

# Happiness & Brain Messengers

The Mental State of Pleasurable Feeling



Positive Psychology,  
commonly called happiness  
has two components:

1. Current Happiness
2. Long term Wellbeing

This course will discuss why  
delayed gratification improves  
both.

By: Chris Peek

Email: [chrispeek@idssystem.com](mailto:chrispeek@idssystem.com)

## Positive Psychology

Professor Ed Diener was called the “Jedi Master of Happiness” by the famous psychologist David Myers. His book, “Unlocking the Mysteries of the Psychology of Wealth” the book covered decades of his studies of what made people happy. He called what is commonly thought of as long term happiness, “Subjective Wellbeing”. Professor Seligman in his book “Authentic Happiness” called what is commonly known as happiness “Positive Psychology”. These two theories were a paradigm shift in psychological theory of happiness. Up to the 21<sup>st</sup> century psychologists were concerned with the negative aspects of the human mental state. The prevention and cure of mental disease was the norm not the study of how normal people could improve their life time wellbeing.

Research psychologists for the last decade have been focusing their research on what they now call positive psychology by interviewing large classes of subjects to determine how they report their feelings of happiness. They then publish their results in many best selling books. They list many does and don'ts in order to maximize the reader's well being or long-term happiness.

My concept is different. It is based on a method for helping people improve their happiness by their determining what causes their personal happiness and then to maximize the most important causes by their own actions.

I began my work on what is now called “Positive Psychology” over 70 years ago by measuring what was then called and I will continue to call happiness. I was curious if my fraternity brothers were really as happy as they seemed to be after imbibing in significantly more beer than I thought possible. I developed a method for measuring what I called “Happiness Integral”. I realized that a happy state of mind, or what I now call current happiness may change by the minute and therefore must be averaged or more precisely integrated over a period of time resulting in what I then labeled *Happiness Integral*). Yes, their measured happiness was high for the hours before they collapsed but it was very low the next day, thus proving to my satisfaction that my being a teetotaler was a good thing. That, of course changed the next year when I rationalized that drinking was a fraternity social necessity..

I conscientiously measured my happiness integral for several years and occasionally tried it on my developing family. During the past few years after my wife passed on I have made a serious study of “Happiness”.

The combination of short and long term happiness I will call “Happiness”. The short term feeling of pleasure, I will call “Current Happiness”, CH; and long term wellbeing simply, “Wellbeing” WB.

# What is Happiness?

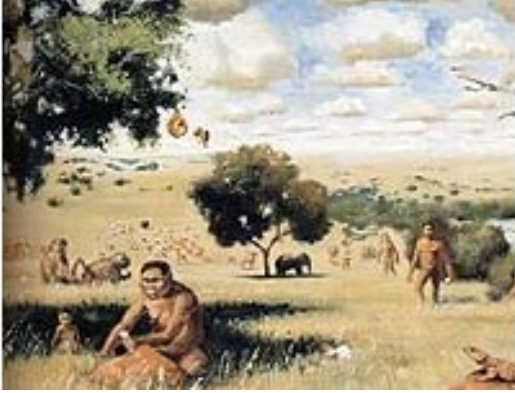
- The dictionary definition of happiness is “The feeling of pleasure”.
- \* The definition of pleasure is “The feeling of happiness”.
- I will call the immediate joyful, elated, euphoric, pleasure we may feel right now “Current Happiness”, CH.
- I will call the long term feeling of contentment, satisfaction, worry free future “Wellbeing”, WB.
- The combination professionally called “Positive Psychology” I will hereafter call “Happiness”.

What is our real goal in life? Is it to make money? It is difficult to be happy without it but the desire for happiness intuitively comes first. We want to be happy by definition of the word happy. We know what the feeling of happiness is because it is in our personal consciousness. Mother Teresa and Adolf Hitler each did those things they thought would make them happy. That doesn't mean each did the good thing. Hitler did not do those things that would have caused his long term wellbeing and he ended up in his bunker very unhappy.

It is nice to be happy every moment but we know by experience that can't be. We have been taught as children by our parents to delay immediate gratification so that we can be happy in the long run, but we know if we keep delaying immediate happiness too long we may spend a good share of our life preparing for the future and miss some of the immediate happiness we could have had if we had enjoyed more immediate pleasure along the way.

My goal is to find a rational method of obtaining the proper balance between short term pleasure and delayed gratification.

# Two Happiness Causes



Hunter Gathers



My Early Family

## 1. Inherited DNA

As members of the Homo sapiens species, we all have similar DNA that hasn't changed significantly in 9,000 years. Our ancestors were then "Hunter Gathers" Our DNA is constantly affecting our happiness throughout our lifetime.

## 2, Developed Culture

We have very different cultures derived from the totality of our personal past experiences. Since our cultural backgrounds are varied our culturally affected happiness is also varied.

# Happiness Causes

What causes our happiness or lack thereof is important to us since we hope to manage those causes in order to reap the rewards of happiness. My study encapsulates three causes as fundamental to our happiness.

1. Our DNA cause rewards us with happiness if we do those things that resulted in the survival of our Homo sapiens species. (*Dawkin's selfish gene*)
2. Our cultural cause for happiness or unhappiness is our family, social or other personal experiences. This cause is constantly varying while our DNA common cause remains constant throughout our life.
3. A third cause that is affected by the two just mentioned is the control of neuron electrical signals by chemical neurotransmitters created by our pineal gland. They in turn are caused by various psychological activities we may undertake.

# Wellbeing Concept

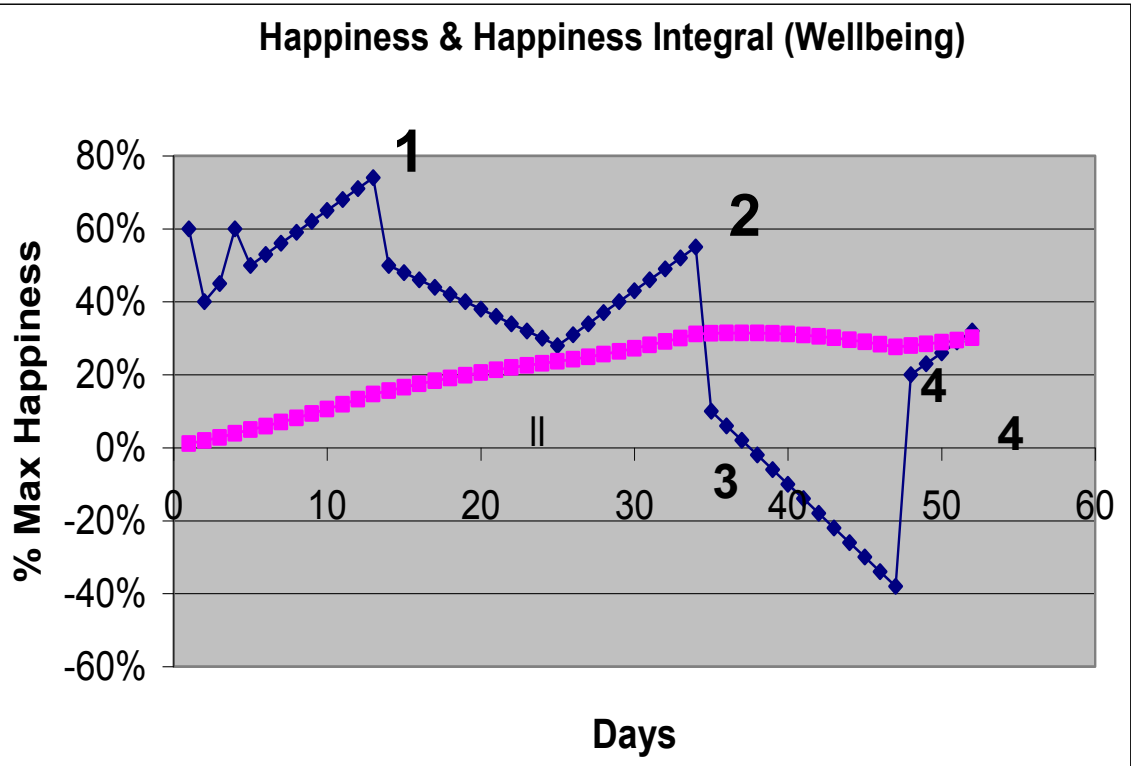
My recent concept for improved of happiness allows one to measure their current happiness (CH) and to obtain their wellbeing (WB) for various times. Young people have difficulty in considering what will make them happy at retirement. They correctly feel that many things that will affect their later life are indeterminate so why bother. But we who are already there wish we had done those things that would have improved our happiness in old age. I have, however given up hope of changing the past. (☺). But I am in hopes that if we can understand the causes of our wellbeing (WB). We will help promote our later well being. At my age, 93 I should not delay gratification for very long.

My concept for happiness that employs the accumulation of current happiness (CH) over time allows one to measure their wellbeing (WB) for whatever time period they choose to use. I will use my own example as a sample for others.

The graph to the right describes a sample of a plot of the possible current happiness I might encounter for a future one year period. The calculated accumulated wellbeing value for that year is also plotted. If I wanted to improve my life time wellbeing I could change the time scale to my projected life time. I am working on that approach for myself without concern for my the past mistakes. Many people who try to do that impossible task suffer current happiness in the process.



# Happiness Wellbeing



- A sample of a possible current happiness (CH) curve is in blue.
- The calculated well being (WB) is in red. It is the accumulated area or technically the integration of the current happiness curve.
- Point 1 might be a bad economic result of the debt cliff, point 2 the accomplishment of a goal; 3 a worrisome health problem; 4 a happy recovery from surgery.
- This Happiness Integration concept promotes the advantages of delayed gratification.

The table to the right is a sample of how one can determine their current happiness. (CH) My choice of the various psychological factors that make up our happiness are based on studies made by positive psychological professionals who have written and studied what people of various cultures claimed contributed to their happiness. The eight I specifically chose seem to support my postulate that: a positive response to them would have contributed to the survival of one's Hunter Gather ancestors.

One arrives at their percent of the maximum possible current happiness (CH) by a simple arithmetical summation of the importance in column A multiplied by the numeric rating of how each was accomplished for the previous week in column C which results in the percent of maximum possible current happiness for each component in column D. The summation of column D at the bottom of the column is the final current happiness (CH).

This is the same process I used to determine the wellbeing of Middle East countries in my last lecture. It is a universal and simple method for analyzing various phenomena. I don't know why similar methods aren't used more often.

# My Current Happiness for Nov. 7 after the Election

	A	B	C	D
Row Numb.	order of importance	My Happiness 10/31 - 11/7 Happiness Component	rating from +10 to -10	user's % max
1	4	ENJOYED environment or NOT	9	12.50%
2	1	LOVED/LIKED by others or REJECTED	8	17.78%
3	2	In physical COMFORT or PAIN	-2	-3.89%
4	3	ACCOMPLISHED goals or FAILED	6	10.00%
5	5	OPTIMISTIC or WORRIED	-3	-3.33%
6	6	HELPED others or HURT their feelings	5	4.17%
7	7	Felt FAITH or were spiritually LOST	3	1.67%
8	8	Experienced BEAUTY UGLINESS	0	0.00%
<b>sum =</b>	<b>36</b>	col D = col C times (9-A) / 3.6 in percent	<b>Sum D = CH</b>	<b>38.89%</b>

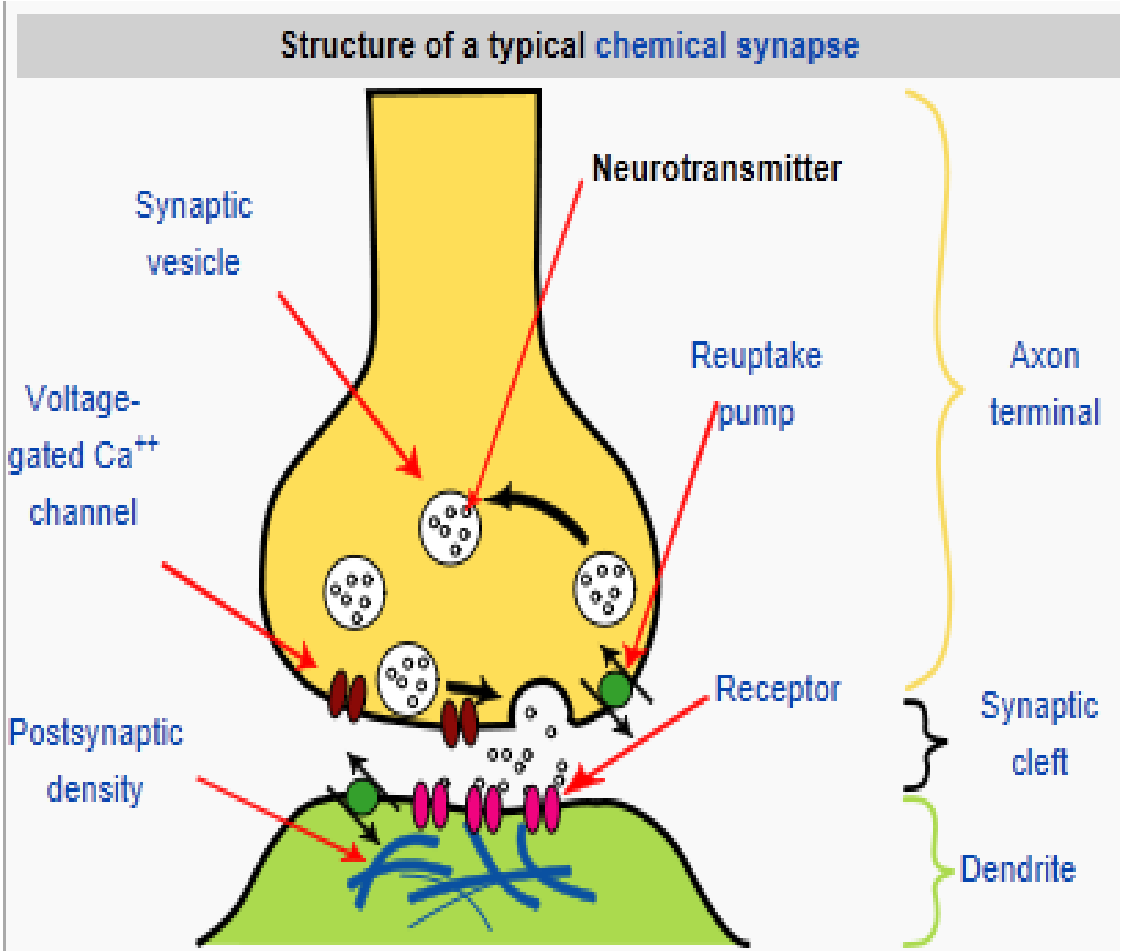
- I'm sure the weekly happiness for some in the audience went up for the week of November 6.
- Mine went from 65% before the election to 38.89% after.
- This simply demonstrates how our different cultural experiences influence our current happiness.

Column B in the previous chart lists what I believe to be the major psychological causes for our current happiness. These causes result from the affects of our relatively common DNA as well as our variable cultural experiences. Our cultural experiences modify our rating for the relative importance of each component. I have found that people who submit themselves to my happiness measurement process vary significantly on how they list the importance of each component. Some at the Conservatory for instance rate “Practice your Faith” before their “Comfort or Pain” while most put “Comfort or Pain” as number 1.

My components of happiness that were used to determine current happiness are really dependent upon our physical actions. If we socialize, for instance we may receive current happiness as well as long term wellbeing since we may be more liked or loved by others through our relationship.

So far we have discussed and measured the psychological causes for our happiness. I will now shift to the physiological causes. They are in themselves caused by and are dependent upon our psychological feelings that in turn result from and are dependant upon our psychological reactions to whatever we do physically.

# The 3<sup>rd</sup> Happiness Cause



- The sketch shows one of ~30 trillion synapses through which our chemical happiness messengers flow.
- Neurotransmitter molecules in the synapse cleft can cause electrical signals to pass or to be inhibited in their flow to the post-synapse.

I will limit my discussions to the physiology of the brain even if many other bodily functions affect our happiness. The brain's functions are a major concern for our study of happiness since it resides in our upper cortex.

The synapse is the information gateway to our ~30 billion marvelous and amazing neurons that control our body functions and produce our unique human consciousness. Each neuron has ~10,000 inputs each controlled by a synapse. The synapse can allow or inhibit the flow of an electrical signal from a remote neuron to its mother neuron.
















A synapse is divided into a pre-synapse and post-synapse with a open cleft between them. The pre-synapse contains various chemicals called neurotransmitters that it emits into the cleft. Some neurotransmitter chemicals encourage the electrical signal from a neuron to pass through the cleft while others will inhibit the signal from reaching the post-synapse.

During the last decade we have been able to identify 150 particular chemical neurotransmitters and to determine their psychological affect. Since dopamine is likely to allow a happiness signal to pass through, it tends to increase our current happiness, and create a feeling of pleasure and joy while serotonin is more likely to cause a feeling of wellbeing. Melatonin has been shown to lower our ability to feel joy and pleasure. The psychological affect of testosterone and estrogen are well known.

Synapses as an information gateway to neurons make possible the holistic function of our entire human physiological system. The chemical messengers that allow electrical signals to flow through synapses clefts are a cause for our feelings of happiness and wellbeing.

# Religion in the USA

Religious affiliation in the U.S. (2012)<sup>[78]</sup>

Affiliation		% of U.S. population
Christian	73	
Protestant	48	
Evangelical Protestant	19	
Mainline Protestant	15	
Black church	8	
Catholic	22	
Mormon	2	
Eastern Orthodox	1	
Other Faith	6	
Unaffiliated	19.6	
Nothing in particular	13.9	
Agnostic	3.3	
Atheist	2.4	
Don't know/refused answer	2	
Total	100	

- The chart shows that religion is still well and surviving in America. 73% of USA population are Christian.
- 84% of the worlds population are religious.
- Therefore it is not surprising that I found people who rated “Practiced Faith or Not” highly during their happiness test. I believe the desire to join one’s religious community and feel the resulting happiness and well being is an important contributor to US happiness.

# Conclusion

- What I call Happiness and psychologists now called Positive Psychology is the positive feeling of pleasure in human consciousness.
- It has two components; current happiness and long term wellbeing.
- I have developed a method for quantifying these happiness components.
- Two causes of our happiness are our actions that would have supported our ancient ancestors and our cultural experiences.
- A physiological cause for our happiness is the employment of the chemical neurotransmitters dopamine and serotonin that excite the flow of electrical signals through clefts in our synapses.
- Practicing religious faith has for many people a significant positive affect on American happiness.
- One can rationally achieve an optimum balance between current happiness and delayed gratification through self examination using a happiness measurement test explained in this booklet.