

THE USAGE OF THE CONCEPT HAPPINESS IS ENHANCED BY A MATHEMATIC FORMULA THAT INCLUDES SEVEN VARIABLES

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ABSTRACT: *It is well-known that defining happiness is complicated. However, there are some elements that can be perceived according to the following: 1) The strength of the feelings of satisfaction within the time unit (hour, day, month, year). 2) The amount of the feelings of satisfaction within the time unit. 3) The amount of experienced satisfaction and dignity. 4) The amount or strength of the feelings of delusional satisfaction. 5) The strength of the bad feeling within a time unit. 6) The amount of bad feelings within a time unit. 7) The amount of ease, sieving threats, indifference et cetera. In this presentation these will be formed into a mathematic formula which ability to be utilized in different happiness projects will be examined.*

KEYWORDS: Happiness, Definition of Well-Being, 7x4-Field

INTRODUCTION

Happiness is one of the phenomena, concepts and experiences that is very hard to be focused and formed a commonly accepted definition of. However, it is about such a experience of life that is continuously actual in individuals' and even nations' lives. Handling it includes the same difficulty as shooting with cannon: if the load is tilted with one millimetre, it will arrive 100 meters tilted. In this context the goal means, for instance, a developed mental health programme.

Happiness is a positive and desirable life situation for an individual which is hoped for or expected to be long lasting. It is happiness when your life goes on in the way you wish it to go on. These kinds of definitions about happiness have introduced already *Plato and Aristotle*. When different actions are developed in order to prevent psychic illness, psychic disturbance and negatively deviant behaviour, this kind of baseline definition of happiness is defective. For example a criminal who has not been caught can feel long lasting -- and problematic happiness. Also if somebody assimilates the part "your will be done" by Lord's prayer from Sermon on the Mount, it might be hard for him to accept the part "when your life goes on in the way you wish it to go on" from the happiness definition above. Lord's Prayer does not even include word "I" and human can find a state of will in his life that the concept of dying self can be fitted in. Sermon on the Mount talks also about the concept "blissful" which entices avoiding focusing the definition of happiness.

As we consider the uniqueness of the human being, this kinds of chances to avoid will increase. For instance in 1984 a study group by *Edward Diener* ended up to the result that after Plato and Aristotle there has not been any significant development in the understanding of happiness.^[3] Also in the 21th Century, *Sanna Jäppinen* writes in the Finnish *Yliopisto* (University) magazine: "It is hard to study happiness because everybody defines it for themselves" and continues the cumbersome trying to concretize it into practical actions.^[7] When this kind of action turns difficult, happiness will easily remain a thing which is not worth

clarifying. "Happiness is actually that we try to ponder the definition of happiness even though it only is important to define the well-being." These kinds of exclamations are well-presented. In addition psychic well-being, experienced well-being, estimated well-being, socio-emotional well-being, satisfaction with life, quality of life, bloom and bliss are concepts that are competing in the importance of definition.

A question arises: does it enhance the defining process of happiness and its utilizing whether it is done with a mathematic formula that has variables that are formed out of the information from the presence of happiness? This way the thesis "the words are only an approximate value when handling feelings" could be derived into a better processing.

Forming the formula

Jeremy Bentham examined happiness at the beginning of the 19th Century from a starting point which claims happiness to be born when there is more satisfaction than bad feeling.^[1] This only is a basis for the formula. In the following the considered *mathematic formula of happiness* will be presented:

$$\frac{A \times B + C}{D} - \frac{E \times F}{G}$$

The explanations and thoughts:

A = the strength of the feelings of satisfaction within the selected time unit (hour, day, month or year).

When talking about human feelings it is important to keep in the back of one's mind that their strengths vary notably much between individuals and within communities. This coefficient tells about it the same way as the coefficient E. Central in this is that each feeling has their own volume coefficient and the amount of different feelings are not multiplied with the same number. Actually this part should be described with the statistical sign for sum variable Σ so the sigma sign known from the Greek language. However, with A it is noted that the feeling fades while repeated.

B = the amount of the feelings of satisfaction within the selected time unit. For example, when using a drug the human's feeling of satisfaction gets a high value, the time unit is the duration of action of the drug and this value has a high A coefficient.

C = the amount of experienced satisfaction and dignity. For example, the phenomenon called "craving grows while eating" causes that the concept "satisfaction" needs to be taken into consideration as a separate variable. Also the note by a well-known Finnish poet, *Eino Leino*, "who has got the luck shall hide it".^[10] has as a connection to this since taking envy into consideration when determining happiness, is important. An essential part of the determination is the experience when you have conveyed something essential and important to the people around, about your own happiness experience.

D = The amount or strength of the feelings of delusional satisfaction. For example, at luxury cruisers travel a lot of bored passengers who have perceived this to "be nothing". Also, different kinds of happiness delusions connected to intoxicants and the lust for power belong to this variable.

E = *The strength of the bad feeling within a time unit.* Here it is essential that the objective meter for measuring physical pain has not been found but perceiving the subjectivity they *have* found varying solutions. For example *Eija Kalso and Anneli Vainio* have produced a meter to measure subjective pain that has 43 different divisions.^[9]

F = *The amount of the bad feeling within a selected time unit.* All people can recognize the bad feeling. At this point it has to be agreed somehow that at which point the bad feeling is located that “craving grows while eating”.

G = *The amount of ease, sieving threats, indifference et cetera.* For example, the reducing sensitivity for physical pain in old age increases a kind of indifference and reduces the minus part of the index. The decrease of the G is also significant, so the growth of the minus part of the formula whether the subject, for example, has less information about how the bad feeling can be damped. In addition in the formula G you can note that according to the knowledge of today a human has many “me” and the happiness of each one is an own issue to be dealt with. For example in transaction analysis parent-adult-child (P A C) tells about the three “me” a human has, and their details. A child will therefore be focused on an accosted child, “little professor” and a happy child that is carefree. Also according to *Daniel Kahneman*’s perception a human has a judging and experiencing me.^[8] In this case you can note for example that seriously disabled people can be happy exactly because of the reason that their judging me is low.

A closer view to the formula

A great amount of famous sculptors have described the definition of happiness more or less consciously. Maybe the fittest description can be found in the artwork called *Allegory of Happiness*. *Agnolo di Cosimo* from Firenze describes seven human characters in this artwork, which was made in the 16th Century. The human characters mirror both bad and good angels (satisfaction and bad feeling).

In the middle of the artwork there is a flourishing character with a child next to her who is only experiencing and not judging. Under these there is an upset character connected to indifference. Actually each of the seven characters describes one of the elements of happiness, from A to G. The picture raises thoughts within many of us when you deepen into it.



The formula under focus includes a possibility to fine down the thesis connected to happiness into numbers, to expressions referring to a more precise language, so to say. For example: "the money did not bring me happiness" can mean that $A \times B$ increases happiness more than $E \times F$ decreases it, while D and G can change the situation upside-down. Also, "my life is only work and burden but I am happy to have noticed that...." means in the first place that the subject's G is big. As an additional example it can be mentioned the saying "there is no short-cut to the happiness" which means that the formula of happiness includes these seven variables.

Aiming to happiness is kind of a basic function of a human being which meaning has to be defined. There are guidelines from a millennium back about how to raise one's happiness. The Finnish happiness researcher, *Markku Ojanen* has in many of his presentations construed the guidelines for example according to the following:

- 1) Take care of yourself since in a healthy body, the mind is happy as well. Healthy habits, varied nutrition and enough sleep are enough while a person who neglects these, has a more challenging life.

Pay attention to other people. Thank, smile and be polite. Pay attention not least to your family, relatives and friends. The good comes always back.

- 2) Pay attention to the things you speak about. Are they positive or negative? Positivity increases positivity and negativity increases negativity. Maybe you could speak at least five times more about the positive than about the negative?

Pay attention to the good things in your life. Then they will increase automatically. The mind of a human being gets easily used to the good things and starts to take them for granted. This could be improved as well.

- 3) Do things voluntarily, how you can manage. Helping others and increasing well-being will add also your own well-being.
Responsibility and doing one's job with honour increases happiness. Then you can feel you have added value to something.
- 4) Feeling justice is connected to happiness. Therefore, be equitable toward yourself and the others.

Write a gratitude letter to a person who you experience you have got a lot from. Whether it is your partner, grandmother, or friend! Deliver the letter personally and this way you can make at least two persons happy. You can deal with it also via chat or e-mail – even though e-mail is a little bit less personal.

- 5) Let worries take their time. You will overcome them easier when you have someone holding your hand.

Do not smother your negative feelings but let them go when the time has come. They do not need to make a nest at you.

- 6) Avoid unnecessary risk-taking and searching for extreme experiences. This way the limits would just come sooner or later and after that nothing will be enough.

Avoid catastrophe thinking when it comes to every day challenges – being late, dropping a glass of milk or faults by you or others, are not the end of the world. Some of us are naturally more optimistic but the attitude is not graven in stone. You can also learn optimism.

- 7) Be active. Have hobbies and do things that get you into a good mood and that you experience are important and reasonable. Few people get actually happy by just working.

The goals should be reasonable – you do not need to aim to perfection, well done is enough.

Even in these kinds of parses parts of the certain kind of starting point definition can be seen.

In the search of the definition formula of happiness, at least the "equation of happiness" by MoGawdatin has already been released ^[4], which is following:

Happiness = (image of the incidents in the own life) – (expectations of what the life should be like)

If the side of the positive imaginations in the formula is as big as or bigger than the expectations so then happiness is felt. There is an especially difficult issue when this formula is applied that also Gawdatin is thinking of: "We are not unhappy because of an incident but because of what we think of the incident." In addition a difficult variable is "the expectations on what life should be like." Lots of positive and significant things do happen people without expectations.

Therefore we come up to the conclusion that the equation needs the certain variables: A, B, C, D, E, F and G.

When measuring happiness, the certain definition is important. For example, this result was got in one wide follow-up study: Within a group that was somatically healthy but otherwise unhappy, the mortality rate was on the same level as in the group where they were healthy and happy.^[12] This way the questions of measuring happiness that Markku Ojanen has widely discussed in his book *The manual to happiness [Onnellisuuden käsikirja]*.^[14] are faced. The fact that the measurement is reliable and immediately producing a similar result when repeated (the reliability) is a small difficulty compared to how well it is measured what is supposed to be measured. This (the validity) depends crucially on the definition of happiness.

There are many measures to be used to measure happiness. Also within big groups, happiness can be measured with one question, for example, the following: "On the scale 0-100, how happy do you feel yourself today?" Nevertheless, it is well-known that there are many important variables. Reeta Kankaanpää has handled all these variables in her thesis *Measuring the experienced well-being [Koetun hyvinvoinnin mittaaminen]* with help of a well-known mathematic method called factor analysis.^[11] With her method Kankaanpää succeeded to collect together variables measuring the same thing. Kankaanpää carries out a broad inspection but states at the end anyway the following: "When interpreting the results of the factor analysis you should note that the contents of the factor does not necessarily derive from the seen contextual connection (valid variation) but it can be a production of the measuring way." Also in this case the starting points of the definition are important.

In addition, the importance of the starting point definition is emphasized in the sociological claims. For example, the UN publishes every year The World Happiness Report that year 2018 indicated Finland the happiest country in the world when 156 countries were compared. In this kind of "Olympics of the nations" the definition of happiness becomes very important. In addition, the thesis "social pressure to feel happiness might affect the formation of depression" is a significant example. Research group by Egon Dejonckheer proves this in their broad experimental follow-up study^[2] that the social pressure of the test persons to feel or express happiness is a very significant factor when depression is being developed. In order to deal with this process, you need to have it clear for you what is being discussed.

The kingdom of Bhutan in Asia with Buddhism as the main religion, has taken a notable step when it comes to happiness research. They have developed an index corresponding to the GDP that is called *Gross national happiness index*.^[13] There have traditionally been detected some serious faults within GDP. For example, increasing crime rises GDP when new prisons, police houses etc. need to be built.^[5] Thus happiness kind of strives for attention to be faced in these indexes.

In the index of Bhutan there are nine main variables: 1) physical well-being, 2) health, 3) raising, 4) time usage, 5) cultural diversity and flexibility, 6) good leadership, 7) communal activity, 8) ecological diversity together with flexibility and 9) life standard. In this the "life standard" from previous indexes is just one of the nine variables. However, problematic in this case remains the fact that in the main variables the difference between happiness and well-being is not clear. There is though a clear orientation to that with the mentioned points happiness will be clearer but how can, for instance, the delusions connected to climate change and fear of war, the points D and G of the previous formula, be taken into account? It might be significant to note that at this point also the complexity of the gross index comes up: For

instance, when counting the Finnish GDP there are 180 branches included and the database counting it uses 26 million rows.

As a conclusion out of the previous...

At least it can be concluded that the formula can contribute to concretize handling pain, physical and psychological disturbance and the negatively exceptional behaviour. Its variables are also well suited to the 7x4 theory. This theory parses the causes of psychic nausea, psychological disturbance and negative deviant behavior. The description of the theory is in the following book: Heiska, J. (2016) Better Mental Health with 7x4-field. Berlin:Lambert Academic Publishing. Within this concretizing it is, of course, difficult that forming the values for the variables is challenging in the definition. When, for example, the complexity of counting the GDP and applying it to the practice is being considered, the challenge does not seem too overwhelming.

In addition, it is significant that concepts that have been bothering scientists for millennia, such as love, time, soul and even God and making it to heaven, are same kinds of things to be defined like happiness, in order to enhance well being – and these things will come along even though defining them would be avoided.

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