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Deciphering The Keys To Happiness ☺

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INTRODUCTION

1.1 Inspirational Definitions of Happiness

Perhaps the key to attaining happiness is through philosophical contemplation!

Probably the biggest insight... is that happiness is not only a place, but also an ongoing process of fresh challenges, which requires the right attitudes and activities to cultivate it. - Ed Diener [3]

“For happy people, time is filled and planned. For unhappy people, time is long, underfilled and unplanned.”
–Michael Argyle

“Compassion doesn’t render people tearful idlers, moral weaklings, or passive onlookers but kind, caring, empathetic individuals” –Dacher Keltner

“Every criticism, judgement and the expression of anger is the tragic compilation of an unmet need.” –Marshall Rosenberg

1.2 Benefits of Living in a Constant State of Happiness

Electrifying, Elusive and Glorious

Happiness seems to be an electrifying and elusive term that philosophers, theologians, psychologists, and even economists have long been eager to classify. Since the 1990s, a whole branch of psychology—positive psychology—has been dedicated to pinning it down. More than simply positive mood, happiness is apparently a state of well-being that encompasses living a good life, with a sense of meaning and deep contentment. [9]

Feeling joyful has its very own health perks. A growing body of evidence suggests happiness can improve physical health & wellbeing; Additionally, feelings of positivity and fulfillment could benefit cardiovascular health, the immune system, inflammation levels, and blood pressure, among other things. Happiness has even been linked to a longer lifespan and also a higher quality of life in general. Attaining happiness is a global pursuit. Researchers find that people from every corner of the world rate happiness more important than other desirable personal outcomes, such as obtaining wealth, acquiring material goods, and getting into heaven. [9]

1.3 Scientific Answers on Happiness:

1.3.1 Challenge in Defining Happiness

Many would agree that happiness is difficult to define and challenging to measure likely due to its subjective nature. Can we possibly get a scientific grip on such a slippery concept? There might be several aids to start us off... [8]

1.3.2 Aristotle’s Perspective

Since Aristotle, happiness has been usefully thought of as consisting at least two aspects: hedonia (pleasure) and eudaimonia (a life well lived). In contemporary psychology these aspects are usually referred to as pleasure and meaning, and positive psychologists have recently proposed to add a third distinct component which is definitively related to feelings of commitment and participation in life.

Using these definitions, scientists have made ample progress in defining and measuring happiness in the form of creating self-reports of subjective well-being, identifying its distribution across people in real life, and in identifying how well-being is influenced by various life factors that range from income to other indicators. This research shows that while there is clearly a sharp conceptual distinction between pleasure versus engagement-meaning components, hedonic and eudaimonic aspects empirically cohere together in happy people majority of the time.

“In happiness surveys, over 80% of people rate their overall eudaimonic life satisfaction as “pretty to very happy,” and comparably, 80% also rate their current hedonic mood as positive (akin to positive 6–7 on a 10 point valence scale, where 5 is hedonically neutral) (Kesebir and Diener 2008). A lucky few may even live consistently around a hedonic point of 8 — although excessively higher hedonic scores may actually impede attainment of life success, as measured by wealth, education, or political participation (Oishi et al. 2007). While these surveys provide interesting indicators of mental well-being, they offer little evidence of the underlying neurobiology of happiness which is ultimately the quest we have set for ourselves here. But to progress in this direction, it is first necessary to make a start using whatever evidence is both relevant to the topic of well-being and happiness, and in which neuroscience has relative strengths. [7]

For years, research has shown that, over time, our experiences literally reshape our brains and can change our nervous systems, for better or worse. Now, neuroscientists and psychologists like Hanson are zeroing in on how we can take advantage of this “plasticity” of the brain to cultivate and sustain positive emotions.” [8]

NEUROBIOLOGY OF SENSORY PLEASURE

2.1 Bringing on the Neuroscience Angle Of Analyzing Happiness

2.1.1 Progress in Understanding

In the following, we will therefore focus on the concrete progress in understanding the psychology and neurobiology of sensory pleasure made over the past decade. These advances make the hedonic side of happiness more tangible by justifying the scientific approach regarding the neural underpinnings of happiness. "Supporting a hedonic approach has been suggested as the best measure of subjective well-being. As it may be simple to ask people for how they hedonically feel right now—again and again—so as to track their hedonic accumulation across daily life. Such repeated self-reports of hedonic states could also be used to identify more stable neurobiological hedonic brain traits that dispose particular individuals toward happiness. Further, a hedonic approach might even offer a toehold into identifying eudaimonic brain signatures of happiness, due to the empirical convergence between the two categories, even if pleasant mood is only half the happiness story".^[7]

Sensory Pleasures

"From sensory pleasures and drugs of abuse to monetary, aesthetic and musical delights, all pleasures seem to involve the same hedonic brain systems, even when linked to anticipation and memory. Pleasures important to happiness, such as socializing with friends, and related traits of positive hedonic mood are thus all likely to draw upon the same neurobiological roots that evolved for sensory pleasures. The neural overlap may offer a way to generalize from fundamental pleasures that are best understood and so infer larger hedonic brain principles likely to contribute to happiness".^[7]

2.2 Brain Chemistry & Happiness

"The schematic figure below shows the approximate sensorimotor, pleasure, and social brain regions in the adult brain."

- Processing linked to the identification of and interaction with stimuli is carried out in the sensorimotor regions of the brain,
- which are separate from the valence processing in the pleasure regions of the brain.
- In addition to this pleasure processing, there is further higher-order processing of social situations (such as theory of mind) in widespread cortical regions.
- The hedonic mammalian brain circuitry can be revealed using behavioral and subjective measures of pleasures in rodents and humans (Berridge and Kringelbach 2008)."^[7]

2.3 Brain Circuitry Showing How Pleasure is Encoded

2.3.1 Pleasure & Desire Brain Circuits

Encoding Pleasure

"Pleasure encoding may reach an apex of cortical localization in a subregion that is midanterior and roughly midlateral within the orbitofrontal cortex of the prefrontal lobe, where neuroimaging activity correlates strongly to subjective pleasantness ratings of food varieties—and to other pleasures such as sexual orgasms, drugs, chocolate, and music. Most important, activity in this special midanterior zone of orbitofrontal cortex tracks changes in subjective pleasure, such as a decline in palatability when the reward value of one food was reduced by eating it to satiety (while remaining high to another food). The midanterior subregion of orbitofrontal cortex is thus a prime candidate for the coding of subjective experience of pleasure (Kringelbach 2005). This medial–lateral hedonic gradient interacts with an abstraction–concreteness gradient in the posterior–anterior dimension, so that more complex or abstract reinforcers (such as monetary gain and loss) are represented more anteriorly in the orbitofrontal cortex than less complex sensory rewards (such as taste). The medial region that codes pleasant sensations does not, however, appear to change its activity with reinforcer devaluation, and so may not reflect the full dynamics of pleasure."^[7]

2.4 Trending Arguments about Happiness and Pleasure

Positive Psychology Movement

"The positive psychology movement, which has its own historical roots in the human potential movement of Rogers and Maslow, has unabashedly adopted the Aristotelian concepts of hedonia and eudaimonia in an attempt to frame the exploration of happiness within the field of psychology. Currently popular psychological measures of happiness tend to be more evaluative in nature, and include the Satisfaction with Life Scale (Diener, Emmons, Larsen & Griffen, 1985) and the Subjective Happiness Scale".^[5]

“In recent past, some researchers have attempted to tease apart the differences underlying the various concepts related to well-being, e.g., life satisfaction, positive and negative affect, self-esteem, and optimism. Using Campbell and Fiske’s (1959) multitrait-multimethod matrix analyses, Lucas, Diener and Suh (1996) found high discriminant validity for life satisfaction from positive and negative affect and also from optimism and self-esteem. Self-report questionnaire assessments have long been the mainstay of research in subjective well-being and happiness, as in many areas of psychological research. Psychological theories of happiness fall under three broad categories: need and goal satisfaction theories, process and activity theories, and genetic and personality predisposition theories”. [5]

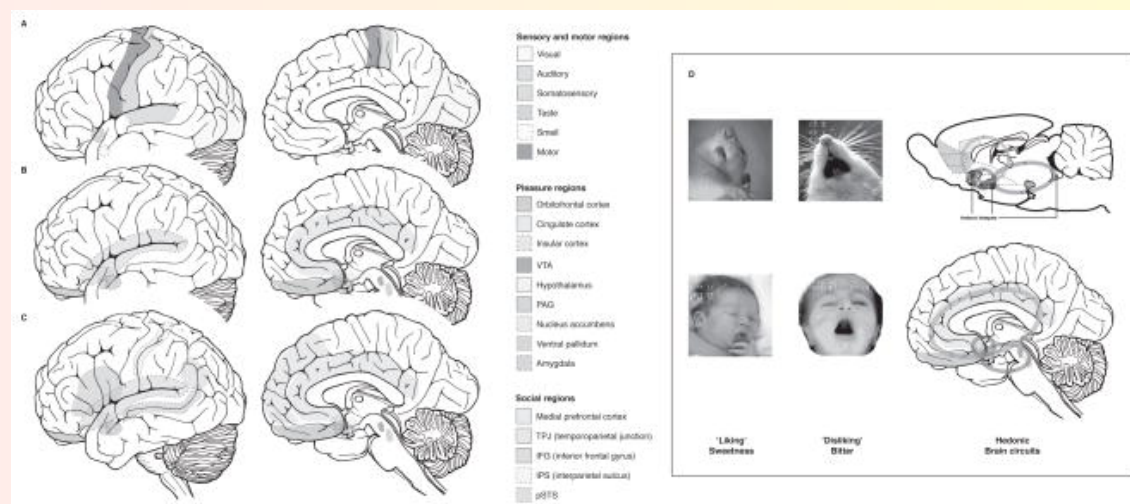


Figure 2.1: Depicting Hedonic Brain Circuitry

[Link To Research Article All About It!](#)

2.5 Happiness Research Findings In Accordance to Maslow's Theory

2.5.1 Common Misconception

“Recently, happiness researchers learned that neither wealth nor income raises our sense of satisfaction with life, once basic needs are met. Nor does education or a high IQ. Virtues of the head—curiosity and love of learning—are less tied to happiness than virtues of the heart—kindness, gratitude, and capacity for love”. [5]

2.5.2 Subjective Well-being

“Subjective well-being (SWB), according to Lyubomirsky and Dickerhoof (2006) “represents people’s beliefs and feelings about whether they are leading a rewarding and desirable life.” Diener, Oishi, and Lucas (2009), define SWB as “a person’s cognitive and affective evaluations of his or her life as a whole,” including evaluations of emotional reactions to life events, and also cognitive judgements. However, too much “wanting” can readily spiral into maladaptive patterns such as addiction, and is a direct route to great unhappiness. Finally, happiness of course springs not from any single component but from the interplay of higher pleasures, positive appraisals of life meaning and social connectedness, all combined and merged by interaction between the brain’s default networks and pleasure networks. Achieving the right hedonic balance in such ways may be crucial to keep one not just ticking over but actually happy”. [5]

Here's How:

- (i) “remain active and physically occupied (a healthy mind in a healthy body)
- (ii) share activities with other people and do things for others
- (iii) focus on the present, preventing past experience or concerns about the future from distorting the “here and now”
- (iv) set small goals to be sequenced toward a larger goal
- (v) think positive, have positive thoughts
- (vi) practice self compassion, learn to give oneself small daily rewards
- (vii) accept what cannot be changed, learning to forgive and be reconciled with the past
- (viii) learn new things and cultivate appreciation
- (ix) develop resilience or the capacity to cope with adversity and overcoming it without letting it destroy or hurt others” [5]

DOUBLING DOWN ON HAPPINESS

3.1 Model Representation of Where Happiness Might Originate

3.1.1 Model of Happiness

“According to this model, roughly 10% of sustainable happiness is determined by life circumstances, 40% by intentional activity, and 50% is determined by a set point of biological and genetic forces. The idea that there is an element of stability in people’s levels of happiness (aside from influences due to life circumstances or the achievement of goals) due to personality dispositions is the fundamental premise of genetic and personality theory. [5]

Substantial genetic component

—“The notion that there is a substantial genetic component to subjective well-being is strongly supported by scientific research findings (Headey & Wearing, 1989), especially in the study of twins. Tellegren et al. (1988, as cited in Diener, et al., 2009) found that in studies comparing both monozygotic and dizygotic twins raised together and apart, approximately 50% of the emotional reactivity of life circumstances can be explained by genes. [5]

Lyubomirsky’s tripartite model of sustainable happiness is congruent with the fact that psychological research often fails to confirm any single variable as causal, and that complex human experiences often result from the interaction of several dynamic variables. [5]

Happiness is indeed a fuzzy concept—fraught with nuance, jangle about terminology, overlapping constructs and notions about what happiness entails. Yet if we can agree on anything—it is that no matter how ill-defined happiness is, as humans we desire more of it. We value and seek lives that are pleasant, engaged and meaningful. As humans, we prize the many correlates of happiness: more marital satisfaction, greater quality of our social lives, better job performance and higher incomes, greater physical health, longevity, and success. We recognize the numerous benefits and rewards that happiness bestows upon us, and as students of psychology, we also recognize our responsibility and intentionality toward happiness. We must also accept the complex inter-relationship between correlational variables related to happiness. Many variables related to happiness appear to be bi-directional and bi-reciprocal in nature, and defy any clear attributions to causality. Lyubomirsky, King, and Diener (2005) state this position succinctly in their title page as they examine the juxtaposition of correlational evidence in the relationship between success and happiness and ponder: Does Happiness Lead to Success? This may well be the seminal question in our scientific inquiry regarding well-being: does happiness lead to success, or does success lead to happiness? The astounding answer appears to be— yes!” [5]

3.2 Multifacetedness of Happiness & Its Limitations

3.2.1 Skeptical Thoughts

“When you are given a graph that is this clean, it seems reasonable to be skeptical,” warns George Mason University professor Todd Kashdan in his blog post critiquing the pie chart. While the pie has separate slices, he argues, our genes, our life circumstances, and our activities aren’t three isolated factors that influence our happiness directly. They can also influence each other, muddying those distinctions. [8]

Gene for leadership

“For example, Kashdan writes, you may have a gene for leadership, but you won’t necessarily turn into an adept leader unless you find yourself in the right life circumstances (for starters, a supportive social environment). Or, as the University of Groningen’s Nicholas Brown and the University of Leipzig’s Julia M. Rohrer write in their 2019 paper, perhaps you have a genetic disposition toward anxiety—activated by the circumstances of your stressful childhood—that is putting a damper on your happiness.” [8]

“Delle Fave and colleagues (2011) noted that happiness is also an ambiguous term which can have a number of meanings:

→A transient emotion (that is synonymous with joy)

→An experience of fulfillment and accomplishment (characterized by a cognitive evaluation)

→A long-term process of meaning-making, identity development and building goals.” [2]

Table 3.1: Actionable Steps to Cultivate Happiness

No.	Action		Details
	Key Verb	Key Tasks	
1	Choose	Activities that fit our personality and interests	Activities fit us better when they feel natural, enjoyable, and aligned with our values, rather than driven by guilt or other people’s expectations.
2	Choose	Activities that are virtuous and meaningful	Rather than obsessing about feeling good all the time, Hedonism won’t necessarily make you happy, even if you feel good in the moment. We also need to pursue a purpose, and practice forgiveness, gratitude, and generosity—those give us a sense of competence, autonomy, and connection, which are core human needs.
3	Add	Variety into our routine	Doing an exercise—like writing gratitude letters—the same way over and over can mean that we become accustomed to it and don’t reap as many benefits. You have to keep your brain alive to possibilities.
4	Devote	Effort into the process	Unsurprisingly, people who invest more effort into their new habits see greater improvements in their well-being. [8]

3.3 Addressing Assumptions

3.3.1 Measuring According to Demographics

“The 10 percent figure was based on studies mainly measuring demographics—like age, income, education, race, and sex, they point out. But the term “life circumstances” is extremely broad and includes (as Lyubomirsky and her colleagues noted in 2005) “the national, geographical, and cultural region in which a person resides. But studies done in a single country probably won’t capture the widest possible variation in life circumstances like these, which may explain why the 10 percent slice is too small.

Finally, even assuming the 50/40/10 was right, there is that crucial misunderstanding that countless speakers and publications have perpetuated: These numbers don’t represent how much of our individual happiness comes from various sources, but how much of the differences among people (in general) do. If your happiness is 8/10, you can’t say that 3.2 points of that is determined by your activities; you can merely say that just under half of the average gaps between your happiness and other people’s comes down to what activities everyone is doing.” [8]

3.3.2 Updated Consensus

“In their updated paper about the pie chart, Sheldon and Lyubomirsky acknowledge that they largely agree with these criticisms. The numbers were intended to be estimates in a thought experiment, says Lyubomirsky, adding that their original paper should have clarified how our genes, circumstances, and activities can influence and interact with each other. Our aim (more than 18 years ago) was more to pose a question—is it possible for happiness to go up—and to stay up?—than to provide an answer,” says Lyubomirsky. “Like all pie charts, ours was a gross oversimplification.”

Debates aside, it’s clear that the optimistic message of the pie chart did inspire groundbreaking research over the last fifteen years in positive psychology. We’ve learned that the behaviors and habits we engage in do matter—from gratitude to kindness to mindfulness—and that they can lead to an enduring happiness boost. And thanks to that research, we also have an understanding of what we can do to give ourselves the best chance of success!” [8]

Happiness Accelerates & Involves:

- “Incorporating curiosity in daily life
- Ability to tolerate risk & anxiety
- Seeing the Big Picture
- Balancing between momentary pleasure and longer-term striving towards goals”

[9]

3.4 Potential for Happiness

3.4.1 Building Satisfaction

“People can create for themselves a steady inflow of engaging, satisfying, connecting, and uplifting positive experiences, thereby increasing the likelihood that they remain in the upper range of their happiness potentials,” Sheldon and Lyubomirsky write. At the end of the day, it’s impossible to predict how much happiness you’ll get from any specific change you make in life. We’re all individuals, and no pie chart can tell us how we live our lives the best way.” [8]

Self-reported Wellbeing Measures

“Self-reported wellbeing measures are thought to be a reflection of at least four factors: circumstances, aspirations, comparisons with others, and a person’s baseline happiness or disposition”. [6]

Actually Konow and Earley (1999) describes evidence recording happiness levels have been demonstrated to be correlated with:

1. "Objective characteristics such as unemployment.
2. The person’s recall of positive versus negative life-events.
3. Assessments of the person’s happiness by friends and family members.
4. Assessments of the person’s happiness by his or her spouse.
5. Duration of authentic or so-called Duchenne smiles (a Duchenne smile occurs when both the zygomatic major and obicularus orus facial muscles fire, and human beings identify these as ‘genuine’ smiles).
6. Heart rate and blood pressure measures responses to stress.
7. Skin-resistance measures of response to stress.
8. Electroencephelogram measures of prefrontal brain activity.”

[6]

“Happiness requires creating better work-life balance. It’s impossible to be happy while being regularly stressed and exhausted from work. Thinking positively increases one’s happiness as well as the ability to cope with stress. Changing one’s physiology through nutrition and exercise can boost baseline-level happiness.” [4]

Internal State of Mind(Can Control)

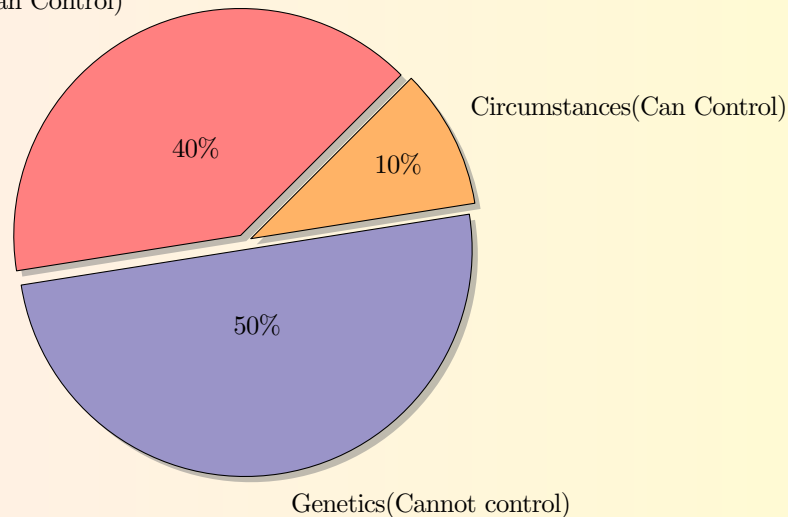


Figure 3.1: *Happiness Pie Chart*

IS HAPPINESS, MENTAL WELLBEING AND WEALTH SEPARATABLE?

4.1 Interconnections between them?

4.1.1 Recent Links Uncovered

For most people larger and higher incomes are associated with greater happiness. The exception is people who are financially well-off but are very unhappy. For instance, if you're rich and miserable, more money won't help. For everyone else, more money was associated with higher happiness to somewhat varying degrees." "The function differs for people with different levels of emotional well-being." Specifically, for the least happy group, happiness rises with income until \$ 100,000, then shows no further increase as income grows. For those in the middle range of emotional well-being, happiness increases linearly with income, and for the happiest group the association actually accelerates above \$ 100,000. [1]

4.1.2 Introducing the Well-being Equation

$$\alpha = h((u(y, z, t))) + e \quad (4.1)$$

"where α is some measure of psychological stress or self-reported number or wellbeing level (perhaps the integer 4 on a satisfaction scale, or "very happy" on an ordinal happiness scale), $u(\dots)$ is to be thought of as the person's true wellbeing or utility, $h(\cdot)$ is a continuous non-differentiable function relating actual to reported wellbeing, y is real income, z is a set of demographic and personal characteristics, t is the time period, and e is an error term. It is assumed, as seems plausible, that $u(\dots)$ is a function that is observable only to the individual. Its structure cannot be conveyed unambiguously to the interviewer or any other individual. The error term, e , then subsumes among other factors the inability of human beings to communicate accurately their happiness level (your 'two' may be my 'three'). The measurement error in reported wellbeing data would be less easily handled if wellbeing were to be used as an independent variable." [1]

4.2 The General Health Questionnaire (GHQ)

4.2.1 Analyzing stress and psychological distress

In the spirit favoured by psychologists, it amalgamates answers to the following list of twelve questions, each one of which is itself scored on a four-point scale for 0 to 3:

Have you recently?

- (i) "Been able to concentrate on whatever you are doing?
- (ii) Lost much sleep over worry?
- (iii) Felt that you are playing a useful part in things?
- (iv) Felt constantly under strain?
- (v) Felt you could not overcome your difficulties?
- (vi) Been able to enjoy your normal day-to-day activities?
- (vii) Been feeling unhappy and depressed?
- (viii) Been losing confidence in yourself?
- (ix) Been feeling reasonably happy all things considered?"

Questions:

To gain valuable insights

[6]

4.3 Can Money Honestly Buy Happiness?

4.3.1 Fact proven?

Money value

“Findings show money does in fact buy greater happiness and lower measured stress. A windfall of money in year t is followed by lower mental stress and higher reported happiness. As a conservative estimate, a windfall of 50,000 pounds (75,000 US dollars) improves mental wellbeing by between 0.1 and 0.3 standard deviations. Combining economics and psychology as a basis for exploring happiness reveals that happiness is very closely linked to lifestyle needs and money but after a certain threshold is reached, happiness doesn’t further increase. Longitudinal information and studies reported approximately 9,000 randomly chosen people profoundly felt happy when they received windfalls – by winning lottery money or receiving an inheritance. They possessed higher mental wellbeing in the following year. However, how happiness gained gradually wears off over time, remains an open unsolved question in of itself.” [6]

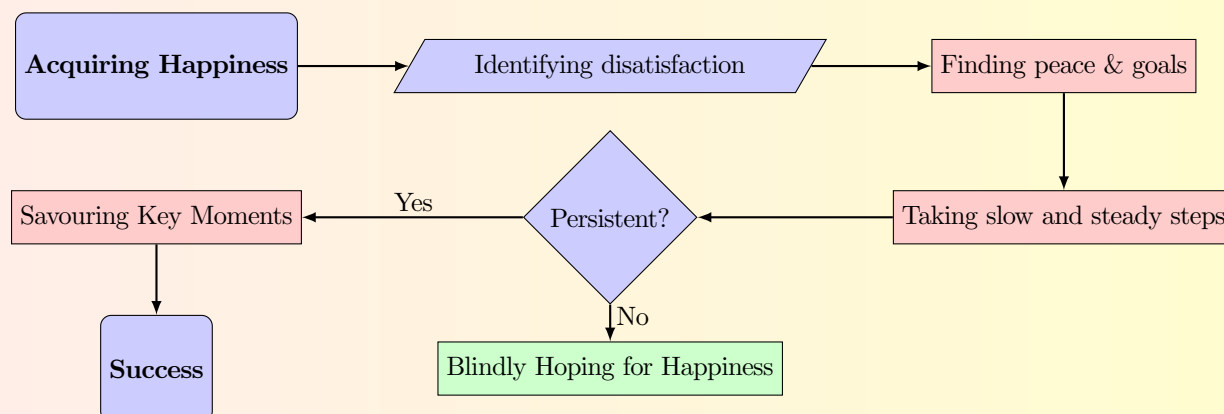


Figure 4.1: Flow Chart on Path to Happiness

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