherlands, it was reported that people’s view on the actual value of marriage had changed; however, the positive correlation between marriage status and level of happiness gathered from reports hadn’t shown any weakening [15]. In this case, stereotypical influences of the correlation between marriage and happiness could’ve played a role without the respondents realizing it, which led to inaccuracy of happiness measurement.

Else, too much time-emphasis in the present is another source of error influencing the validity of happiness measurement. As mentioned, happiness should be evaluated in the frame of “life-as-a-whole”, meaning that not only the current feeling, but the well-beings of the past and prospective future should also be taken into consideration when evaluating the level of happiness. The problem with this when comes into assessing happiness are that people naturally tend to think overwhelmingly of their situations at the moment and to a large extent ignore their state of well-beings in the past and possibly in the future [16]. Because of this, current feeling of happiness is incompetent and insufficient to reflect the level of overall happiness of an individual reliably. Though diary studies that keep track of subjects’ happiness over several years can largely mitigate this problem, the same limitations regarding time frame hinders the accuracy as well. Hence, such instinctive time-emphasis can considerably impact the validity of the measurement of most happiness measurements.

II. CONCLUSION

It is discussed in this essay that despite there are numerous ways of measuring happiness and they are all reliable and valid to a certain degree, accurate quantification of happiness could be very difficult. This is because of various sources of unavoidable errors when measuring the two essential components of happiness, contentment and hedonic level and affect, which are comprised of imprecise measuring scales, defensive responses, stereotypical responses, limited scope of time-emphasis, and many others.

Several ideas to improve the accuracy of the measurement have been proposed. First, there could be a set of questionnaires and methods to measure happiness in a single attempt, and among which questions directing to the measurement of both hedonic level of affect and contentment should be included [17]. Second, neurologically, it is known that certain neurotransmitters, neuropeptides, and hormones are related with the positive feelings, and the level of these chemicals in human body has been used as an indicator of happiness. For example, the production of a nonapeptide hormone, oxytocin, was found to be positively associated with positive emotions in various ways [18]. Measuring happiness physiologically is a feasible method to quantify happiness and eliminate bias. However, there are over 50 types of hormones in the human body, and not all hormones have their functions and triggers clearly identified, and more research is still needed to find out the triggers and neurologically pathways of mood-related chemicals in order to measure happiness effectively [19]. The two methods have their own advantages and drawbacks, but coming together, they compensate for each other and enable researchers to obtain more accurate results.

Think about what we've been striving for and putting efforts in everyday, we are essentially pursuing happiness. Being able to accurately quantify our current state of well-being and overall happiness, we would be better able to orient ourselves for future directions and goals and to obtain greater happiness. Notwithstanding the fact that "happiness" might be too abstract to be perfectly quantified, based on our current progress, there must be ways to further push the accuracy of the measurement to a new limit, but obviously more research is needed for wishes to come true.

REFERENCES

- [1]. Veenhoven, R. (1984). Can happiness be measured? (p.22). Springer Netherlands. https://doi.org/10.1007/978-94-009-6432-7_3
- [2]. Diener, E. (2000). Subjective well-being [PDF file]. *American Psychologist*, 34-41.
- [3]. Veenhoven, R. (1984). Can happiness be measured? (p.26). Springer Netherlands. https://doi.org/10.1007/978-94-009-6432-7_3
- [4]. Veenhoven, 1984, p.97
- [5]. Cantril, A.H., & Roll, C.W. (1971). Hopes and fears of the American people. In *Hopes and fears of the American people*. Universe Books.
- [6]. Wessman, A.E., & Ricks, D.F. (1966). *Mood and personality*. New York, NY: Holt, Rinehart and Winston.
- [7]. Holder, M. (2017, May 22). Measuring happiness: how can we measure it? *Psychology Today*. Retrieved July 8, 2023, from <https://www.psychologytoday.com/us/blog/the-happiness-doctor/201705/measuring-happiness-how-can-we-measure-it#:~:text=Self%2DReports,to%20ask%20them%20about%20it>.
- [8]. Sutton, J. (2019, April 13). 6 happiness tests & scales to measure happiness. *PositivePsychology.com*. Retrieved July 1, 2023, from <https://positivepsychology.com/measure-happiness-tests-surveys/#scales>
- [9]. Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. In *Social Indicator Research* (pp. 137-155) [PDF]. <https://sonjalyubomirsky.com/wp-content/themes/sonjalyubomirsky/papers/LL1999.pdf>
- [10]. Seligman, M. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment* [PDF file]. New York, NY: the Free Press.
- [11]. Wright, S. A. (2022, April 28). How to talk to someone who is always defensive. *PsychCentral*. Retrieved May 12, 2022, from <https://psychcentral.com/lib/how-to-talk-to-someone-who-always-gets-defensive>
- [12]. Sissons, C. (2020, July 31). Defense mechanisms in psychology: What are they? *Medical News Today*. Retrieved July 2, 2023, from <https://www.medicalnewstoday.com/articles/defense-mechanisms>
- [13]. Veenhoven, 1984, p.25
- [14]. Veenhoven, 1984, p.42
- [15]. Veenhoven, R. (1979). De towkomst can het huwelijk. *De Haan & van der Wolk*, 139-151.
- [16]. Veenhoven, 1984, p.24
- [17]. Diener, E. (2000). Subjective well-being [PDF file]. *American Psychologist*, 34-41.
- [18]. Domes, G., Normann, C., & Heinrichs, M. (2016). The effect of oxytocin on attention to angry and happy faces in chronic depression. *BMC Psychiatry*, 16(1). <https://doi.org/10.1186/s12888-016-0794-9>
- [19]. Alexander, R., Aragón, O. R., Bookwala, J., Cherbuin, N., Gatt, J. M., Kahrilas, I. J., ... & Styliadis, C. (2021). The neuroscience of positive emotions and affect: Implications for cultivating happiness and wellbeing. *Neuroscience & Biobehavioral Reviews*, 121, 220-249. <https://doi.org/10.1016/j.neubiorev.2020.12.002>