

INSTITUTO TECNOLÓGICO Y DE ESTUDIOS SUPERIORES DE MONTERREY



ESCUELA DE GOBIERNO Y TRANSFORMACIÓN PÚBLICA

UNDERSTANDING SUBJECTIVE WELL-BEING: THE IMPORTANCE OF MOVING AWAY FROM HEDONISTIC VIEWS.

TESIS

PRESENTADA COMO REQUISITO PARCIAL PARA OBTENER EL GRADO
ACADEMICO DE:

MAESTRA EN ADMINISTRACIÓN PÚBLICA Y POLÍTICA PÚBLICA

POR:

GABRIELA SANDOVAL GONZÁLEZ

TABLE OF CONTENTS

CHAPTER I: THE RELEVANCE OF HAPPINESS AND WELL-BEING	2
OUR CURRENT SITUATION: EVERYTHING IS NOT FINE.	3
INTERNATIONAL EFFORTS TO UNDERSTAND WELL-BEING	4
WHY SHOULD WE CARE ABOUT SUBJECTIVE WELL-BEING?	7
CHAPTER II: THEORETICAL CONCEPTUAL ANALYSIS OF THE WELL-BEING DEBATE.....	8
THEORETICAL APPROACHES TO WELL-BEING	8
CONCEPTUAL FRAMEWORK FOR SUBJECTIVE WELL-BEING	10
BUILDING UP AN EUDAIMONIC FRAMEWORK	12
PROBLEM STATEMENT AND RESEARCH OBJECTIVES	13
CHAPTER III: METHODOLOGICAL FRAMEWORK.....	14
DATA AVAILABILITY AND DESCRIPTION	14
METHODOLOGY AND STATISTICAL MODEL.....	15
DEPENDENT VARIABLES QUESTION WORDING	16
MODEL SUMMARY SEPARATED INTO CATEGORIES WITH VARIABLE NAMES	17
HEDONIC VARIABLES	17
EUDAIMONIC VARIABLES	20
CONTROL VARIABLES	24
HYPOTHESIS	25
CHAPTER IV: FINDINGS.....	25
RESULTS.....	25
REGRESSION N.1 RESULTS	25
REGRESSION N.2 RESULTS	27
ANALYSIS	28
REGRESSION N.1: SUBJECTIVE WELL-BEING AS LIFE SATISFACTION	29
REGRESSION N.2: SUBJECTIVE WELL-BEING AS SELF-SATISFACTION	30
CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS	32
CONCLUSIONS	33
RECOMMENDATIONS AND FUTURE RESEARCH	33
DISCUSSION.....	35
ANNEXES.....	37
BIBLIOGRAPHY.....	48

UNDERSTANDING SUBJECTIVE WELL-BEING

THE IMPORTANCE OF MOVING AWAY FROM HEDONISTIC VIEWS

There is an over-reliance on external factors as a means for happiness. Since the rise of materialism 150 years ago, the concept of happiness became mainly related to how much you consume, have, and experience, i.e., hedonia. Great scientific discoveries have helped develop technology, physical health, and prosperity, yet subjective well-being in the world at large has not improved significantly (Kahneman et al. 2006). Instead, anxiety, depression, and mental distress are becoming more common than ever (Ritchie and Roser 2018). Public policy has been mainly focused on improving well-being factors related to wealth and economic welfare, yet economists and scientists have found that over the long-term this approach has not been sufficient, since humankind is not necessarily better off (Stiglitz 2019). Empirical well-being research has focused on refining how subjective well-being is measured, and on finding associations with physical and mental factors. Much progress has been made to understand what brings overall well-being to humanity, however, subjective well-being frameworks are often contradictory since “differing definitions of wellness have led to quite different types of inquiry concerning the causes, consequences, and dynamics of well-being” (Ryan and Deci 2001). “The future of the field depends on understanding the differences between various types of well-being, and the different and similar causes of each” (Diener, Scollon, and Lucas 2009). The causes of well-being and the public policies to support it still remain poorly understood.

Keywords: Subjective well-being, eudaimonia, life satisfaction, self-satisfaction

CHAPTER I: THE RELEVANCE OF HAPPINESS AND WELL-BEING

One of the most trivialized yet most significant words in almost all languages is *happiness*. We all yearn for happiness one way or another. For some people, happiness comes from financial stability and material assets. These people strive to have the home, car, and job they have always wanted. For other people, happiness means having health, education, and loving relationships. These people seek a quality of life that gives them peace of mind. For others, happiness is related to the positive feelings that come from lived experiences. Each of us can identify with one or more of these pathways to happiness and, depending on the beliefs and values of each person, we create our own definition of happiness.

Everything we do in life we do it to be happy, even if we do not do it consciously. For many, we choose a career, a partner, an ideology or a religion because we believe it will bring us well-being. The 19th century philosopher and psychologist William James, posited that the search for happiness is the secret motive of all we do: "How to gain, how to keep, and how to recover happiness is in fact for most men at all times the secret motive of all they do, and of all they are willing to endure." However, despite the fact that we dedicate most of our lives to pursue happiness in all its forms, and even if we currently enjoy financial stability, health and experience pleasant feelings from time to time, we often find the opposite: discomfort and dissatisfaction.

Commonly, our search for happiness goes aimlessly by not knowing or understanding just what it is that we are looking for. We seek happiness in external aspects like a partner, a job, and material possessions. We place a lot of effort in getting and keeping what we think will make us feel happy, yet we constantly feel dissatisfied, frustrated, ill-at-ease, anxious or depressed. We do not realize that all on which we generally base our happiness has a changing nature and is impermanent. We also fail to recognize that the effect these factors have on our happiness is transitory and temporary.

The COVID-19 pandemic has made it clear how fragile and impermanent worldly matters are. We can lose our job and our economic stability overnight. We can lose our health at any moment and also experience the loss of loved ones. The patterns and systems we take for granted can change in the blink of an eye. Thus, basing our happiness on something that can change at any moment and over which we have no control is very risky.

Just as risky is basing our happiness on fleeting experiences that have a temporary effect on our well-being. To name a few examples: graduating, getting married, getting a raise, buying a new car, going on vacation, etc., all of these life events have a temporary effect on our happiness because, once these circumstances fade or we get used to them, so does the pleasure they produce. Then, dissatisfaction and the desire for happiness emerge again, meaning that these external conditions are not intrinsically linked to well-being. Otherwise, all married people, people with a university degree, or people with a luxury car, would always be happy, but simply by observing people around us and delving from our personal experience we can know that it is not necessarily so. Then, what do we mean when we wish for our own happiness and the happiness of others? Do we wish for one pleasant experience after another in order to maintain our dopamine levels consistently high? Or, do we wish for a greater and sustained kind of well-being that does not depend on external conditions? Where does well-being come from? And, how can we experience a greater sense of genuine, satisfying, and sustainable well-being?

OUR CURRENT SITUATION: EVERYTHING IS NOT FINE.

Economic growth is no longer synonymous with development. Traditionally, the main objective of governments has been to increase people's well-being through the generation of more goods and services, under the assumption that increased production always brings greater welfare. Hence, the great emphasis that has long been given to gross domestic product (GDP) as an indicator of well-being and development, but GDP was never intended to measure the welfare of society (Lequiller and Blades 2014). "Economic indicators were extremely important in the early stages of economic development, when the fulfillment of basic needs was the main issue. As societies grow wealthy, however, differences in well-being are less frequently due to income" (Diener and Seligman 2004).

For several years now, economists and scientists have identified missing elements in the way we assess economic performance and social progress. They have further established that inadequate metrics provide poor guidance for governments in order to make decisions and implement better public policies. In the words of Nobel laureate Joseph E. Stiglitz (2019), "If we measure the wrong thing, we will do the wrong thing. If our measures tell us everything is fine when it really isn't, we won't make the right decisions."

Brilliant scientific discoveries have been extremely beneficial for enhancing mundane well-being, developing technology, physical health, prosperity and so forth. Deadly diseases have been eradicated, millions of people have been lifted out of poverty and have gained access to modern education and health care. In many ways the history of humanity has been a history of progress (e.g. Diamond, 2013; Pinker, 2011), however, this doesn't necessarily mean that we as human species are better off. "There is still great suffering, and humanity continues to face enormous difficulties and problems... and all the pressures of modern life bring with them stress, anxiety, depression, and, increasingly, loneliness" (Dalai Lama 2012).

We commonly prefer pleasure over pain, joy over sorrow, and satisfaction over misery or suffering. Humans have been seeking ways to achieve and maintain *happiness*, but despite this continuous pursuit and remarkable economic growth, the global scenario is not very encouraging. Depression is the third leading cause of disability (James et al. 2018) and is the second most impactful condition on overall health (BCBS Health Index 2018). In the United States, "diagnoses of major depression have risen dramatically by 33 percent since 2013. This rate is rising even faster among millennials (up 47 percent) and adolescents (up 47 percent for boys and 65 percent for girls)" (BCBS 2018). Anxiety disorders have risen too. An estimated 31.1% of U.S. adults experience an anxiety disorder at some time in their lives and an estimated 31.9% of U.S. adolescents aged 13-18 had an anxiety disorder (as cited by the National Institute of Mental Health, 2017). "Globally an estimated 284 million people experienced an anxiety disorder in 2017, making it the most prevalent mental health or neurodevelopmental disorder" (Ritchie and Roser 2018), and every year close to 800,000 people take their own life (WHO 2018). The burden of mental disorders is present in both sexes and across all age groups (James et al. 2018), making it one in ten people worldwide living with a mental health disorder (Ritchie and Roser 2018). In addition, "the world is facing three existential crises: a climate crisis, an inequality crisis, and a crisis in democracy... it should be clear that, in spite of the increases in GDP, in spite of the 2008 crisis being well behind us, everything is not fine" (Stiglitz 2019).

INTERNATIONAL EFFORTS TO UNDERSTAND WELL-BEING

Since the beginning of intellectual history, there has been debate about what is defined as a good life. According to Ryan and Deci (2001), theorists have found the issue of well-being to be complex and controversial, particularly because "how we define well-being influences our practices of government, teaching, therapy, parenting, and preaching, as all such endeavors aim to change humans for the better, and thus require some vision of what 'the better' is" (Ryan and Deci 2001).

Multiple studies have been conducted in order to find out which activities and experiences contribute to feelings of happiness. Positive associations have been found with income, education, employment, health, exercise, stable relationships, and having children (see Dolan et al., 2008 for a full review). However, research has also shown that, over the long-term, few of these are reliable causes of happiness since they do not guarantee an increase in life satisfaction, nor a sustainable sense of well-being (e.g. Diener & Seligman, 2004; Easterlin, 1974; Kahneman et al., 2006). Economist Richard Easterlin first noticed that, despite growing levels of income per capita in the United States, the average levels of happiness increased little if at all over half a century (Easterlin

1974). These findings hold for both developed and developing countries, as well as countries transitioning from socialism to capitalism (Easterlin et al. 2010).

Ideas about how to define and measure well-being have gained renewed attention from governments and the international community, especially since 2008 when the president of France, Nicolas Sarkozy, held a meeting with Joseph Stiglitz to lead a project on the measurement of progress in societies. One of the main concerns of President Sarkozy was that even when the macroeconomic indicators of his country were at an acceptable level, the perception of citizens regarding his government was negative. The following year, the Stiglitz-Sen-Fitoussi (SSF) Commission was formed to address these issues.

The Commission's report highlighted the importance of relevant metrics and called upon a radical change in the focus of statistical systems, including a shift away from measuring the size of economic production as a way to assess governments, and toward measuring what shapes the well-being of people today and that of future generations (Stiglitz, Sen, and Fitoussi 2009). The interest of the scientific community on this topic dates back to no more than four decades, specifically to the rise of positive psychology and the science of happiness. In this regard, the work of the Stiglitz Commission represented a milestone, proposing well-being as a multidimensional phenomenon and allowing the creation of the "beyond GDP" agenda.

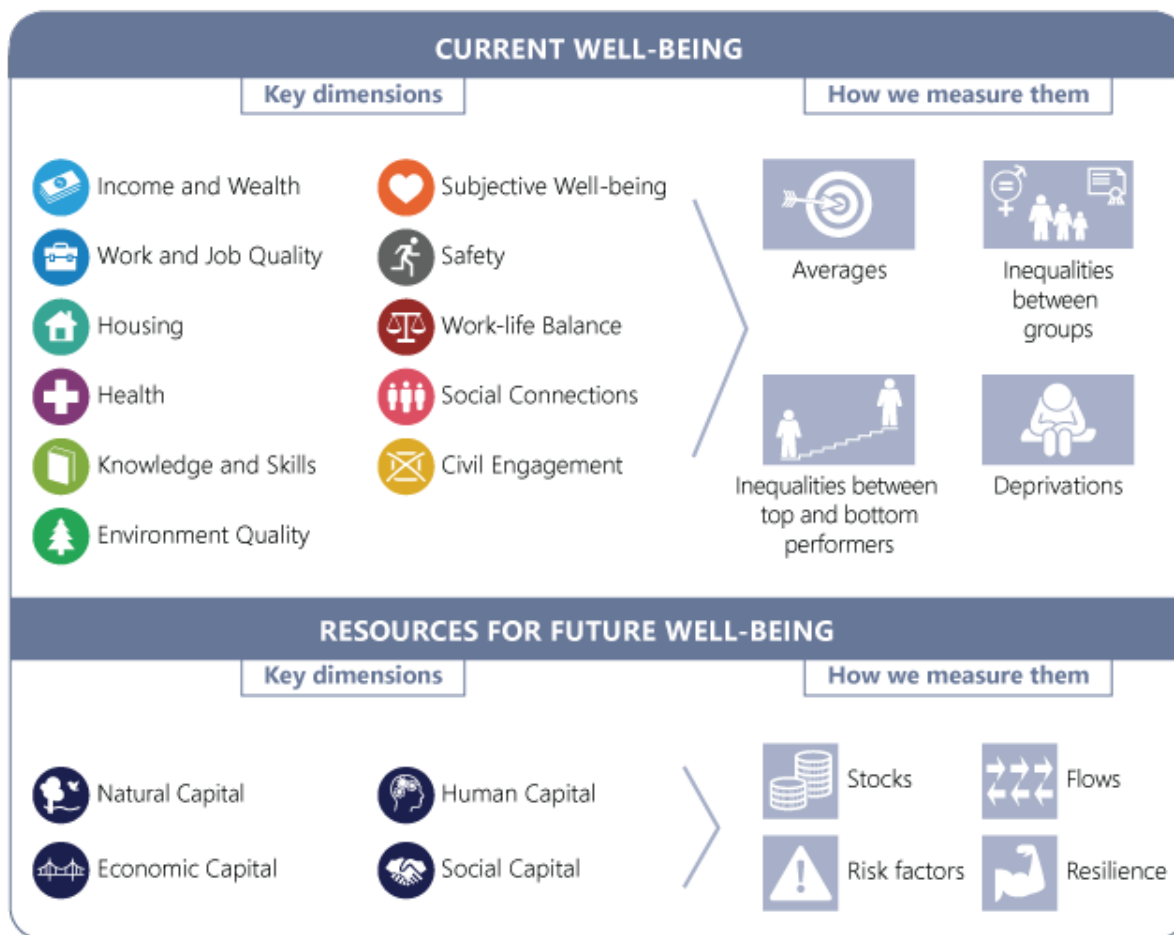
In the scientific literature, *happiness* has been operationalized as *subjective well-being* (SWB), which "refers to how people experience and evaluate their lives and specific domains and activities in their lives" (Stone and Mackie 2013). Broadly speaking, SWB consists of three types of measures: evaluative measures, experiential well-being, and eudaimonia. The latter has recently been incorporated and is still underdeveloped as a measure for SWB. Critically, "These measures focus on what people believe and report feeling, not their objective conditions, although they can be related to objective conditions" (Stone and Krueger 2018).

Since 2009, extensive progress has been made in collecting, analyzing and improving subjective well-being data, including the UN World Happiness Report, the US National Academy of Science Report on Measuring Subjective Well-being, the OECD *How's life?* series and its *Better Life Initiative*. The OECD published an extensive report on measuring SWB to guide National Statistical Offices (NSOs) on how to measure subjective well-being (OECD 2013). These efforts have paid off. According to Stone and Krueger (2018):

Thanks to large investments on the part of NSOs and governmental research agencies such as the US National Institute on Aging, there is today growing evidence to support the idea that these measures can be the basis of useful indicators on individual and societal welfare, and that they provide relevant information that is not reflected in more conventional economic statistics such as GDP.

In 2011, the OECD launched the Better Life Initiative through the biennial report *How's Life? Measuring Well-being* and by creating the *Better Life Index* in order to capture not only aggregate economic performance, but also people's quality of life (OECD 2011). This initiative provides knowledge of where governments stand as regard SWB in order to map the trajectory of their policies and efforts, and acknowledges that achieving sustainable and inclusive development means putting people and the planet at the center of policymaking. Two years later, a High-Level Expert Group (HLEG) was formed and housed at the OECD to continue the work started by the

SSF Commission. Thanks to these efforts, there is now a better understanding of well-being as a multidimensional construct comprised of the following elements (OECD 2020):



This thesis will focus on the subjective well-being dimension of the OECD’s wellbeing construct, because as of today it is the closest approximation to a definition of *happiness*.

When first conceptualized, SWB consisted of a cognitive component, satisfaction with life (SWLS, Diener et al., 1985), and two affective components, positive affect and negative affect (PANAS, Watson et al., 1988). It was often interpreted to mean experiencing a high level of positive affect, a low level of negative affect (experiential well-being), and a high degree of satisfaction with one’s life (evaluative well-being). “The concept of SWB, assessed in this way, has frequently been used interchangeably with *happiness*. Thus, maximizing one’s well-being has been viewed as maximizing one’s feelings of happiness” (Deci and Ryan 2008). According to Stone and Krueger (2018):

Subjective well-being is subjective, that is, it is based on a person’s self-report of their beliefs and feelings. In this respect, it differs from objective well-being measures that might include observable health or material outcomes. A subjective well-being measure is one for which there is no obvious reference point that an external observer can use to evaluate a person’s self-report.

This *subjectivity* is relevant as it is an accurate way to assess a person's actual well-being, how he or she feels about their life experiences, what they value, and what they find rewarding. According to Stiglitz, Fitoussi, and Durand (2018):

Subjective well-being has great potential as an indicator of the *health* of a community and of individuals... at a societal level, subjective well-being measures can signal wider problems in people's lives, capture prevailing sentiment, and predict behaviour in ways that complement more traditional measures.

Thereby, SWB is a self-report measurement of the current state of well-being of a person. The processes that determine that subjective evaluation are based on the values and desires of that particular person. They involve a cognitive self-assessment of life conditions.

WHY SHOULD WE CARE ABOUT SUBJECTIVE WELL-BEING?

There is plenty of evidence that a high level of well-being in societies results in desirable outcomes for both businesses and governments. "People high in well-being function more effectively than people low in well-being: They are likely to have more successful relationships, to be more productive at work, to have higher incomes, and to have better physical and mental health" (Diener and Seligman 2004). Longevity is greater in nations where well-being is high (Vázquez, Hernangómez, and Hervás 2004), and "high well-being is likely to buffer against the incidence of at least some mental disorders", which are significant and costly for governments, households, and health care institutions (Diener and Seligman 2004). Lower employee turnover and lower accident rates are found within corporations in which employees were satisfied and engaged, as well as higher productivity and profitability rates (Harter, Schmidt, and Hayes 2002). Thus, "Well-being not only is valuable because it feels good, but also is valuable because it has beneficial consequences. This fact makes national and corporate monitoring of well-being imperative" (Diener and Seligman 2004).

Monitoring social welfare is now a crucial priority. Improving our understanding of subjective well-being and knowing what brings genuine happiness is the most important task to which we can dedicate our intelligence since it affects the lives of all humans. After all, "The care of human life and happiness, and not their destruction, is the first and only legitimate object of good government" (Jefferson 1809). Policymaking is still mainly focused on economic development as a measure of progress, despite the fact that increasing wealth and economic prosperity has been proven not to have a lasting effect on life satisfaction. These efforts must continue as long as there are people living in poverty, however, public policy regarding well-being should now focus elsewhere. As the SSF Commission established, "What we measure affects what we do. If we measure the wrong thing, we will do the wrong thing. If we don't measure something, it becomes neglected, as if the problem didn't exist" (Stiglitz 2019). We cannot remain blind to the fact that we, as a society, are not okay.

This thesis seeks to improve the understanding of well-being by comparing different theoretical approaches and analyzing the effects they have on subjective well-being.

CHAPTER II: THEORETICAL CONCEPTUAL ANALYSIS OF THE WELL-BEING DEBATE

Theoretical and research literature on well-being is summarized into hedonic and eudaimonic perspectives (Ryan and Deci 2001). Hedonia refers to pleasurable feelings which come with sensory-level experiences. Wealth, health, and friendship all contribute greatly to such feelings (Kahneman, Diener, and Schwarz 1999). Eudaimonia, on the other hand, refers to a deeper level of satisfaction deriving not from external stimuli but from our own mental state (Dahl, Wilson-Mendenhall, and Davidson 2020). According to the Dalai Lama (2012):

The first kind of satisfaction, since it is dependent on sensory stimulation, is by its nature fragile and transient. Such pleasures last only so long as the sensory stimulation, and when this is over, they make no lasting contribution to our overall sense of well-being... It is this second level of satisfaction, coming from within us, which I refer to when I talk about genuine human happiness.

For at least the last 150 years, since the rise of materialism, the most common approach to happiness has been primarily hedonic, and has been mainly related to Bentham's concept of utilitarianism, which boils down to maximizing pleasures and minimizing pain. We naturally avoid uncomfortable experiences and choose to enjoy pleasant ones. Certainly, it is preferable to enjoy good health, have a rewarding job, material resources, and a comfortable life that allows our development. However, many times we think that when we achieve a successful life, economic stability, and loving relationships, we will finally be satisfied and at peace. Yet, a growing body of evidence suggests that these cannot by themselves bring us lasting subjective well-being.

The debate has grown regarding which theoretical approach best describes SWB, however, the hedonic perspective still predominates within the scientific community. I argue that the understanding of subjective well-being, and therefore happiness, remains incomplete without fully taking eudaimonia into account.

THEORETICAL APPROACHES TO WELL-BEING

Broadly speaking, there are two main views concerning happiness and well-being, those that go back directly to the hedonistic tradition in philosophy, and those that resonate with the burgeoning eudaimonist theories of the classical era, such as those of Aristotle. “Both hedonism and eudaimonism represent efforts in ethical philosophy to answer questions regarding the nature of a good life or a life well-lived” (Huta and Waterman 2014). The former is led by scientists who support the idea of happiness, or life satisfaction, as a result of experiencing positive emotions caused by external factors or personality traits (e.g. Diener, 1984; Diener et al., 1985, 1997, 1998, 2003; Kahneman, 1999; Kahneman et al., 1999, 2003). *Hedonia* refers to experiences of pleasure, enjoyment, and comfort, and the absence of discomfort. The sense of well-being that comes from hedonia is heavily dependent on the level of sensory satisfaction, on the pleasures that come from met desires or material possessions. It is also known as experiential well-being since it is subject to the presence of a stimulus and is characterized by being ephemeral. Hedonic well-being emphasizes the importance of feeling good and involves both evaluative and experiential aspects

of SWB, however, “a more precise interpretation of hedonic well-being would use just positive affect and negative affect to index happiness, because life satisfaction is not strictly a hedonic concept” (Deci and Ryan 2008).

The word *hedonism* from a philosophical stance prioritizes pleasure. However, from a practical, real-world stance, it refers to all aspects related to the mundane world. This means, everything that you can get from the outside world and that in one way or another benefits your life, such as a job, a spouse, money, food, health, etc. All hedonic pleasures are said to be transitory since in principle they satisfy a desire. “All pleasures based on sensory stimulation derive at some level from the satisfaction of a craving. And if we become obsessed with satisfying that craving, this will eventually turn into a kind of suffering. Even the pleasure we get from eating turns to suffering if we overindulge” (Dalai Lama 2012). I do not mean to suggest that hedonic pleasures do not influence well-being, but instead to point out that the satisfactions they provide are transitory.

In today's materialistic world, it is very easy to fall into the habit of constantly seeking sensory stimulation. Simply by observing ourselves and others, we often find that if people do not listen to music, watch television, or do not engage in a distracting activity, they feel bored, restless, or anxious. This suggests that our sense of well-being is highly dependent on the sensory level of satisfaction. According to Diener and Lucas (2006):

People continue to pursue happiness because they incorrectly believe that greater happiness lies just around the corner in the next goal accomplished, the next social relationship obtained, or the next problem solved. Because new goals continually capture one's attention, one constantly strives to be happy without realizing that in the long run such efforts are futile.

Eudaimonia represents the opposite theoretical perspective. Eudaimonia considers happiness as not so much an outcome or end state but as a process of actualizing one's virtuous potentials and realizing one's true nature (Ryan and Deci 2001). This view “considers well-being to consist of more than just happiness, suggesting that people's reports of being happy (or of being positively affective and satisfied) does not necessarily mean that they are psychologically well” (Deci and Ryan 2008). When Aristotle first proposed the concept of eudaimonia, he argued that living a life of contemplation and virtue in accordance with one's inherent nature was the pathway to well-being (Norton 1976). The idea of a higher or genuine happiness was also recognized in different traditions, regions, and time periods (e.g., Socrates, Plato, Buddha, St Augustine of Hippo). In those traditions, the hedonic pleasures and mundane desires like wealth, power, and prestige, were seen as inferior and by nature unsatisfying, and instead a contemplative and introspective approach was suggested in order to cultivate inner peace and mental balance (Lobel 2017).

Eudaimonists agree that happiness is not really something to be pursued. Pleasures and positive emotions, although strongly positive, “are not the goal to be pursued but rather a by-product of the pursuit of virtue, excellence, and the best within us, and/or an indication that one is having some success in that regard” (Huta and Waterman 2014). Well-being is not seen as a fixed state but is interpreted as a continuous dynamic process of effortful living by means of engagement in meaningful activities which are guided by ethics and the motivation to lead a meaningful life (Ryan and Deci 2001). In this regard, many contemporary philosophers prefer the translation of eudaimonia as *flourishing*, rather than the traditional translation as *happiness* (Huta and Waterman 2014). Thus, eudaimonia refers to internal cues and mental states that reflect virtue, excellence,

and the full development of our potentials. It considers happiness as not really something to be pursued, but as the result of living an ethical, benevolent and virtuous way of life. The sense of well-being that comes from eudaimonia is compared to a higher or genuine well-being that does not depend on external circumstances.

CONCEPTUAL FRAMEWORK FOR SUBJECTIVE WELL-BEING

Subjective well-being has traditionally been comprised of three elements, one cognitive (life satisfaction) and two affective (positive and negative). According to Diener, Suh, and Oishi(1997):

A person's evaluation of his or her life may be in the form of cognitions (e.g., when a person gives conscious evaluative judgements about his or her satisfaction with life as a whole, or evaluative judgements about specific aspects of his or life such as recreation). However, an evaluation of one's life also may be in the form of affect (people experiencing unpleasant or pleasant moods and emotions in reaction to their lives).

These components have been translated into a wide range of evaluative and experiential measures, which among the most popular we find: the Satisfaction With Life Scale (SWLS, Diener et al., 1985), the Positive and Negative Affect Schedule (PANAS, Watson et al., 1988), the Day Reconstruction Method (DRM, Kahneman et al., 2004), and the U-index (Kahneman and Krueger 2006).

Satisfaction with life or *life satisfaction* has been the gold standard with regard to the evaluative measures. “*Evaluative measures* require a person to reflect upon and evaluate his or her life (or some aspect of it, such as health)” (Stone and Krueger 2018). This is often measured using questions such as: “The following question asks how satisfied you feel, on a scale from 0 to 10. Zero means you feel ‘not at all satisfied’ and 10 means you feel ‘completely satisfied’. Overall, how satisfied are you with life as a whole these days?” (OECD 2013). Therefore, *life satisfaction* is a retrospective and overall evaluation of the individual's life, based on the aspects that are considered most relevant to that particular person. On the other hand, affective components measure the frequency and intensity of positive and negative emotions (Catalino, Algae, and Fredrickson 2014). These *affective* or *experiential measures* are mainly focused on states of enjoyment towards life events and pleasurable feelings. Both types of measures imply self-report ratings of aspects of peoples' lives.

Positive and negative affect is primarily hedonic (Deci and Ryan 2008). Naturally, we feel happy when we get promoted, but sad or anxious if we get fired; we feel happy while doing an activity that we like, but we get bored if we are not doing anything. Our feeling of happiness is dependent on an action or stimulus, and we mainly base our evaluation on hedonic factors. On the other hand, *life satisfaction* is not necessarily hedonic, since it has no immediate hedonic elements. It can be a general, retrospective, neutral assessment of the individual's life based on the aspects that are considered most relevant to that particular person. However, I hypothesize that the measurement holds an implicit hedonic bias, as people generally associate the evaluation of life with hedonic aspects (Dolan, Peasgood, and White 2008).

The materialistic world has led us to believe that being satisfied with life means feeling free from material deprivation, being satisfied with your standard of living or living conditions, being healthy, educated and having a good job. Some might evaluate life in a more spiritual or immaterial sense, however, since this is not the norm, I hypothesize that the *satisfaction with life* measurement has a hedonic bias. Therefore, I argue, if subjective well-being is being measured exclusively through these widely accepted scales, hedonic factors will continue to have a strong association with well-being, and public policies will continue to be oriented towards economic welfare and the accumulation of wealth.

To illustrate the differences between life satisfaction, overall happiness, and measures of positive and negative affect, the UN World Happiness Report (2012) did an inner-country share of total variance in order to analyze if the measurements differ in how they capture happiness (see annex G). Some essential distinctions were highlighted regarding the different ways of getting individuals to report on their well-being (Helliwell, Layard, and Sachs 2012):

1. A first distinction is between experienced and remembered well-being. Experienced well-being depends on moment-by-moment reports, usually of pleasure or pain, and remembered well-being is reported subsequently, and is hence based on memory.
2. A second distinction relates to the time span of the emotion or event being experienced or remembered. For experienced well-being, the time span is momentary, but for remembered well-being, the report can relate to a past moment, or to the average for any particular event or time period.
3. A third distinction is between evaluations and emotional reports. An evaluation is inherently a judgment about something, while an emotional report is more simply the description of an emotional state.

A systematic difference was reported between the average of momentary assessments and the retrospective evaluations, and most researchers agree that “the remembering self and the experiencing self must both be considered, because their interests do not always coincide”, thus this distinction remained as separate types of measurements for SWB (evaluative measures and experienced measures) (Kahneman 2011).

Question wording for evaluative measures include: “All things considered, how satisfied are you with your life as a whole nowadays?” (on a 0 to 10 scale) as asked by the European Social Survey. The World Values Survey asks almost the same life satisfaction question, except that it uses “these days” instead of “nowadays,” and the response scale runs from 1 to 10. However, when happiness measures relate to a specific moment or day, is appropriate to regard them as reports of affect (Helliwell, Layard, and Sachs 2012). For example, when the U.K. Office for National Statistics (ONS) asks “Overall, how happy were you yesterday?”.

In some other cases, the happiness question is both evaluative in nature and broader in time coverage. For example, the European Social Survey asks “Taking all things together, how happy would you say you are?” (on a scale of 0 to 10), while the World Values Survey asks “Taking all things together, would you say you are: Very happy, Quite happy, Not very happy, or Not at all happy?” (Helliwell, Layard, and Sachs 2012).

“The bottom line of our comparisons among life evaluations is that when life satisfaction, happiness and ladder questions are asked about life as a whole, they tell very similar stories about the likely sources of a good life... But when happiness is seen as an emotional report, and measured at a point in time, then it looks very like other measures of positive affect” (Helliwell, Layard, and Sachs 2012). Thus, happiness has been shown to play a double role, sometimes appearing as an emotional report and at other times in an evaluative role (Helliwell, Layard, and Sachs 2012). This fact makes the study of happiness quite challenging, since some researchers might refer to the evaluative type of happiness and others as the affective type of happiness, and just call it *happiness*.

Nevertheless, as the field’s understanding of well-being has evolved and expanded (Adler and Seligman 2016). Well-being is now understood not simply as positive emotions, but rather, as thriving across multiple domains of life (Diener, Scollon, and Lucas 2009) and, since the publication of the first SSF report, the concept of *eudaimonia* has come into common use and a third type of measurement for SWB has been suggested, now related to a sense of meaning and purpose with one’s life and the idea of *flourishing* (Stone and Krueger 2018).

More emphasis is needed on this third type of measurement in order to have a complete conceptual framework for subjective well-being and to be able to design public policies to promote it. In the words of the OCDE’s Secretary-General Angel Gurría (2018) “It is only by having better metrics that truly reflect people’s lives and aspirations that we will be able to design and implement *better policies for better lives*”.

BUILDING UP AN EUDAIMONIC FRAMEWORK

Several theories of eudaimonic well-being developed in parallel to research based on hedonic well-being, identifying dimensions like meaning in life, purpose, autonomy, self-realization, self-acceptance, value congruence, and social connectedness as related to eudaimonia (e.g. Delle Fave et al., 2011; Huta & Ryan, 2010; Ryan & Deci, 2000; Ryff, 1995; Seligman, 2011). One of the most recent and widely accepted is Seligman’s (2011) Well-being Theory, which establishes well-being as a construct of five elements: positive emotion, engagement, positive relationships, meaning, and accomplishment, or PERMA. Seligman argues that by increasing these domains there is an increase in human flourishing (Seligman 2011). Carol Ryff’s Scales of Psychological Well-being is another renowned theory which encompass six distinct dimensions of wellness: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance (Ryff 1989, 1995, 2013; Ryff and Keyes 1995; Ryff and Singer 2008). Several other measures have developed based on specific theories of eudaimonic well-being, which include personal autonomy and self-determination, curiosity and exploration, and character strengths and virtues (Deci and Ryan 2004; Kashdan, Rose, and Fincham 2004; Peterson and Seligman 2004). “However, despite tremendous advances in well-being research, these fields lack a unifying framework that clarifies dimensions of well-being that exhibit training-induced plasticity and the psychological and biological mechanisms through which training-induced changes may endure” (Dahl, Wilson-Mendenhall, and Davidson 2020). The aspect of sustainability and endurance is relevant because it would not be appealing to work towards a well-being state that would vanish at the slightest change.

Research suggests that given the brain's ability to change in response to experience and training (a principle known as neuroplasticity), well-being can be learned and strengthened just like learning to play an instrument (Davidson and McEwen 2013). The fact that eudaimonic well-being can be cultivated gives a tremendous amount of hope, as it does not depend on the socioeconomic factors in which we live, which most of the time are beyond our control, but rather on the enthusiasm and dedication we put into cultivating and training the qualities that provide well-being. After all, if the level of well-being were something fixed that each person was determined to have, it would make no sense to promote it and aspire to it. Thus, the Center for Healthy Minds at the University of Wisconsin-Madison has created a new scientific framework for understanding how human flourishing can be nurtured, and has identified four areas that contribute to well-being which are trainable and measurable: awareness, connection, insight and purpose. "The cultivation of well-being thus involves the use of self-regulatory processes to learn, practice, and apply these skills in daily life" (Dahl, Wilson-Mendenhall, and Davidson 2020).

PROBLEM STATEMENT AND RESEARCH OBJECTIVES

It is evident that our current understanding of well-being is incomplete, since both at the social and individual level *we are not fine*. International efforts are improving well-being's understanding, and the data collected by NSOs and governmental research agencies are increasingly guiding public policy in this direction. However, a critical problem persists as there is no unified definition of happiness and no worldwide distinction between the different types of well-being.

Current definitions of happiness often reflect hedonistic matters, which are not shown to consistently generate happiness. The lack of distinction between two types of happiness, or in other words, the lack of specification between *hedonic well-being* and *eudaimonic well-being* within the term *subjective well-being*, leads to ambiguous and inconsistent evidence concerning the causes, consequences, and dynamics of well-being, and has created a gap in subjective well-being measurements.

Therefore, in addition to evaluative happiness (life satisfaction) and affective happiness (positive affect), which both emphasize the hedonic aspect of well-being, a third type of happiness deserves distinction that reflects eudaimonic factors. I recognize the relevant impact that hedonia and economic development have on well-being, however, it is also necessary to highlight the importance of eudaimonia as a means for happiness and to incorporate eudaimonic measurements in order to fully understand subjective well-being. There is also a need for a change in the way governments assess societal well-being. Specifically, we need a new way of understanding well-being that moves us beyond hedonic factors. All this prompts an urgent set of research questions: If the current SWB measures, life satisfaction and affect, are primarily hedonic, how can we define subjective well-being in a way that reflects eudaimonic factors? How should eudaimonia be measured? Finally, what can be done to promote a genuine and sustainable sense of well-being?

This study aims to enhance our understanding of subjective well-being and broaden our scope to different ways of relating to it. By relating, I mean realizing that our level of well-being is not fixed, but rather that we can train ourselves to cultivate it. This fact is relevant because, if we can learn the tools to nurture our own well-being, then we can help improve well-being in our immediate community and organizations.

I will use regression analysis of large-n survey data from INEGI's subjective well-being module (BIARE) in its National Household Income and Expenditure Survey (ENIGH) to evaluate which attributes best explain subjective well-being, and to test whether eudaimonic factors have a relevant impact on subjective well-being. Regression analysis provides a broad perspective of the different approaches to well-being since, in addition to measuring subjective well-being as *life satisfaction*, an alternative outcome variable is proposed – *self-satisfaction* – to find out whether traditional measures have an implicit hedonic bias. Both hedonic and eudaimonic views will be represented by selecting a set of variables that describe each approach, noting which set of variables show stronger correlations with the different ways of measuring subjective well-being. To that end, the study's objectives are:

1. Identify what attributes best explain happiness, by analyzing both hedonic and eudaimonic theoretical approaches to well-being.
2. Analyze each set of factors (hedonic and eudaimonic) to find out which variables have the greatest incidence on *life satisfaction* and *self-satisfaction*.
3. Compare *life satisfaction* with *self-satisfaction* results, in order to find out whether or not *life satisfaction* has a hedonic bias.
4. Analyze whether *self-satisfaction* serves as a preliminary measure for eudaimonic well-being.

Note: As mentioned above, the measure of *positive and negative affect* is a purely hedonic measure, as it is based solely on affective emotions, therefore, this measure will be left out of the study, since the intention is to highlight the importance of eudaimonia in well-being.

This thesis is not about proposing a new way to measure happiness, but rather about recognizing that current SWB measures only encompass a hedonic type of happiness, and on demonstrating that the definition of happiness is incomplete without considering eudaimonia.

CHAPTER III: METHODOLOGICAL FRAMEWORK

DATA AVAILABILITY AND DESCRIPTION

In Mexico, various efforts have been made to collect data on subjective well-being. Among the most prominent national surveys there are: BIARE (INEGI); ENVUD (FEP-Banamex); "Lo que piensan los pobres" (Sedesol); Encup (Segob); and ENSAVISO (UDEM). However, the only survey that adheres to OECD's guidelines on measuring subjective well-being (OECD 2013), and that has a question section regarding eudaimonia, is INEGI's BIARE survey.

Mexico's national statistical office (INEGI) developed a subjective well-being module as part of its National Household Surveys. INEGI's database BIARE (which stands for *bienestar autorreportado*, or "self-reported well-being") incorporates elements of PERMA, proposed by Martin Seligman, as well as some considerations derived from works by Edward Diener and developments in the INEGI Research area. A first SWB module (BIARE *piloto*) was created to

accompany the National Household Expenditure Survey (ENGASTO) during the first quarter of 2012. In 2013, a second version (BIARE *básico*) was applied to the National Consumer Confidence Survey (ENCO) in July and, thereafter, in the first month of each quarter to continuously monitor the basic indicators of Subjective Well-being. Additionally, a BIARE complement (BIARE *ampliado*) was added to the Socioeconomic Conditions Module (MCS) of the National Household Income and Expenditure Survey (ENIGH) that was carried out from August to November 2014. The term *ampliado* (“extended”) refers to a greater coverage of households, but also to the fact that it captures the elements of subjective well-being within a broader context (positive/negative life events, family characteristics, and social/material environment). A statistical analysis of the BIARE *ampliado* database (which from now on will only be referred to as BIARE) was chosen for this thesis, as it is the only one out of the three versions of the module (*piloto*, *básico*, *ampliado*) that allows an empirical analysis of subjective well-being with respect to hedonic and eudaimonic variables as it reports on people's quality of life from a self-reported perspective. BIARE allows an analytical approach through its variables, and the possibility of adding ENIGH control variables that will help to give validity and robustness to the study (see annex A.1 for diagram of the relationship between the databases).

BIARE aims to generate solid statistics on subjective well-being, guaranteeing comparability with other OECD member countries. The BIARE questionnaire consists of two parts, each subdivided into sections. The first part focuses on capturing central measures of subjective well-being as described by the OECD guidelines; the second goes further by identifying recent events and situations, sociodemographic characteristics, and aspects of social life and personal growth, which allows contextualizing what was captured in the first (see annex A.2 for variable list).

BIARE is representative by state at the national level. From a sample of 44,518 dwellings, one adult per household (18 years and over) is selected to answer the survey by a random criterion (closest birthday to the interview date). The interview is face-to-face with a printed questionnaire and indirect informants are not allowed. The sample is constituted on the basis of four socioeconomic strata (low, medium-low, medium-high, and high) obtained from INEGI's National Housing Framework, which involves three selection stages: 1) Primary Sampling Units (PSU) selected from the rest of PSUs in each stratum (each urban PSU is an area made up of a set of blocks); 2) The dwelling within the PSU (both selections are random); and 3) The person within the dwelling (selected by closest birthday to the interview date as mentioned before). The sample size is calculated to support up to one fifth of unsuccessful interviews per domain; that is, either at the national level or by state. A total of 39,274 respondents composes the sample.

METHODOLOGY AND STATISTICAL MODEL

Statistical regression analysis was chosen to analyze the data. Causality will not be established with this method, however I expect that any associations found will contribute to a better understanding of subjective well-being.

Within the model, both hedonic and eudaimonic views will be represented by selecting a set of variables to describe each approach and, in order to inquire if each set of variables show different correlations with subjective well-being. As mentioned before, two definitions of subjective well-being will be tested, *life satisfaction* and *self-satisfaction*, therefore, two models will be built each

with a different dependent variable. Regression n.1 will run *life satisfaction* as the dependent variable and regression n.2 will compare the alternative variable *self-satisfaction* as the dependent variable, holding all independent variables constant for both regressions.

The alternative dependent variable *self-satisfaction* refers to self-acceptance and having a positive attitude toward the self (Ryff 2013). A person that has an overall sense of satisfaction with oneself tends to be happy, feel at ease, feel content with one's life, and experience an overall sense of well-being regardless of the external conditions in which they live. This explains a sense of inner personal satisfaction that can be interpreted as eudaimonia. On the contrary, a low scorer in self-acceptance "feels dissatisfied with self; is disappointed with what has occurred in past life; is troubled about certain personal qualities; and wishes to be different than what he or she is" (Ryff 2013). These traits cause restlessness and discomfort and generally affect other areas of peoples' lives. "Maladaptive conceptions of self are linked to negative physical and mental health outcomes" (Dahl, Wilson-Mendenhall, and Davidson 2020). Therefore, having self-satisfaction can be equated to having eudaimonic well-being, since the evaluation of the sense of satisfaction with oneself is not dependent on external stimuli.

DEPENDENT VARIABLES QUESTION WORDING

Variable	LIFE SATISFACTION		
BIARE variable	encsat_1: Satisfacción de vida actual	Range	{00,...,10}
Textual question	¿Podría decirme qué tan satisfecho se encuentra actualmente con su vida?	Definition	How satisfied respondents feel with their life.

Variable	SELF SATISFACTION		
BIARE variable	frases_1: Satisfacción por sí mismo	Range	{00,...,10}
Textual question	En general me siento muy bien con respecto a mi mismo.	Definition	The household member feels good about himself/herself.

At first, an ordered logistic regression was considered for the analysis since the model's dependent variables are ordinal variables, however, the variables have a 11-category scale, and the *Goodness-of-fit* and *Test of Parallel Lines* assumptions were not met, so the analysis was replaced by an OLS linear regression. The model was also tested for collinearity (see annex B.1 for graphics on collinearity diagnosis) and heteroscedasticity (see annex B.2 for graphics on heteroscedasticity diagnosis) to see if data processing was necessary. Heteroscedasticity was detected by a studentized Breusch-Pagan test and corrected by HC3 robust standard errors. The data did not present worrying levels of collinearity (< 2.5).

MODEL SUMMARY SEPARATED INTO CATEGORIES WITH VARIABLE NAMES

Dependent variable n.1	LIFE SATISFACTION	
Dependent variable n.2	SELF-SATISFACTION	
Independent variables	Hedonic variables	<ul style="list-style-type: none"> • STANDARD OF LIVING SATISFACTION • DAY-TO-DAY SATISFACTION • LIVING CONDITIONS • HEALTH • SOCIOECONOMIC STATUS • EDUCATION • JOB LOSS • MATERIAL LOSS
	Eudaimonic variables	<ul style="list-style-type: none"> • AWARENESS • SOCIAL LIFE SATISFACTION • FAMILY LIFE SATISFACTION • AUTONOMY • ENVIRONMENTAL MASTERY • RESILIENCE • MEANING AND PURPOSE • FEELING OF ACCOMPLISHMENT
	Control variables	<ul style="list-style-type: none"> • AGE • GENDER • CHILDREN • MARRIED • STATE (as fixed effects)

HEDONIC VARIABLES

The selected hedonic variables can be summarized as a set of factors that influence our daily life and are tied to the largely material factors emphasized in the hedonic theoretical approach. Objective variables asked from a subjective perspective such as *living conditions* and *health* are included, as well as purely subjective variables such as *standard of living satisfaction* and *day-to-day satisfaction*. *Socioeconomic status* and *education* are two objective sociodemographic variables that are intended to verify the impact on well-being of the traditional models of social development. And finally, two negative life events variables are included in order to analyze the impact that *material loss* and *job loss* have on well-being. These are certainly not the only hedonic variables in the survey, but these were carefully chosen to create a set of variables that fully describe hedonia, in addition to being the best variables to reflect the theory relative to the alternatives.

These variables are representative of hedonia as they capture the tendency to look for happiness in material possessions and external factors like a job, money, our body looks, and our living conditions. As we can recall, hedonia is about experiencing positive emotions through maximizing pleasures and minimizing pain. Hedonic variables are included in the model in order to analyze the impact they have on each definition of subjective well-being, *life satisfaction* and *self-satisfaction*.

HEDONIC VARIABLES QUESTION WORDING:

Variable	STANDARD OF LIVING SATISFACION		
BIARE variable	satis_4: Satisfacción nivel de vida	Range	{00,...,10}
Textual question	¿Qué tan satisfecho está con su estándar o nivel de vida?	Definition	How satisfied is the household member with their standard of living?

This question is included in the model because it is the only question in the survey that highlights subjective satisfaction with material living conditions. Since it has been established that income influences evaluation of life, this variable is expected to have a positive relationship for both dependent variables, but to have a higher incidence with regard to *life satisfaction* (Kahneman and Deaton 2010).

Variable	DAY-TO-DAY SATISFACTION		
BIARE variable	satis_10: Satisfacción de actividad realizada	Range	{00,...,10}
Textual question	¿Qué tan satisfecho está con la actividad que usted realiza (trabajar, quehaceres del hogar, estudiar)?	Definition	How satisfied is the household member with the activity they do on a daily basis?

Research has been done regarding the category "how we spend our time" as a potential influence of our well-being (Dolan, Peasgood, and White 2008). *Day-to-day satisfaction* intends to capture this broad concept of *time use*, in a subjective sense, whether or not people are satisfied with their daily activities. Similarly, a positive relationship is expected for both dependent variables, since the use of time is relevant both for self-satisfaction and life satisfaction.

Variable	LIVING CONDITIONS		
BIARE variable	afirma_3: Condiciones de vida excelentes	Range	{1,...,7} (Totally disagree...totally agree)
Textual question	Mis condiciones de vida son excelentes.	Definition	The living conditions of the household member are excellent.

Living conditions are expected to be highly relevant for a life assessment, but not as influential for a self-assessment. "The belief that high income is associated with good mood is widespread but mostly illusory. People with above-average income are relatively satisfied with their lives but are barely happier than others in moment-to-moment experience, tend to be more tense, and do not spend more time in particularly enjoyable activities" (Kahneman et al. 2006).

Variable	HEALTH (recoded)		
BIARE variable	situa_13: Buena salud	Range	{1,2} recoded {1,0} (Yes, No)
Textual question	Durante los últimos 12 meses, ¿usted gozó de buena salud?	Definition	The household member was in good health.

The relationship between health and well-being has been widely studied. Some of the latest research suggests a two way relationship between health and happiness. Kok, et al. (2013), for example, find that, "An upward-spiral dynamic continually reinforces the tie between positive

emotions and physical health.” In the current model, health is recognized as a hedonic factor as our current physical state is always changing and inevitably our health deteriorates as we age. A positive association is expected towards *life satisfaction*, but not necessarily with *self-satisfaction*.

Variable	SOCIOECONOMIC STATUS		
Tabla CONCENTRADO HOGAR	est_socio: Estrato socioeconómico	Range	{1,...,4} (Low...high)
Variable description	Clasificación de las viviendas del país de acuerdo a ciertas características socioeconómicas de las personas que las habitan, así como características físicas y el equipamiento de las mismas expresadas por medio de 24 indicadores contruidos con información del Censo de Población y Vivienda 2010. Esta estratificación se realizó por medio de métodos estadísticos multivariados.	Definition	Socioeconomic strata built by INEGI during sample design.

Socioeconomic status was chosen as the target variable to measure income rather than income per se, because income is already accounted for in variables such as *living conditions* and *standard of living satisfaction*. Socioeconomic status provides a broader objective context of the person's way of living, and is expected to have high incidence on *life satisfaction*, but not as much on *self-satisfaction*.

Variable	EDUCATION		
Tabla POBLACIÓN	nivelaprob: Nivel de instrucción aprobado gradoaprob: Grado aprobado antec_esc: Antecedente escolar	Range	{00,...,24}
Note:	Variable constructed by Sintax (ESCOACUM)	Definition	Cumulative schooling of household member

“An increasing number of studies suggest that the relationship between higher education and subjective well-being is either insignificant or negative. Most of these studies, however, use life satisfaction as a proxy for SWB”, however, Nikolaev examines the link between higher education and the three different measures of subjective well-being, and finds that people with higher education are more likely to report higher levels of both eudaimonic and hedonic SWB (Nikolaev 2018). In this model *education* is categorized as a hedonic variable, since the motivation behind the wish to study is mainly hedonic, and because the degree title comes from an external entity. As stated by Nikolaev, *education* is expected to have a positive impact on both *life satisfaction* and *self-satisfaction*.

Variable	JOB LOSS (recoded)		
BIARE variable	situa_1: Desempleo o cierre de negocio propio	Range	{1,2} recoded {1,0} (Yes, No)
Textual question	Durante los últimos 12 meses, ¿usted se quedó sin un empleo o tuvo que cerrar un negocio propio?	Definition	The household member lost his job or had to close his own business.

Variable	MATERIAL LOSS (recoded)		
BIARE variable	situa_5: Perdida de posesiones materiales importantes	Range	{1,2} recoded {1,0} (Yes, No)
Textual question	Durante los últimos 12 meses, ¿usted perdió posesiones materiales importantes?	Definition	The household member lost important material possessions.

Job loss and *material loss* are both regarded as negative life events that are expected to have a negative impact on both *life satisfaction* and *self-satisfaction*, since the moment in which the negative event is experienced will likely have a negative effect, albeit momentary, on happiness.

EUDAIMONIC VARIABLES

The selection criteria for eudaimonic variables was based on The Center for Healthy Minds' four dimensions of well-being framework (Dahl, Wilson-Mendenhall, and Davidson 2020), and complemented by Ryff's model of Psychological Well-being (Ryff 2013). Researchers at the University of Wisconsin-Madison propose a four-pillar framework based on scientific evidence that suggests well-being can be cultivated through practice in daily life. The four pillars have been studied in the lab and shown to improve with training (Dahl, Wilson-Mendenhall, and Davidson 2020). For that reason, the selection of eudaimonic variables will be constructed in reference to these 4 pillars: *awareness*, *connection*, *insight*, and *purpose*. Below is a brief description of each.

AWARENESS

According to Dahl, Wilson-Mendenhall, and Davidson (2020):

Awareness refers to “a heightened and flexible attentiveness to perceptual impressions in one’s environment, as well as internal cues, such as bodily sensations, thoughts, and emotions. States of heightened awareness are thus typified by being fully aware of what one is doing, whom one is with, and of one’s own internal states, whereas diminished levels of awareness entail being distracted or absorbed in a given activity or situation.

Awareness and attention improve our daily activities and our happiness. A large-scale study by Killingsworth and Gilbert (2010) revealed that, on average, people spend an estimated 47% of their waking life in a state of distraction and, when distracted, reported lower levels of well-being:

Multilevel regression revealed that people were less happy when their minds were wandering than when they were not, and this was true during all activities, including the least enjoyable. Although people’s minds were more likely to wander to pleasant topics than to unpleasant topics or neutral topics, people were no happier when thinking about pleasant topics than about their current activity and were considerably unhappier when thinking about neutral topics or unpleasant topics than about their current activity. Although negative moods are known to cause mind wandering, time-lag analyses strongly suggested that mind wandering in our sample was generally the cause, and not merely the consequence, of unhappiness.

In my model, I account for *awareness*’ relevance on subjective well-being by the variable *awareness*. It is expected to have a positive association with *self-satisfaction*, but not necessarily with *life satisfaction*:

Variable	AWARENESS		
BIARE variable	sentir_4: Concentración en lo que hace	Range	{00,...,10}
Textual question	¿Estuvo concentrado o enfocado en lo que hacía?	Definition	The household member was aware and focused on what he was doing the day before the interview.

CONNECTION

Connection refers to qualities that support healthy social relationships, like appreciation, kindness, and compassion. It is described by Dahl, Wilson-Mendenhall, and Davidson (2020) as:

...a subjective sense of care and kinship toward other people that promotes supportive relationships and caring interactions. This may occur through positive social perceptions, such as gratitude and appreciation, as well as perspectives of shared humanity toward those outside of one's immediate social circles.

The capacity for caring relationships and positive social interactions figures prominently in scientific conceptions of well-being. For instance, Carol Ryff (2013) describes a high scorer in positive relations as a person who “has warm, satisfying, trusting relationships with others; is concerned about the welfare of others; capable of strong empathy, affection and intimacy; and understands give and take of human relationships.”

Having warm, caring, and healthy relationships is relevant to well-being as it is an important determinant of physical and mental health. Positive social relationships are a better predictor of health than some biological and economic factors, are vital for healthy psychological functioning and serve as a buffer against psychological disorders (Dahl, Wilson-Mendenhall, and Davidson 2020; Vaillant 2008). Prosocial motivations and compassionate goals make similar contributions to well-being by promoting caring feelings and behaviors (Crocker, Canevello, and Brown 2017), which “predict increased self-esteem, more constructive approaches to interpersonal problems, and more positive social emotions” (Dahl, Wilson-Mendenhall, and Davidson 2020).

In my model, I account for *connection*'s relevance on subjective well-being using two satisfaction variables, social life satisfaction and family life satisfaction. This way we can infer the quality of the social relationships of the respondent:

Variable	SOCIAL LIFE SATISFACTION		
BIARE variable	satis_1: Satisfacción vida social	Range	{00,...,10}
Textual question	¿Que tan satisfecho está con su vida social (amistades)?	Definition	How satisfied is the household member with their social life.

Variable	FAMILY LIFE SATISFACTION		
BIARE variable	satis_2: Satisfacción vida familiar	Range	{00,...,10}
Textual question	¿Qué tan satisfecho está con su vida familiar?	Definition	How satisfied is the household member with their family life.

Social life satisfaction and *family life satisfaction* are expected to have a positive association with both *life satisfaction* and *self-satisfaction*; however, higher incidence is anticipated with *self-satisfaction*.

INSIGHT

Insight refers to “self-knowledge concerning the manner in which emotions, thoughts, beliefs, and other factors are shaping one’s subjective experience, and especially one’s sense of self. States of insight thus reflect an experiential understanding of one’s own psychological processes and how the dynamic interplay of these processes influences experience” (Dahl, Wilson-Mendenhall, and Davidson 2020). The core of insight is this ability of self-inquiry, that is, the ability to reflect on one’s own beliefs, opinions, and perceptions, and especially the capacity to question them. Self-inquiry refers to the intentional, curiosity-driven investigation of self-related beliefs and psychological processes (Dahl, Lutz, and Davidson 2017). Research suggests that insight into one’s own mind and mental processes is an important predictor of overall psychological well-being and life satisfaction (Harrington and Loffredo 2011).

Insight can be related to Ryff’s psychological well-being dimensions of *autonomy* and *environmental mastery*. A high scorer in autonomy is “self-determining and independent; able to resist social pressures to think and act in certain ways; regulates behavior from within; and evaluates self by personal standards” (Ryff 2013). A high scorer in environmental mastery “has a sense of mastery and competence in managing the environment; controls complex array of external activities; makes effective use of surrounding opportunities; and is able to choose or create contexts suitable to personal needs and values” (Ryff 2013). I interpret the concepts of *autonomy* and *environmental mastery* as the external expressions of having undergone a process of internal insight, thereby they will be included within the model to discover its relevance to subjective well-being.

Resilience is another relevant concept related to insight, referring to the speed with which we recover from adversity. Resilience is theorized to be a key component of well-being (Davidson and Schuyler 2015). Highly resilient people can overcome setbacks and bounce back from challenges with relative ease. Conversely, people with poor resilience are slow to recover from adversity and often crippled by it (Kesebir et al. 2019). Resilience suggests an internal assessment process in which self-inquiry assumes a major role for the ability to recover from adversity:

...self-inquiry strategies enable one to examine the implicit beliefs that inform self-related narratives, expectations, and goals. For example, self-inquiry may be used to examine a line of anxious thoughts to gain insight into how these thoughts trigger emotional reactions and self-defeating behaviors. Self-inquiry strategies thus help to clarify and challenge maladaptive self-related beliefs” (Dahl, Wilson-Mendenhall, and Davidson 2020).

In this way, self-inquiry and insight are related to our degree of resilience. Thus, in my model, I add *resilience* as an independent variable to analyze its relevance and influence on subjective well-being. The following variables account for *insight* in the statistical model:

Variable	AUTONOMY		
BIARE variable	frases_3: Libertad de decidir en la vida	Range	{00,...,10}
Textual question	Soy libre para decidir mi propia vida.	Definition	The household member has autonomy and can decide in life.

Variable	ENVIRONMENTAL MASTERY		
BIARE variable	frases_7: Como me va depende de mi	Range	{00,...,10}
Textual question	El que me vaya bien o mal depende fundamentalmente de mí.	Definition	The household member is primarily responsible for how life goes.

Variable	RESILIENCE (Reversal from original variable)		
BIARE variable	frases_10: Dificultad para volver a la normalidad (Facilidad para volver a la normalidad)	Range	{00,...,10} (Totally disagree...totally agree) Same label value on recodification.
Textual question	Cuando las cosas no van bien me lleva largo tiempo volver a la normalidad. (Cuando las cosas no van bien me lleva poco tiempo volver a la normalidad.)	Definition	It is easy for the household member to come back to normal when things are not going well.

Both *autonomy* and *environmental mastery* are expected to show positive associations with both dependent variables, however, higher incidence is anticipated with *self-satisfaction*. On the other hand, *resilience* is expected to be equally relevant for both dependent variables.

PURPOSE

Purpose refers to “a sense of clarity concerning personally meaningful aims and values that one is able to apply in daily life. Heightened states of purpose thus foster the self-perception that one both has aims and values and is also able to embody them. This self-perception, in turn, leads one to perceive meaning and significance in one’s life and pursuits” (Dahl, Wilson-Mendenhall, and Davidson 2020). The importance of having a sense of purpose and leading a meaningful life has been widely studied and is commonly a central component of influential scientific models of well-being (e.g. Ryff, 2013; Seligman, 2011), as well as in perspectives of human flourishing of the world’s contemplative and humanistic traditions (Lobel 2017). According to Ryff’s model of Psychological Well-being (2013), a high scorer in purpose “has goals in life and a sense of directedness; feels there is meaning to present and past life; holds beliefs that give life purpose; and has aims and objectives for living”; contrary, “states of diminished purpose may involve a lack of clarity concerning one’s aims and values, or the perception that one has clear values and aims yet is unable to embody them” (Dahl, Wilson-Mendenhall, and Davidson 2020). Thus, *purpose* is about finding our true north, finding our sense of direction in life, and most importantly, aligning our daily behavior towards this purpose so that we can envision our lives in such a way that even mundane tasks can be seen as our overall sense of purpose.

Purpose has been suggested to have a strong association to general well-being, for instance, according to Dahl, Wilson-Mendenhall, and Davidson (2020):

A strong sense of purpose is associated with improved health outcomes and behaviors, including increased physical activity, decreased incidence of stroke, fewer cardiovascular events, reduced risk of death, lower health care utilization, and even better financial health. Purpose is also central to healthy psychological functioning, including memory, executive function, and overall cognitive ability.

However, our goal is to understand its relevance with respect to subjective well-being, and specifically to *self-satisfaction* and *life satisfaction*.

Although meaning and purpose cannot be measured objectively since there is no way to judge them impartially, it is best measured subjectively, in terms of how meaningful *we feel* our lives are. We perceive meaning and significance in our lives by the alignment of personally relevant aims with one's core values, and the embodiment of these aims and values in everyday life (McKnight and Kashdan 2009). This perception can be expressed as a feeling of accomplishment in daily life activities, or in the fact that *one feels* that what one does in life is worthwhile. Therefore, the best variables within the database to account for *purpose's* relevance on subjective well-being are the following:

Variable	MEANING AND PURPOSE		
BIARE variable	frases_5: Hacer algo en la vida que valga la pena	Range	{00,...,10}
Textual question	Por lo general siento que lo que hago en mi vida vale la pena.	Definition	The household member feels that what he does in life is worth doing.

Variable	FEELING OF ACCOMPLISHMENT		
BIARE variable	frases_9: Logros en la vida	Range	{00,...,10}
Textual question	La mayoría de los días siento que he logrado algo.	Definition	The household member feels accomplished most days.

Both variables are expected to have a positive association with self-satisfaction but not with life satisfaction. Although the results may show positive associations with both dependent variables, a higher incidence is anticipated with self-satisfaction.

CONTROL VARIABLES

A series of demographic variables are also included to control for other factors that may affect SWB according to existing literature (see annex C.1 for question wording). The demographic variables included are age, gender, having children, and being married. An additional control variable, state of residence, is added as fixed effects. This allows me to control for additional unobservable heterogeneity and variation, particularly when it is constant over time and is correlated with the independent variables. The assumption of the fixed effects model is that the individual specific effect is correlated with the independent variables, thus, including state-level fixed effects helps control for variation in contextual, structural, and cultural factors that may impact SWB. In this case, it is particularly important to control by fixed effects to rule out a pulling effect, since the database has a large number of observations ($n=39,274$) and state-level conditions may shape SWB. Therefore, we control by state, leaving Mexico City out of the model, as according to the data it is the happiest city within Mexico. Each state represents $\sim 3\%$ of the sample.

An OLS linear regression is conducted. The model uses the original raw data (see annex H.1 for descriptive statistics). In addition, I utilize the common, although not universal practice, of employing the mean values for all independent variables after the estimation. Continuous predictors are mean-centered and scaled by 2 s.d., in order to be able to compare binary variables with continuous variables (Gelman 2008). I analyze the standardized coefficients in order to be able to compare weights between variables.

HYPOTHESIS

Based on the existing evidence, I hypothesize there is an implicit hedonic bias when measuring subjective well-being as a global evaluation of life because I assume people generally associate *life satisfaction* with hedonic aspects. According to this line of thinking, questions like, “All things considered, how satisfied are you with your life as a whole these days?” or “Taken all together, would you say that you are very happy, pretty happy, or not too happy?” make the respondent think automatically about hedonic and material aspects.

These types of evaluative measures are adequate if the intention is to capture hedonic well-being. However, as stated above, the current understanding of well-being, and therefore our measurements, must be incomplete if despite multiple efforts to improve the material well-being, societies in general are not necessarily happier.

I demonstrate this by comparing *life satisfaction* with an alternative outcome variable – *self-satisfaction* – and comparing the different effects that hedonic and eudaimonic variables have on each. The goal is to test these two approaches to see which best explains SWB and propose *self-satisfaction* as a preliminary eudaimonic measurement of SWB. I hypothesize that, when measured as *self-satisfaction*, eudaimonic factors will be more strongly associated with subjective well-being than when measured as *life satisfaction*, and hedonic factors will have a smaller impact for *self-satisfaction* than for *life satisfaction*. However, both hedonic and eudaimonic factors must have a significant and positive effect on both definitions of subjective well-being.

Associations of each variable are expected to be of the same sign for both *life satisfaction* and *self-satisfaction*, however, hedonic factors are expected to have higher incidence on *life satisfaction*, and eudaimonic factors are expected to have higher incidence on *self-satisfaction*. I expect to uncover the strong associations of eudaimonic variables on subjective well-being, and to find important differences between *life satisfaction* and *self-satisfaction* with respect to hedonia.

CHAPTER IV: FINDINGS

RESULTS

As previously outlined, a linear regression was performed, correcting for heteroscedasticity and adding both hedonic and eudaimonic variables to analyze the effect that each has on subjective well-being. Regression n.1 analyzes *life satisfaction* as the dependent variable (see table 4.1), while regression n.2 analyzes *self-satisfaction* as the alternative dependent variable (see table 4.2). For visual purposes, the *state of residence* variable will be omitted from the results tables, however, the complete table can be seen in the Appendix (annexes D.1 and D.2).

REGRESSION N.1 RESULTS

With a sample size of 39,274 respondents, the regression summary shows a significant model and an R-squared of 0.42, meaning that 42% of the variance of the outcome variable can be attributed

or explained by the independent variables. With a confidence level of 95%, all model variables are significant, except for control variable *age* and eudaimonic variable *meaning and purpose*.

TABLE 4.1 LIFE SATISFACTION AS THE DEPENDENT VARIABLE:

MODEL INFO:				
Observations: 39274				
Dependent Variable: LIFE_SATISFACTION				
Type: OLS linear regression				
MODEL FIT:				
F(51,39222) = 550.21, p = 0.00				
R ² = 0.42				
Adj. R ² = 0.42				
Standard errors: Robust, type = HC3				
	Est.	S.E.	t val.	p
(Intercept)	7.87	0.04	209.56	0.00
STANDARD_OF_LIVING_SATISFACTION	1.04	0.03	38.13	0.00
DAY_TO_DAY_SATISFACTION	0.22	0.02	9.75	0.00
LIVING_CONDITIONS	0.40	0.02	18.63	0.00
HEALTH	0.15	0.02	7.64	0.00
SOCIOECONOMIC_STATUS	0.05	0.02	2.74	0.01
EDUCATION	0.14	0.02	7.24	0.00
JOB_LOSS	-0.19	0.02	-8.44	0.00
MATERIAL_LOSS	-0.25	0.04	-7.01	0.00
AWARENESS	0.15	0.02	7.15	0.00
SOCIAL_LIFE_SATISFACTION	0.57	0.02	24.98	0.00
FAMILY_LIFE_SATISFACTION	0.47	0.02	19.54	0.00
AUTONOMY	0.17	0.02	8.17	0.00
ENVIRONMENTAL_MASTERY	0.08	0.02	3.42	0.00
RESILIENCE	0.11	0.02	7.11	0.00
MEANING_AND_PURPOSE	0.05	0.03	1.89	0.06
FEELING_OF_ACCOMPLISHMENT	0.23	0.03	8.84	0.00
AGE	-0.03	0.02	-1.63	0.10
GENDER	0.06	0.02	3.18	0.00
CHILDREN	-0.07	0.02	-3.01	0.00
MARRIED	0.12	0.02	7.71	0.00
Continuous predictors are mean-centered and scaled by 2 s.d.				

All hedonic variables show significance with *life satisfaction*, of which *standard of living satisfaction* and *living conditions* display the largest standardized coefficients indicating a stronger association. *Standard of living satisfaction* exhibits an estimate of 1.04 while *living conditions* an estimate of 0.40. *Day-to-day satisfaction*, *health* and *education* are the second most relevant hedonic associations, with standardized coefficients of 0.22, 0.15 and 0.14 respectively. Naturally, *job loss* (-0.19) and *material loss* (-0.25) have significant and negative associations towards life satisfaction, however, it is surprising to find such a weak association with *socioeconomic status* (0.05), which supports the observations made by scientists and economists regarding GDP and social welfare.

Speaking of eudaimonic variables we find that *social life satisfaction* and *family life satisfaction* are strongly associated with life satisfaction, displaying standardized coefficients of 0.57 and 0.47 respectively. This suggests the idea that life satisfaction has more to do than just material outcomes, as the results show that the *connection well-being pillar* is highly relevant to a satisfied life. *Awareness* and *insight* pillars also have significant and positive associations towards life satisfaction. The *awareness* variable exhibits an estimate of 0.15, while *autonomy*, *resilience* and *environmental mastery*, display estimates of 0.17, 0.11, and 0.08 respectively. Finally, from the *purpose* pillar, the variable *feeling of accomplishment* shows a significant and positive association with a standardized coefficient of 0.23, indicating a stronger association with life satisfaction than most hedonic variables, however, the variable *meaning and purpose* exhibits non-significance.

Control variables *gender*, *children* and *married* show significance, while variable *age* displays non-significance within the model. The *children* variable shows a negative association with an estimate of -0.07, meaning that the increasing number of children results in lower levels of life satisfaction. Binomial variables *gender* and *married* display positive associations. The positive association of *gender* (0.06) means that men tend to greater life satisfaction than women, and the positive association of *married* (0.12) means that married people tend to greater life satisfaction than unmarried people. Since *age* is non-significant it does not influence the assessment of life satisfaction.

REGRESSION N.2 RESULTS

With a sample size of 39,274 respondents, the regression summary shows a significant model and an R-squared of 0.39, meaning that 39% of the variance of the outcome variable can be attributed or explained by the independent variables. With a confidence level of 95%, all eudaimonic variables are significant and almost all hedonic variables, with the exception of the *socioeconomic status* variable. The control variables are not significant.

Self-satisfaction shows stronger associations with eudaimonic variables than with hedonic variables. For instance, the highest coefficients are those of *autonomy* and *meaning and purpose*, with estimates of 0.53 and 0.48 respectively. *Feeling of accomplishment* (0.35), *family life satisfaction* (0.32), *social life satisfaction* (0.29), and *awareness* (0.28) also show strong positive associations with a feeling of satisfaction with one's self. And at last, *environmental mastery* and *resilience* exhibit a standardized coefficient of 0.16 and 0.08 respectively.

The hedonic variables *standard of living satisfaction* (0.32), *living conditions* (0.26), *day-to-day satisfaction* (0.24), and *health* (0.11) display significant and positive associations towards self-satisfaction, however, they have less weight than most of the eudaimonic variables and generally have less impact on an assessment of self-satisfaction than on an assessment of life satisfaction. Instinctively, *job loss* (-0.08) and *material loss* (-0.12) have significant and negative associations with self-satisfaction, as well as with life satisfaction. However, what is unusual is to find a negative association of *education* (-0.13) with self-satisfaction, and to find non-significance with *socioeconomic status*.

Unlike life satisfaction, demographic variables do not influence self-satisfaction. A feeling of satisfaction with one's self does not depend on *age*, *gender*, number of *children*, or being

married. This is great news because most of the time these circumstances cannot be changed in our lives, so it would be uninspiring if our level of self-satisfaction depended on something that we cannot control.

TABLE 4.2 SELF-SATISFACTION AS THE DEPENDENT VARIABLE:

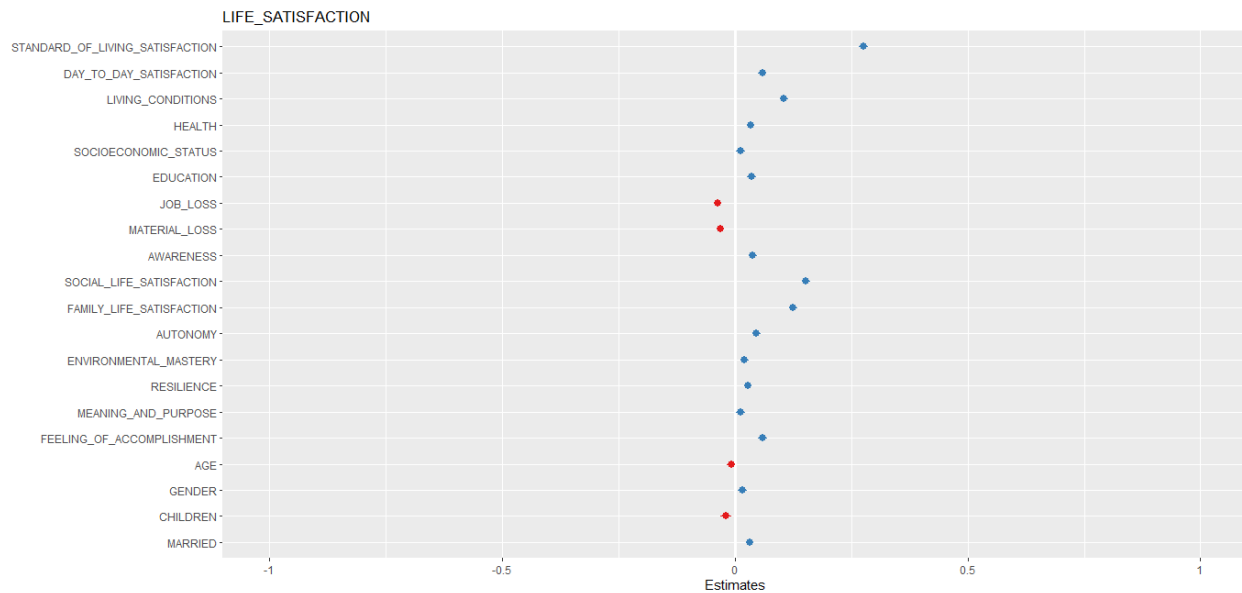
MODEL INFO:				
Observations: 39274				
Dependent Variable: SELF_SATISFACTION				
Type: OLS linear regression				
MODEL FIT:				
F(51,39222) = 485.34, p = 0.00				
R ² = 0.39				
Adj. R ² = 0.39				
Standard errors: Robust, type = HC3				
	Est.	S.E.	t val.	p
(Intercept)	8.73	0.03	263.85	0.00
STANDARD_OF_LIVING_SATISFACTION	0.32	0.02	13.40	0.00
DAY_TO_DAY_SATISFACTION	0.24	0.02	10.55	0.00
LIVING_CONDITIONS	0.26	0.02	13.35	0.00
HEALTH	0.11	0.02	5.81	0.00
SOCIOECONOMIC_STATUS	-0.02	0.02	-1.15	0.25
EDUCATION	-0.13	0.02	-7.96	0.00
JOB_LOSS	-0.08	0.02	-4.00	0.00
MATERIAL_LOSS	-0.12	0.03	-3.62	0.00
AWARENESS	0.28	0.02	13.17	0.00
SOCIAL_LIFE_SATISFACTION	0.29	0.02	13.16	0.00
FAMILY_LIFE_SATISFACTION	0.32	0.02	13.50	0.00
AUTONOMY	0.53	0.02	21.52	0.00
ENVIRONMENTAL_MASTERY	0.16	0.02	7.23	0.00
RESILIENCE	0.08	0.01	5.72	0.00
MEANING_AND_PURPOSE	0.48	0.03	17.16	0.00
FEELING_OF_ACCOMPLISHMENT	0.35	0.03	13.06	0.00
AGE	-0.01	0.02	-0.67	0.50
GENDER	0.03	0.02	1.85	0.06
CHILDREN	0.01	0.02	0.55	0.58
MARRIED	-0.02	0.01	-1.27	0.21
Continuous predictors are mean-centered and scaled by 2 s.d.				

ANALYSIS

While the above coefficients are helpful, it is difficult to explain the substantive meaning of such concepts because the scales merely serve to compare intangible concepts. However, it is important to put them in perspective and compare estimates and predicted values to better understand which attributes have greater influence on subjective well-being (see annexes E.1 and E.2 for a graphical representation of the predicted values).

REGRESSION N.1: SUBJECTIVE WELL-BEING AS LIFE SATISFACTION

The first regression analyzes *life satisfaction* as the dependent variable. The following graph is presented for visual purposes, where we find the regression estimates as a scatter plot. The points that touch the zero line are not significant. The blue color means a positive association while the red color means a negative association.



For *life satisfaction*, we expected a high positive impact from material factors such as *standard of living satisfaction*, *living conditions*, and *socioeconomic status*. The results show that, from the hedonic factors, the most influential variable is *standard of living satisfaction* followed by *living conditions*. These results are in accordance with our expected effects. However, I find that *socioeconomic status* has almost no influence on *life satisfaction*. This is interesting because it suggests that life assessment is highly dependent on how the person *feels* about their standard of living and material possessions, and not so much about the actual socioeconomic status of the individual. If a person perceives their standard of living as satisfactory, they are most likely to evaluate their life as satisfactory. Thus, these results suggest that subjective experience outweighs objective conditions with regards to *life satisfaction*.

All other hedonic variables show results in accordance with their corresponding expectations. *Day-to-day satisfaction*, *health* and *education*, have positive incidences on *life satisfaction*, just as *job loss* and *material loss* display a negative impact on life evaluation.

On the other hand, the results reveal an interest finding regarding eudaimonic factors, namely the key role eudaimonia plays in explaining *life satisfaction*. All eudaimonic variables display positive associations and significance with a 95% confidence, except *meaning and purpose* which only shows significance with 90% confidence. In fact, all eudaimonic variables have the same weight, or even more weight, than most hedonic variables. Notably, they outweigh the impact of objective

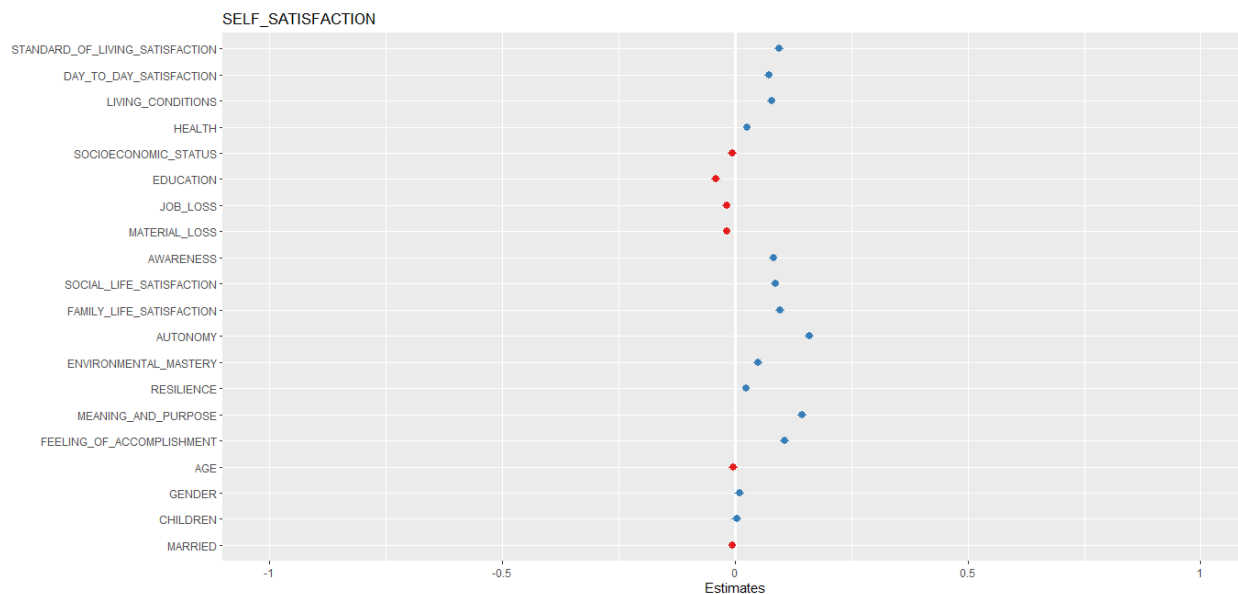
hedonic variables such as *health*, *education* and *socioeconomic status*. This suggests that, regardless of the SWB measurement, the definition of well-being is not complete without taking eudaimonia into account.

But what is most surprisingly, is finding a higher-than-expected association with *social life satisfaction* and *family life satisfaction*. This is a remarkable finding, as these variables are the second and third most influential factors on *life satisfaction*, suggesting that a great deal of the satisfaction with life comes from the family core and social fabric, all of which are social constructs that cannot be built merely on material and economic aspects.

REGRESSION N.2: SUBJECTIVE WELL-BEING AS SELF-SATISFACTION

The second model analyzes *self-satisfaction* as the dependent variable, in order to find out whether *life satisfaction* has a hedonic bias and to propose it as a preliminary measure for eudaimonic well-being. If we find that hedonic factors are not as important for *self-satisfaction* as in for *life satisfaction*, then we would verify the material-economic bias that life satisfaction has.

The following scatter plot summarizes the regression estimates:



At first glance, it is very interesting to note that when subjective well-being is defined as *self-satisfaction*, none of the demographic variables have an influence on a sense of satisfaction with oneself, and *socioeconomic status* is no longer significant. This result was not expected, as socioeconomic status was presumed to have a small yet significant impact on *self-satisfaction*. Control variables *gender*, *children* and *married* are also insignificant. *Education*, on the other hand, remains significant but the variable switches signs displaying a negative association with *self-satisfaction*. These results suggest something interesting, since none of the variables over

which we generally have no control do not influence our self-satisfaction. Therefore, *self-satisfaction* must be related to factors over which we hope to have at least some influence.

Another notable insight is that *standard of living satisfaction* is no longer as influential as it was for *life satisfaction*. Instead, the most influential variables for *self-satisfaction* are personal *autonomy*, having *meaning and purpose* in life, and a *feeling of accomplishment*. These results are in accordance with our expected effects. Likewise, the results of the rest of the hedonic variables are in accordance with the expected effects for *day-to-day satisfaction*, *living conditions*, and *health*, displaying positive associations, and *job loss* and *material loss* displaying negative associations.

For *self-satisfaction*, all eudaimonic variables have a significant and positive association with 95% confidence, and when compared with *life satisfaction*, the influence of these variables is much higher. This suggests *self-satisfaction* has a stronger eudaimonic weight than *life satisfaction*. Indeed, *self-satisfaction* exhibits an association only with the hedonic *standard of living satisfaction* and the association is weak. These results suggest that *life satisfaction* has a hedonic bias.

Eudaimonic variables such as *autonomy*, *meaning and purpose*, *feeling of accomplishment*, *family life satisfaction* and *social life satisfaction*, have the strongest incidence on a sense of satisfaction with oneself. *Awareness*, *environmental mastery* and *resilience* are associated with a smaller increase in self-satisfaction. These results suggest that when subjective well-being is defined as *self-satisfaction*, eudaimonia has a stronger influence than hedonia, therefore, *self-satisfaction* could be suggested as a preliminary way to measure eudaimonic well-being.

The analysis suggests that the factors influencing subjective well-being are dependent on the way it is measured, just as the way it is measured depends largely on how it is defined. Therefore, distinctions between hedonic well-being (life satisfaction) and eudaimonic well-being (self-satisfaction), are imperative in order to have a precise definition of subjective well-being, and to unify academic and policy efforts toward a better understanding of societal well-being.

As abstract concepts, *life satisfaction* and *self-satisfaction* could appear to be similar terms. However, these statistical results suggest they are not the same. This gives us theoretical reasons to distinguish that they do indeed capture different elements, otherwise the explanatory variables would have the same effects. In terms of validity theory, they are not the same concept, since both face validity and convergence validity tell us that they are not the same term and that they do not predict the same things. Therefore, each concept suggests a different explanation of subjective well-being and there are reasons to believe that they are different. This finding supports the proposition of self-satisfaction as a preliminary construct for measuring eudaimonic well-being. However, for future research, a confirmatory factor analysis is needed to analyze the specific effects on umbrella variables.

CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS

Everyone wants to be happy; it is natural to avoid adversity as it is natural to enjoy pleasure. The eternal longing of humanity has always been the desire to free oneself from suffering and seek happiness. However, up to now we have sought well-being in the outside world and it has never been enough to satisfy our thirst for happiness. As a modern society we haven't yet fully understood the causes of true happiness, since we commonly base our happiness on impermanent and transient hedonistic matters that cannot provide a sustainable and lasting sense of well-being. And although hedonia has long been known for influencing subjective well-being, this thesis proved the significant impact that eudaimonia also has on it. Eudaimonic variables had a positive impact on both definitions of SWB used in the analysis, *life satisfaction* and *self-satisfaction*. Therefore, hedonic variables are not the only ones that predict happiness.

This insight brings us back to our original quest: What do we strive for when we say we seek our happiness and the happiness of others? Do we wish for transient *feelings* of happiness, or do we wish for a *sustainable and lasting* sense of happiness and well-being? Surely it all begins at the individual level, and if we don't know exactly what we mean when we wish to be happy, then everything that follows will be misguided.

For a long time, popular conceptualizations of subjective well-being have so far been related only to hedonic factors (wealth, health, education, positive emotions vs. negative emotions), without noticing the missing element of eudaimonia. It was until the first SSF Commission's report (2009) that eudaimonia was once again noticed by the public eye, however, to this day, more than 10 years after the concept of *flourishing* came to light, still no official measure for eudaimonia has been recognized. "One reason is that in the absence of some crisis in existing ways of collecting and using information, people tend to simply and often unconsciously apply and use information and decision rules that have served them well in the past" (Helliwell, Layard, and Sachs 2012). Well, we are currently experiencing not one, but many crises, a humanitarian, climate, democratic, psychological and inequality crisis, which place the understanding and correct measurement of well-being as the top priority.

Different conceptualizations of SWB can lead to different aspects of what can impact and predict its increase; however, it has been demonstrated by this analysis that regardless of how it is defined, the understanding of subjective well-being is not complete if we don't take eudaimonia into account. We must fully integrate eudaimonia in how we measure and understand SWB.

Eudaimonia refers to inner values (love, kindness, tolerance, forgiveness, generosity, and affection) and to living a meaningful and ethical way of life (acting with compassion and whenever possible with benevolence). In other words, eudaimonia refers to a healthy and balanced mind, since by embracing inner values and being guided by ethics, we nurture and cultivate our minds. There is evidence that shows that a deeper and sustainable sense of well-being comes from cultivating the mind (Dahl, Wilson-Mendenhall, and Davidson 2020), which includes cultivating mindfulness, loving-kindness, empathy, and compassion. Thus, genuine well-being flows from the mind itself when cultivating inner values and living an ethical way of life. This kind of well-being is not a transient sensation or emotion, but an optimal way of functioning that does not depend on external circumstances.

CONCLUSIONS

The objective of the thesis was to test both hedonic and eudaimonic theoretical approaches to well-being to find out what attributes best explain subjective well-being. After conducting the analysis, I come to the following conclusions:

The traditional meaning of happiness is related to emotions; thus, *positive and negative affect* measurements are accurate to index *affective happiness*. *Life satisfaction* captures *evaluative happiness*. Both these types of happiness are related to hedonia. However, the all-time *search* for happiness, or we can say, *genuine happiness*, is related to eudaimonia. So, researchers must be specific when referring to each type of happiness, since the main problem regarding literature misunderstanding, is the lack of distinction between *hedonic well-being* and *eudaimonic well-being*, within the term *subjective well-being*.

Life satisfaction is the subjective aspect of material well-being since the elements that best explain it are material related. *Self-satisfaction* on the other hand, is best explained by eudaimonic related attributes, and therefore can be proposed as a preliminary subjective measurement for eudaimonic well-being. *Life satisfaction* and *self-satisfaction* are in fact different constructs, thus, if we continue to measure SWB only as *life satisfaction* and *positive affect*, hedonia will remain the most important approach to well-being.

Some factors of hedonia have a positive influence on both analyzed measures of SWB, however, according to the definition given, specific material and economic aspects will have relevant incidence or not. Yet, when subjective well-being is not defined in economic terms, the attributes that best explain SWB are those of eudaimonia, since all eudaimonic factors analyzed have a significant and positive impact regardless of how SWB is measured. Thus, the understanding of subjective well-being remains incomplete without considering eudaimonia.

Another notable finding is that despite the presence of hedonic and control variables, all eudaimonic variables have a positive impact on *life satisfaction*. Even in the presence of health, education, and socioeconomic status, it is still important to have autonomy, awareness, and a feeling of accomplishment, to name a few. This suggests that *life satisfaction* cannot be explained solely in hedonic terms, and that eudaimonic factors must also be considered. For future research, it would be necessary to build a hierarchical model that takes into account second-level contextual variables such as poverty, income and government support in order to have a complete analysis. However, I would expect to find that a person who lives in a humble home or has a low income can also have life satisfaction, or conversely, a person in the richest 1% can present low values of life satisfaction, suggesting that even in the presence of something as important as income, eudaimonic factors have an important effect on subjective well-being.

RECOMMENDATIONS AND FUTURE RESEARCH

In Mexico, as in many other parts of the world, the public policy priorities have been placed on measuring economic development while neglecting what really matters to citizens: their well-being.

Governments have failed to understand the aspects of life that can bring greater well-being to their citizens, or simply have not given this the importance it deserves and measurements regarding it have largely been omitted.

The first crucial aspect to highlight is the fact that there are not enough sources of information. Available data is not up-to-date and existing surveys are not comparable. This is proven by the simple fact that the BIARE *ampliado* module has not been administered again since 2014, and as of today, it is the only survey in Mexico to capture elements of eudaimonia in a broader context.

It has been recognized that “subjective well-being measures are critical to assess the nonmonetary costs and benefits of public programs and policies” (J. E. Stiglitz 2019), therefore, governments need to allocate more resources to conducting continuous well-being surveys. And particularly in Mexico, a practical and viable operational proposal is: to allocate funds to be able to continuously raise subjective well-being data by the BIARE *ampliado* module annexed to the ENIGH.

Additionally, in Mexico, no subnational government has the well-being debate on its public agenda, and it is difficult for them to make the issue their own if the federal government does not have the relevance of the SWB measurement on its agenda. Further integration with the OECD guidelines is needed, and a specific governmental department should be created to address and follow up on these issues. Currently the well-being agenda has been pushed aside, and these topics are handled by the federal general office.

The most appropriate measurement instruments are undoubtedly national surveys. Overall, BIARE is a good survey, however, an update of the latest eudaimonia models is needed, and perhaps more integration with household expenditure surveys would be beneficial in order to generate relevant data for sub-national governments.

Furthermore, measurements so far manage to capture hedonic well-being (*life satisfaction* captures the subjective side of material well-being, and *positive and negative affect* captures experiential well-being). However, there is no internationally recognized measurement for eudaimonia, and in this regard, this study helps to collect evidence in favor of proposing *self-satisfaction* as a preliminary measure of eudaimonic well-being.

Monitoring society’s well-being should be a crucial priority. As Helliwell, Layard, and Sachs stated (2012):

...most people probably believe that happiness is in the eye of the beholder, an individual’s choice, something to be pursued individually rather than as a matter of national policy. Happiness seems far too subjective, too vague, to serve as a touchstone for a nation’s goals, much less its policy content. That indeed has been the traditional view. Yet the evidence is changing this view rapidly... It makes sense to pursue policies to raise the public’s happiness as much as it does to raise the public’s national income... Four steps to improve policy-making are: the measurement of happiness, explanation of happiness, putting happiness at the center of analysis, and translation of well-being research into design and delivery of services.

As this was a first approach, all the variables were kept in their original scale and value. However, it is recognized that a unified recoding would be ideal for a better evaluation and analysis, and that it would be necessary to consider contextual variables to generalize the results at the society level.

A good way for controlling for second-level contextual factors would be to adopt a hierarchical model that controls for PIBE of each federative entity. Latent variables should be analyzed to see if they do not have a tapping effect, and perhaps umbrella concepts should be proposed through a confirmatory factor analysis, since perhaps there are conceptually broader variables than the elements analyzed.

DISCUSSION

In the modern world, it seems that our greatest motivation is oriented towards economic growth, material consumption, and hedonic pleasures, even at the expense of social justice and environmental sustainability. Public policy has been mainly focused on improving hedonic well-being, yet this approach has not been sufficient since humankind is not necessarily better off. I argue that what people really yearn for when pursuing happiness is actually eudaimonic well-being, but by not understanding what we are seeking, we commonly confuse it and instead end up pursuing hedonic pleasures in an attempt to achieve well-being. This inevitably and eventually results in disappointment because hedonia will never derive in genuine well-being. This statement can be proved by observing real-life situations, for example, recognizing that once we obtain something we were craving (such as money, fame, or power), the pleasure obtained from it will gradually fade away until we are back to our normal dissatisfaction. The exhausting pursuit of hedonia is never truly satisfying and we continuously search for fleeting pleasures our entire life. However, much can be done from a public policy standpoint by recognizing the importance of eudaimonia and thus promote subjective well-being by focusing on eudaimonic causes that can actually bring genuine, sustainable satisfaction. In other words, with simple yet profound shifts in our priorities as a society we can achieve significant improvements in SWB.

With that said, I want to restate that these points by no means negate the importance of economic stability and hedonic pleasures, but perhaps they are not as important as we think and in fact may be a cause of suffering. According to some world views, an illusion of knowledge is one of the main causes of suffering (Wallace and Shapiro 2006). Broadly speaking, this means that we lead ourselves to suffering when confusing that which is not a source of happiness for something that we think is a source of happiness (Nanamoli and Bodhi 1995; Ricard 2015). This craving and grasping to worldly things generate afflictions in the mind, such as greed, hostility, egotism, jealousy and so on. All of these are defilements of the mind, pollutions and toxins that prevent us from seeing things as they are and make us seek well-being where it isn't found. "The fundamental problem, I believe, is that at every level we are giving too much attention to the external, material aspects of life while neglecting moral ethics and inner values... our inner lives are something we ignore at our own peril, and many of the greatest problems we face in today's world are the result of such neglect" (Dalai Lama 2012).

The current pandemic has forced the world into social distancing and isolation, and although it has brought much suffering, sickness and economic crisis, one of the mayor concerns of health

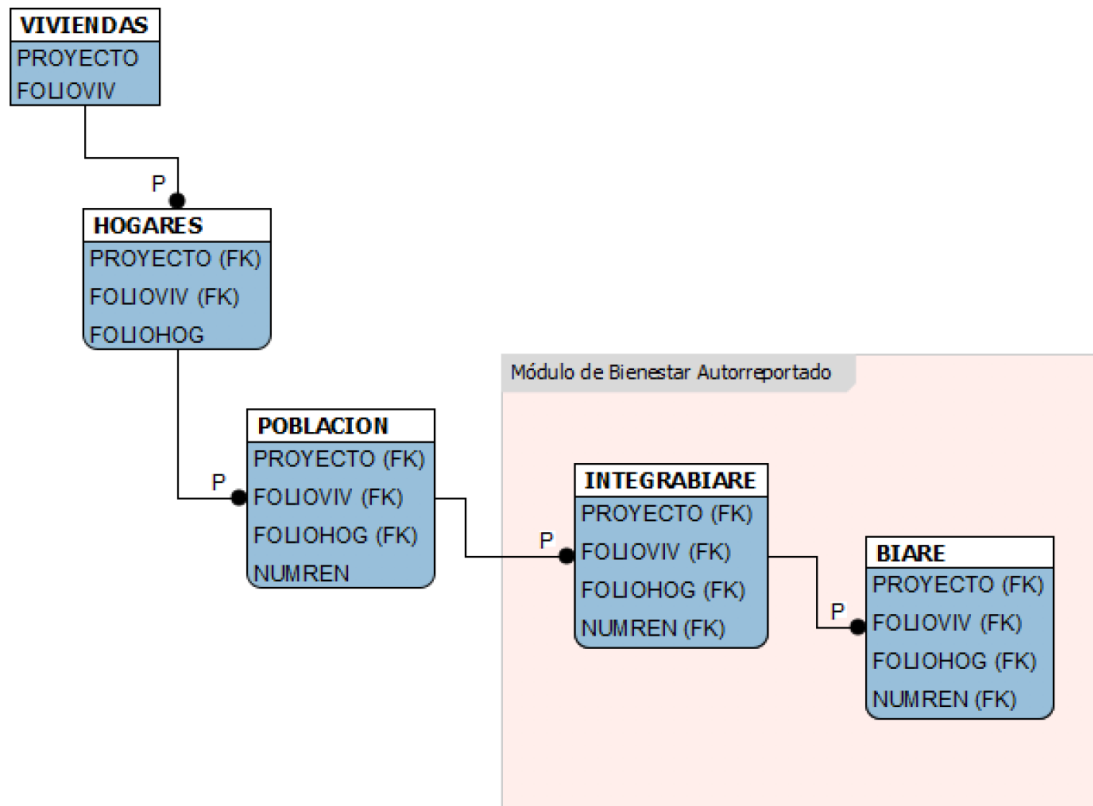
institutions is humanity's mental health. We might be sitting quietly in our room, but our mind can be elsewhere, wandering, feeling anxious or frustrated, experiencing a circus of thoughts, emotions, memories, fears and fantasies. A noisy ruminating mind can get caught up in mundane and daily concerns, and can lead us to unhappiness, anxiety, and even depression. Our mental state is of the utmost importance since it permeates all our experience. The primary ingredients of human experience, according to modern science, are the data of our senses. At another level of perception are our subjective experiences of these basic sensations, whether we experience them as being pleasant, unpleasant, neutral, or some combination of these. Even the ability to experience mundane pleasures comes from the mind and not from the intensity from of the experience. Aging, sickness and death will always be part of human existence; adversity will always arise but we can see it from a different perspective and choose how to experience it by prioritizing eudaimonic values and a healthy mental state.

Thus, is imperative to expand our current view and measurements of SWB and work towards further understanding of what can really bring well-being to society. Collecting fleeting moments of pleasure is not enough to build a deep and sustainable sense of well-being, which can only arise from a healthy and balanced mind (AtentaMente Consultores A.C. 2016). Evidence-based frameworks like the four-dimensions of well-being from The Center for Healthy Minds can help us move in this direction. Internal factors like having a sense of purpose, or understanding your values and motivations; feeling connection, or appreciation, kindness and compassion towards other people; having awareness, or attentiveness to one's environment and internal cues; and nourishing insight, or curiosity into the self and the narratives we carry of ourselves; are qualities that are proven to improve by training and that can help cultivate a virtuous mind which in turn will foster our sense of genuine well-being (Dahl, Wilson-Mendenhall, and Davidson 2020). Working toward these changes could bring about immense changes in society, perhaps even in a much more powerful way than many other public policy priorities. "While material wealth can be a source of so much stress and unhappiness, mental wealth, based on love and compassion, cannot. It is obvious, therefore, which kind of wealth we should really seek" (Dalai Lama 2012).

ANNEXES

A. Módulo de Bienestar Autorreportado Ampliado

A.1 Diagrama de relación



1: Relación 1 a 1
P: Relación 1 con varios
FK: Llave foránea

A.2 Lista de variables

Tabla INTEGRABIARE

#	Variable	Etiqueta	Tipo
1	proyecto	Proyecto origen	C (1)
2	folioviv	Identificador de la vivienda	C (10)
3	foliohog	Identificador del hogar	C (1)

(Continúa)

#	Variable	Etiqueta	Tipo
4	numren	Identificador de la persona	C (2)
5	fecha_nac	Fecha de nacimiento	C (8)
6	selecc	Persona seleccionada	C (1)

Tabla BIARE

#	Variable	Etiqueta	Tipo
1	proyecto	Proyecto origen	C (1)
2	folioviv	Identificador de la vivienda	C (10)
3	foliohog	Identificador del hogar	C (1)
4	numren	Identificador de la persona	C (2)
5	llena_dia	Día de la entrevista	C (2)
6	llena_mes	Mes de la entrevista	C (2)
7	llena_anio	Año de la entrevista	C (2)
8	encsat_1	Satisfacción de vida actual	C (2)
9	encsat_2	Satisfacción de vida hace 5 años	C (2)
10	satis_1	Satisfacción vida social	C (2)
11	satis_2	Satisfacción vida familiar	C (2)
12	satis_3	Satisfacción con su vida afectiva	C (2)
13	satis_4	Satisfacción nivel de vida	C (2)
14	satis_5	Satisfacción con su salud	C (2)
15	satis_6	Satisfacción de los logros en su vida	C (2)
16	satis_7	Satisfacción con perspectiva futuro	C (2)
17	satis_8	Satisfacción del tiempo dedicado a hacer lo que le gusta	C (2)
18	satis_9	Satisfacción con la seguridad ciudadana	C (2)
19	satis_10	Satisfacción de actividad realizada	C (2)
20	satis_11	Satisfacción de su vivienda	C (2)
21	satis_12	Satisfacción de su vecindario	C (2)
22	satis_13	Satisfacción de su ciudad	C (2)
23	satis_14	Satisfacción de su país	C (2)

(Continúa)

#	Variable	Etiqueta	Tipo
24	frases_1	Satisfacción por si mismo	C (2)
25	frases_2	Persona optimista respecto a su futuro	C (2)
26	frases_3	Libertad de decidir en la vida	C (2)
27	frases_4	Gusto por aprender cosas nuevas	C (2)
28	frases_5	Hacer algo en la vida que valga la pena	C (2)
29	frases_6	Persona afortunada	C (2)
30	frases_7	Como me va depende de mi	C (2)
31	frases_8	Tener un propósito en la vida	C (2)
32	frases_9	Logros en la vida	C (2)
33	frases_10	Dificultad para volver a la normalidad	C (2)
34	frases_11	Persona abrumada por problemas personales	C (2)
35	sentir_1	Con buen humor	C (2)
36	sentir_2	Experimentó tranquilidad	C (2)
37	sentir_3	Con energía o vitalidad	C (2)
38	sentir_4	Concentración en lo que hace	C (2)
39	sentir_5	Con alegría y satisfacción	C (2)
40	sentir_6	Con mal humor	C (2)
41	sentir_7	Con preocupación y ansiedad	C (2)
42	sentir_8	Cansancio	C (2)
43	sentir_9	Aburrido y sin interés	C (2)
44	sentir_10	Tristeza o abatimiento	C (2)
45	afirma_1	Persona feliz	C (1)
46	afirma_2	Necesidades materiales cubiertas	C (1)

(Continúa)

#	Variable	Etiqueta	Tipo
47	afirma_3	Condiciones de vida excelentes	C (1)
48	afirma_4	Cerca de su ideal en la vida	C (1)
49	afirma_5	Metas alcanzadas	C (1)
50	afirma_6	No cambios en su vida	C (1)
51	afirma_7	Satisfecho con su vida	C (1)
52	lengua	Otra lengua hablada	C (1)
53	lengua_1	Lengua originaria de México	C (1)
54	lengua_2	Inglés	C (1)
55	lengua_3	Lengua extranjera	C (1)
56	moverse	Aparato permanente que ayuda para moverse	C (1)
57	dif_fis	Dificultada física para escuchar	C (1)
58	presta_1	Préstamo para alimentación	C (1)
59	presta_2	Préstamo para renta	C (1)
60	presta_3	Préstamo para el agua	C (1)
61	presta_4	Préstamo para luz	C (1)
62	presta_5	Préstamo para colegiaturas	C (1)
63	presta_6	Préstamo para medicinas	C (1)
64	situa_1	Desempleo o cierre de negocio propio	C (1)
65	situa_2	Hospitalización	C (1)
66	situa_3	Divorcio o rompimiento con su pareja	C (1)
67	situa_4	Nacimiento de un hijo con complicaciones	C (1)
68	situa_5	Perdida de posesiones materiales importantes	C (1)
69	situa_6	Sufrió algún tipo de agresión física	C (1)
70	situa_7	Abandono de estudios	C (1)
71	situa_8	Rechazo para entrar a estudiar	C (1)
72	situa_9	Demanda judicial	C (1)
73	situa_10	Rechazo para entrar a trabajar	C (1)
74	situa_11	Otra situación que provoco frustración	C (1)
75	situa_12	Empleado o abrió un negocio	C (1)
76	situa_13	Buena salud	C (1)
77	situa_14	Casamiento	C (1)
78	situa_15	Nacimiento de un hijo	C (1)
79	situa_16	Adquisición de una propiedad	C (1)

(Continúa)

#	Variable	Etiqueta	Tipo
80	situa_17	Justicia a alguna demanda	C (1)
81	situa_18	Estudios finalizados	C (1)
82	situa_19	Ingreso a escuela de su elección	C (1)
83	situa_20	Situación legal o problema resuelto	C (1)
84	situa_21	Reconocimiento o ascenso en su trabajo	C (1)
85	situa_22	Acontecimiento satisfactorio para usted	C (1)
86	perimp_1	Fallecimiento de alguna persona cercana	C (1)
87	perimp_2	Persona extraviada cercana a usted	C (1)
88	perimp_3	Persona desempleada cercana a usted	C (1)
89	perimp_4	Accidente o enfermedad	C (1)
90	perimp_5	Victima de agresión	C (1)
91	perimp_6	Situación que afecto negativamente a alguien cercano	C (1)
92	perimp_7	Persona cercana empleada	C (1)
93	perimp_8	Recuperación de enfermedad	C (1)
94	perimp_9	Estudios finalizados de una persona cercana	C (1)
95	perimp_10	Ingreso una persona cercana a una escuela o institución	C (1)
96	perimp_11	Persona cercana con ascenso en su trabajo	C (1)
97	perimp_12	Situación positiva para persona cercana a usted	C (1)
98	maltra_1	Maltrato por la edad	C (1)
99	maltra_2	Maltrato por su sexo	C (1)
100	maltra_3	Maltrato por el color de su piel	C (1)
101	maltra_4	Maltrato por discapacidad	C (1)
102	maltra_5	Maltrato por enfermedad	C (1)
103	maltra_6	Maltrato por religión	C (1)
104	maltra_7	Maltrato por preferencias políticas	C (1)
105	maltra_8	Maltrato por el físico	C (1)
106	maltra_9	Maltrato por clase social	C (1)
107	maltra_10	Maltrato por ser extranjero	C (1)
108	maltra_11	Maltrato por preferencia sexual	C (1)
109	maltra_12	Otro motivo de maltrato	C (1)
110	maltra_d	Cual otro motivo de maltrato	C (50)
111	maltra_13	Maltrato 12 meses	C (1)
112	padece_1	Tabaquismo	C (1)

(Continúa)

#	Variable	Etiqueta	Tipo
113	padece_2	Alcoholismo	C (1)
114	padece_3	Drogadicción	C (1)
115	padece_4	Discapacidad mental	C (1)
116	padece_5	Otra condición con cuidados especiales	C (1)
117	religion	Religión	C (1)
118	iglesia	Iglesia	C (1)
119	lglesia_1	Grupo religioso	C (1)
120	perten_1	Organización política	C (1)
121	perten_2	Organización profesional	C (1)
122	perten_3	Asociación de estudiantes	C (1)
123	perten_4	Mesa directiva	C (1)
124	perten_5	Organización de vecinos	C (1)
125	perten_6	Organización no gubernamental	C (1)
126	perten_7	Asociación filantrópica	C (1)
127	perten_8	Grupo de autoayuda	C (1)
128	perten_9	Asociación deportiva	C (1)
129	perten_10	Asociación civil de afiliación voluntaria	C (1)
130	reu_ami	Reunión con amistades	C (1)
131	reu_fam	Reunión con familiares	C (1)
132	contac_1	Contacto telefónico con familiares	C (1)
133	contac_2	Contacto telefónico con amistades	C (1)
134	correo_1	Contacto por correo electrónico con familiares	C (1)
135	correo_2	Contacto por correo electrónico con amistades	C (1)
136	redsoc	Registro a red social	C (1)
137	redsoc_1	Facebook	C (1)
138	redsoc_2	Twitter	C (1)
139	redsoc_3	Otra red social	C (1)
140	urg_fam	Urgencia familiar	C (1)
141	nec_fam	Urgencia no familiar	C (1)
142	vecino	Vecino	C (1)
143	activ_1	Ayuda económica a familiares	C (1)
144	activ_2	Ayuda económica a conocidos	C (1)
145	activ_3	Donativos a organizaciones que ayudan a personas	C (1)

(Continúa)

#	Variable	Etiqueta	Tipo
146	activ_4	Donaciones a otro tipo de organizaciones	C (1)
147	activ_5	Trabajo voluntario	C (1)
148	activ_6	Abuso hacia los animales	C (1)
149	activ_7	Árbol	C (1)
150	activ_8	Cuidado de árboles	C (1)
151	mascota	Mascota	C (1)
152	mascota_1	Perro	C (1)
153	mascota_2	Gato	C (1)
154	mascota_3	Otra mascota	C (1)
155	actfis	Actividad física	C (1)
156	actfis_1	Días de actividad física	C (2)
157	deporte	Deporte	C (1)
158	vertv_1	Horas de televisión entre semana	C (1)
159	vertv_2	Horas de televisión los fines de semana	C (1)
160	sempas_1	Libro	C (1)
161	sempas_2	Revista	C (1)
162	sempas_3	Periódico	C (1)
163	sempas_4	Programa de debate	C (1)
164	sempas_5	Documental	C (1)
165	sempas_6	Meditación	C (1)
166	sempas_7	Charla o conversación	C (1)
167	hijos	Hijos	C (1)
168	hijos_1	Cantidad de hijos	C (2)
169	hijos_viv	Hijos viviendo en la vivienda	C (1)
170	tiehij_1	Tiempo dedicado a hijo de 0 a 5 años	C (1)
171	tiehij_2	Tiempo dedicado a hijo de 6 a 12 años	C (1)
172	tiehij_3	Tiempo dedicado a hijo de 13 a 17 años	C (1)
173	tiehij_4	Tiempo dedicado a hijo de 18 y más	C (1)
174	reves	Reveses en la vida	C (1)
175	advers_1	Adversidades de niño	C (1)
176	advers_2	Adversidades de adolescente	C (1)
177	advers_3	Adversidades después de los 17 años	C (1)
178	alegria_1	Alegría siendo niño	C (1)

(Continúa)

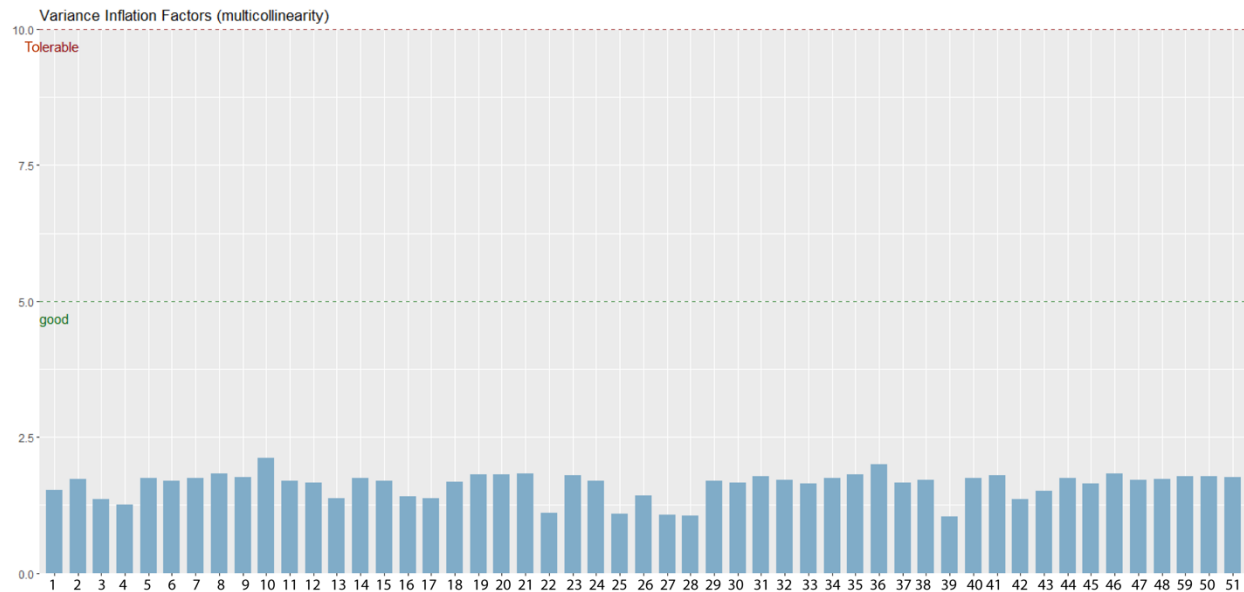
#	Variable	Etiqueta	Tipo
179	alegria_2	Alegría siendo adolescente	C (1)
180	alegria_3	Alegría después de los 17 años	C (1)
181	elogio	Elogio	C (1)
182	agrad	Agradecimiento	C (1)
183	neceseite_1	Necesidad de atención o cuidados	C (1)
184	neceseite_2	Necesidad de su afecto	C (1)

(Continúa)

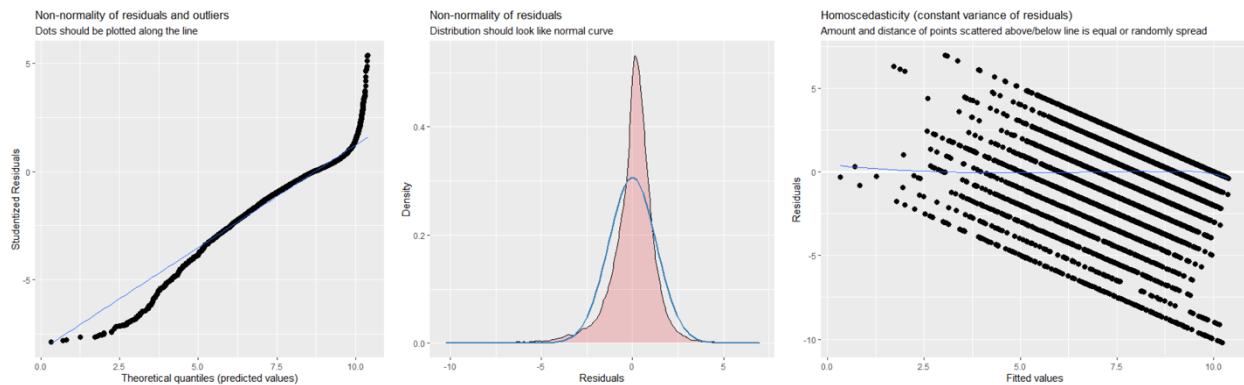
#	Variable	Etiqueta	Tipo
185	neceseite_3	Necesidad de su apoyo económico	C (1)
186	dec_imp	Decisiones importantes	C (1)
187	dec_lib	Decisiones libremente	C (1)
188	hog_act	Nivel de vida en hogar actual	C (1)
189	factor_per	Factor de expansión para personas	N(5)

B. Data tests

B.1 COLLINEARITY DIAGNOSIS GRAPHICS:



B.2 HETEROSCEDASTICITY DIAGNOSIS GRAPHICS:



C. Model variables question wording

C.1 CONTROL VARIABLES QUESTION WORDING:

Variable	AGE		
Tabla POBLACIÓN	edad: Edad	Range	{18,...,97}
Textual question	¿Cuántos años cumplidos tiene (NOMBRE)?	Note:	Para personas de 97 o más años, edad=97.

Variable	GENDER (recoded)		
Tabla POBLACIÓN	sexo: Sexo	Range	{1,2} recoded {1,0} (Men, Women)
Textual question	(NOMBRE) es ...	Definition	Household member's gender.

Variable	CHILDREN		
Tabla POBLACIÓN	hijos_sob: Hijos sobrevivientes	Range	{00,...,19}
Textual question	¿Cuántas de sus hijas o hijos viven actualmente, aunque no residan en esta vivienda?	Definition	Number of children the household member has regardless of where they reside.

Variable	MARRIED (recoded)		
Tabla POBLACIÓN	edo_conyug: Situación conyugal	Range	{1,...,6} recoded {1,0}
Textual question	¿Actualmente (NOMBRE)...	Definition	Marital status of the household member.
Label value	1 Vive con su pareja o en unión libre 2 Está casado(a) 3 Está separado(a) 4 Está divorciado(a) 5 Es viudo(a) 6 Está soltero(a)	Recoded	1 Está casado(a) 0 Todas las demás

Variable	STATE OF RESIDENCE		
Tabla POBLACIÓN	residencia: Residencia	Range	{01,...,32}
Textual question	¿Hace 5 años, en octubre de 2009, en qué estado de la República Mexicana o país vivía (NOMBRE)?	Definition	Entity or country of residence of the household member, 5 years before the time of the interview.
Label value	01 Aguascalientes	12 Guerrero	23 Quintana Roo
	02 Baja California	13 Hidalgo	24 San Luis Potosí
	03 Baja California Sur	14 Jalisco	25 Sinaloa
	04 Campeche	15 México	26 Sonora
	05 Coahuila de Zaragoza	16 Michoacán de Ocampo	27 Tabasco
	06 Colima	17 Morelos	28 Tamaulipas
	07 Chiapas	18 Nayarit	29 Tlaxcala
	08 Chihuahua	19 Nuevo León	30 Veracruz de Ignacio de la Llave
	09 Distrito Federal	20 Oaxaca	31 Yucatán
	10 Durango	21 Puebla	32 Zacatecas
	11 Guanajuato	22 Querétaro	

D. Complete regression outputs

D.1 REGRESSION N.1 LIFE SATISFACTION:

MODEL INFO:
 Observations: 39274
 Dependent Variable: LIFE_SATISFACTION
 Type: OLS linear regression

MODEL FIT:
 $F(51,39222) = 550.21$, $p = 0.00$
 $R^2 = 0.42$
 Adj. $R^2 = 0.42$

Standard errors: Robust, type = HC3

	Est.	S.E.	t val.	p
(Intercept)	7.87	0.04	209.56	0.00
STANDARD_OF_LIVING_SATISFACTION	1.04	0.03	38.13	0.00
DAY_TO_DAY_SATISFACTION	0.22	0.02	9.75	0.00
LIVING_CONDITIONS	0.40	0.02	18.63	0.00
HEALTH	0.15	0.02	7.64	0.00
SOCIOECONOMIC_STATUS	0.05	0.02	2.74	0.01
EDUCATION	0.14	0.02	7.24	0.00
JOB_LOSS	-0.19	0.02	-8.44	0.00
MATERIAL_LOSS	-0.25	0.04	-7.01	0.00
AWARENESS	0.15	0.02	7.15	0.00
SOCIAL_LIFE_SATISFACTION	0.57	0.02	24.98	0.00
FAMILY_LIFE_SATISFACTION	0.47	0.02	19.54	0.00
AUTONOMY	0.17	0.02	8.17	0.00
ENVIRONMENTAL_MASTERY	0.08	0.02	3.42	0.00
RESILIENCE	0.11	0.02	7.11	0.00
MEANING_AND_PURPOSE	0.05	0.03	1.89	0.06
FEELING_OF_ACCOMPLISHMENT	0.23	0.03	8.84	0.00
AGE	-0.03	0.02	-1.63	0.10
GENDER	0.06	0.02	3.18	0.00
CHILDREN	-0.07	0.02	-3.01	0.00
MARRIED	0.12	0.02	7.71	0.00
AGUASCALIENTES	-0.16	0.06	-2.92	0.00
BAJA_CALIFORNIA	0.10	0.05	2.25	0.02
BAJA_SUR	0.18	0.05	3.69	0.00
CAMPECHE	-0.20	0.06	-3.57	0.00
COAHUILA	-0.14	0.05	-2.60	0.01
COLIMA	-0.31	0.06	-5.59	0.00
CHIAPAS	-0.06	0.05	-1.04	0.30
CHIHUAHUA	0.02	0.05	0.46	0.65
DURANGO	-0.04	0.05	-0.74	0.46
GUANAJUATO	-0.07	0.05	-1.28	0.20
GUERRERO	-0.09	0.06	-1.55	0.12
HIDALGO	-0.01	0.05	-0.17	0.86
JALISCO	-0.15	0.05	-2.85	0.00
MEXICO	-0.11	0.05	-2.07	0.04
MICHOACAN	-0.06	0.05	-1.21	0.22
MORELOS	-0.19	0.06	-3.24	0.00
NAYARIT	-0.20	0.05	-3.71	0.00
NUEVO_LEON	-0.16	0.05	-2.98	0.00
OAXACA	-0.23	0.06	-3.91	0.00
PUEBLA	-0.13	0.05	-2.53	0.01
QUERETARO	-0.02	0.05	-0.44	0.66
QUINTANA_ROO	-0.09	0.05	-1.63	0.10
SAN_LUIS	-0.07	0.05	-1.20	0.23
SINALOA	-0.20	0.05	-3.78	0.00
SONORA	-0.14	0.05	-2.66	0.01
TABASCO	-0.01	0.05	-0.13	0.90
TAMAULIPAS	0.02	0.05	0.35	0.72
TLAXCALA	0.01	0.05	0.21	0.84
VERACRUZ	-0.07	0.05	-1.32	0.19
YUCATAN	-0.09	0.05	-1.68	0.09
ZACATECAS	-0.09	0.05	-1.79	0.07

Continuous predictors are mean-centered and scaled by 2 s.d.

D.2 REGRESSION N.2 SELF-SATISFACTION:

MODEL INFO:

Observations: 39274

Dependent Variable: SELF_SATISFACTION

Type: OLS linear regression

MODEL FIT:

$F(51,39222) = 485.34$, $p = 0.00$

$R^2 = 0.39$

Adj. $R^2 = 0.39$

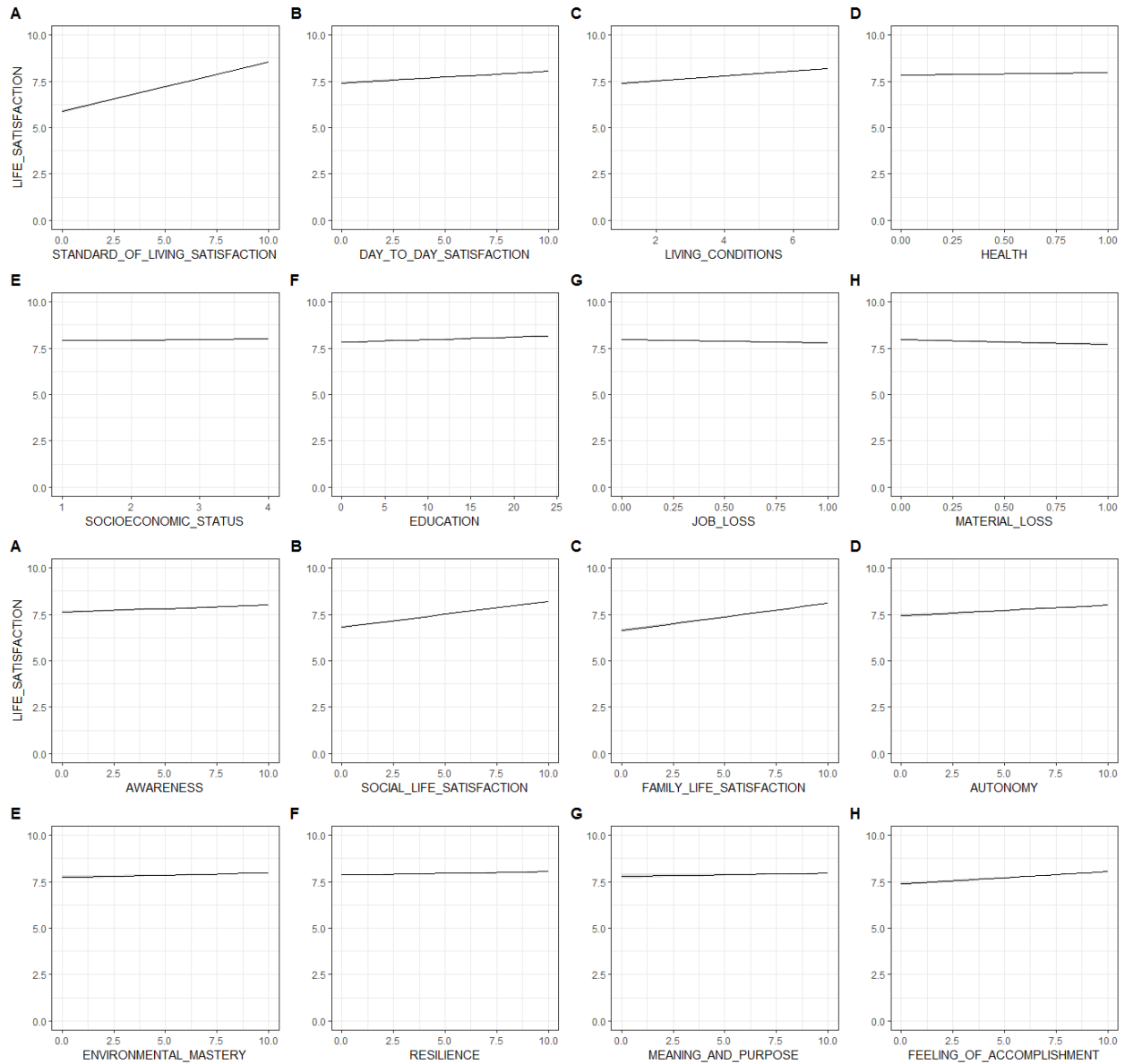
Standard errors: Robust, type = HC3

	Est.	S.E.	t val.	p
(Intercept)	8.73	0.03	263.85	0.00
STANDARD_OF_LIVING_SATISFACTION	0.32	0.02	13.40	0.00
DAY_TO_DAY_SATISFACTION	0.24	0.02	10.55	0.00
LIVING_CONDITIONS	0.26	0.02	13.35	0.00
HEALTH	0.11	0.02	5.81	0.00
SOCIOECONOMIC_STATUS	-0.02	0.02	-1.15	0.25
EDUCATION	-0.13	0.02	-7.96	0.00
JOB_LOSS	-0.08	0.02	-4.00	0.00
MATERIAL_LOSS	-0.12	0.03	-3.62	0.00
AWARENESS	0.28	0.02	13.17	0.00
SOCIAL_LIFE_SATISFACTION	0.29	0.02	13.16	0.00
FAMILY_LIFE_SATISFACTION	0.32	0.02	13.50	0.00
AUTONOMY	0.53	0.02	21.52	0.00
ENVIRONMENTAL_MASTERY	0.16	0.02	7.23	0.00
RESILIENCE	0.08	0.01	5.72	0.00
MEANING_AND_PURPOSE	0.48	0.03	17.16	0.00
FEELING_OF_ACCOMPLISHMENT	0.35	0.03	13.06	0.00
AGE	-0.01	0.02	-0.67	0.50
GENDER	0.03	0.02	1.85	0.06
CHILDREN	0.01	0.02	0.55	0.58
MARRIED	-0.02	0.01	-1.27	0.21
AGUASCALIENTES	-0.23	0.05	-4.45	0.00
BAJA_CALIFORNIA	-0.14	0.04	-3.23	0.00
BAJA_SUR	0.00	0.05	0.10	0.92
CAMPECHE	-0.18	0.05	-3.48	0.00
COAHUILA	-0.20	0.05	-4.11	0.00
COLIMA	-0.14	0.05	-2.83	0.00
CHIAPAS	-0.04	0.05	-0.95	0.34
CHIHUAHUA	-0.02	0.05	-0.49	0.62
DURANGO	-0.08	0.04	-1.90	0.06
GUANAJUATO	-0.09	0.04	-2.01	0.04
GUERRERO	0.03	0.05	0.54	0.59
HIDALGO	-0.06	0.04	-1.26	0.21
JALISCO	-0.12	0.05	-2.56	0.01
MEXICO	-0.08	0.05	-1.70	0.09
MICHOACAN	-0.11	0.05	-2.27	0.02
MORELOS	-0.15	0.05	-2.84	0.00
NAYARIT	-0.16	0.05	-3.22	0.00
NUEVO_LEON	-0.12	0.04	-2.78	0.01
OAXACA	-0.14	0.05	-2.67	0.01
PUEBLA	-0.07	0.04	-1.64	0.10
QUERETARO	-0.12	0.04	-2.72	0.01
QUINTANA_ROO	-0.10	0.05	-2.27	0.02
SAN_LUIS	-0.03	0.05	-0.52	0.60
SINALOA	-0.19	0.05	-3.95	0.00
SONORA	-0.09	0.05	-1.87	0.06
TABASCO	-0.08	0.05	-1.74	0.08
TAMAULIPAS	-0.01	0.04	-0.15	0.88
TLAXCALA	-0.11	0.05	-2.44	0.01
VERACRUZ	-0.12	0.05	-2.31	0.02
YUCATAN	0.05	0.04	1.19	0.23
ZACATECAS	-0.05	0.04	-1.22	0.22

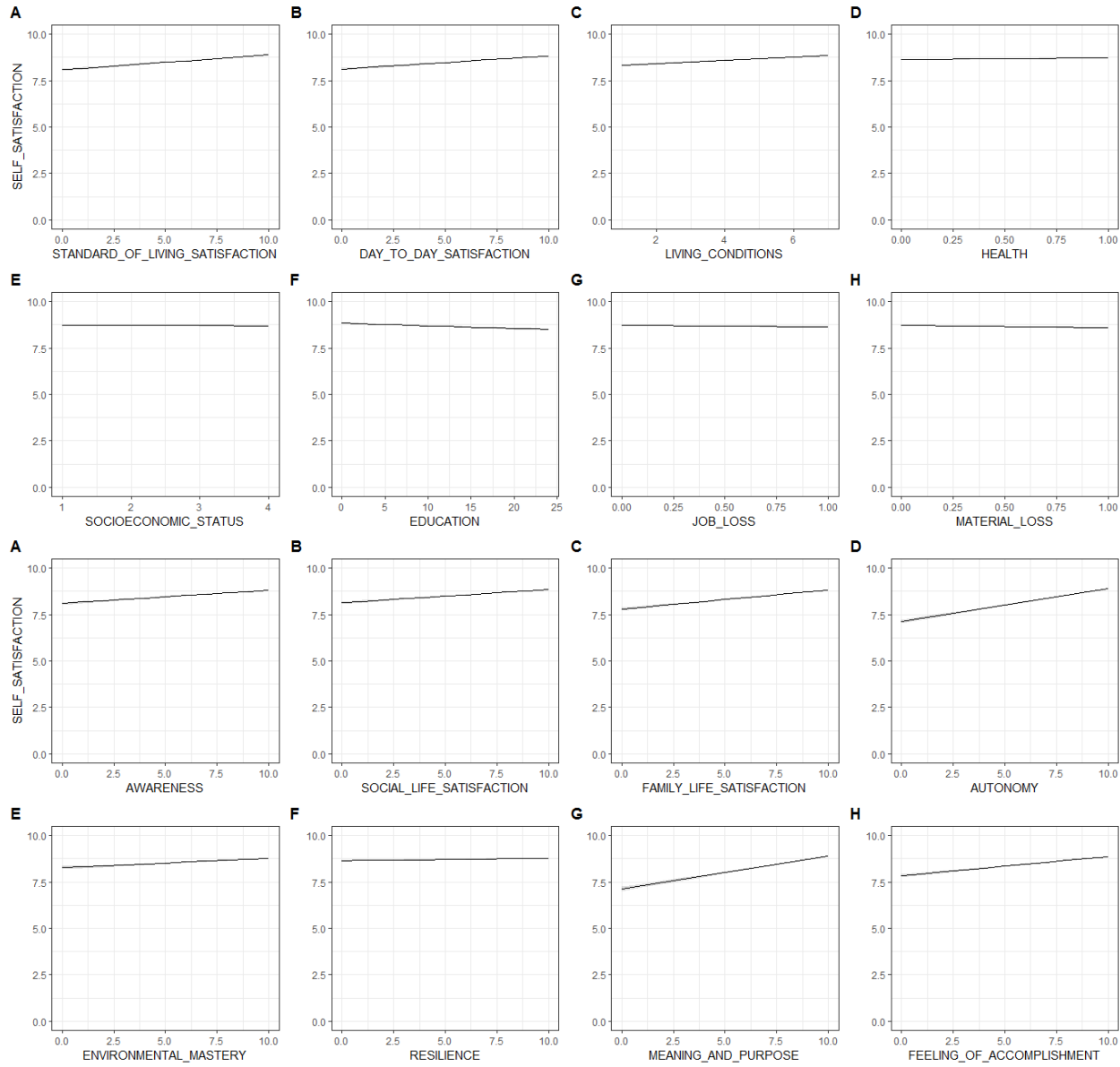
Continuous predictors are mean-centered and scaled by 2 s.d.

E. Graphic representation of predicted values

E.1 PREDICTED VALUES FOR LIFE SATISFACTION:



E.2 PREDICTED VALUES FOR SELF-SATISFACTION:



G. UN World Happiness Report analysis

Table 2.1 Inter-Country Shares of Total Variance

Data Source	Well-Being Measures	Inter-Country Share of Total Variance
GWP 05-11	Cantril Ladder (life evaluation)	0.222
GWP 07-10	Life Satisfaction (life evaluation)	0.327
GWP 05-11	Happiness (yesterday)	0.068
GWP 05-11	Positive Affect (yesterday)	0.072
GWP 05-11	Negative Affect (yesterday)	0.042
GWP 05-11	Net Affect (yesterday)	0.061
GWP 05-11	Log of Income	0.422
ESS round 4	Life Satisfaction (life evaluation)	0.172
ESS round 4	Happiness (life evaluation)	0.146
ESS round 4	Log of Income	0.384
WVS 3-5	Life Satisfaction (life evaluation)	0.143
WVS 3-5	Happiness (four point scale)	0.115

Notes: (1) To construct numerical income from the categorical income class in ESS round 4, we use midpoints for non-top income categories and 1.5*(bottom boundary) for the top income category. Household income in local currency units in ESS round 4 is converted to international dollars by multiplying by the PPP conversion factor from WDI (2011). Note that the PPP conversion ratio for Slovakia is for euro and international dollar, however, the household income is measured by Slovak crown in the survey. Household income for Slovak respondents is then divided by 30.126, the official exchange rate between Slovak crown and euro, before applying the PPP conversion factor. (2) WVS 3-5 refers to the WVS round 3-5 and EVS round 4-5.

H. Additional annexes

H.1 DESCRIPTIVE STATISTICS:

Variable	Mean	Std.Dev	Min	Max
LIFE_SATISFACTION	7.95	1.87	0.00	10.00
SELF_SATISFACTION	8.71	1.66	0.00	10.00
STANDARD_OF_LIVING_SATISFACTION	7.77	1.95	0.00	10.00
DAY_TO_DAY_SATISFACTION	8.37	1.72	0.00	10.00
LIVING_CONDITIONS	5.29	1.49	1.00	7.00
HEALTH	0.78	0.41	0.00	1.00
SOCIOECONOMIC_STATUS	2.19	0.83	1.00	4.00
EDUCATION	8.92	4.75	0.00	24.00
JOB_LOSS	0.15	0.36	0.00	1.00
MATERIAL_LOSS	0.06	0.24	0.00	1.00
ATTENTION	8.52	1.92	0.00	10.00
SOCIAL_LIFE_SATISFACTION	8.11	2.03	0.00	10.00
FAMILY_LIFE_SATISFACTION	8.92	1.58	0.00	10.00
AUTONOMY	9.02	1.52	0.00	10.00
ENVIRONMENTAL_MASTERY	8.80	1.63	0.00	10.00
RESILIENCE	4.79	3.07	0.00	10.00
MEANING_AND_PURPOSE	9.03	1.37	0.00	10.00
FEELING_OF_ACCOMPLISHMENT	8.52	1.74	0.00	10.00
AGE	42.54	16.51	18.00	97.00
GENDER	0.44	0.50	0.00	1.00
CHILDREN	1.47	2.11	0.00	19.00
MARRIED	0.45	0.50	0.00	1.00

BIBLIOGRAPHY

- Adler, Alejandro, and Martin E. P. Seligman. 2016. "Using Wellbeing for Public Policy: Theory, Measurement, and Recommendations." *International Journal of Wellbeing* 6(1): 1–35.
- Angel Gurria OECD Secretary-General. 2018. "Foreword" in *Beyond GDP: Measuring What Counts for Economic and Social Performance*. <https://doi.org/10.1787/9789264307292-en> (May 20, 2020).
- AtentaMente Consultores A.C. 2016. *Trabajar y Vivir En Equilibrio. Transformando El Ámbito Laboral Desde El Cambio Interior*.
- BCBS. 2018. "Major Depression: The Impact on Overall Health | Blue Cross Blue Shield." *Blue Cross Blue Shield Association*. <https://www.bcbs.com/the-health-of-america/reports/major-depression-the-impact-overall-health>.
- BCBS Health Index. 2018. "Impact of Major Depression." <https://www.bcbs.com/the-health-of-america/health-index> (January 29, 2021).
- Catalino, Lahnna I, Sara B Algae, and Barbara L Fredrickson. 2014. "Prioritizing Positivity: An Effective Approach to Pursuing Happiness?" *Emotion* 14(6): 1155.
- Crocker, Jennifer, Amy Canevello, and Ashley A. Brown. 2017. "Social Motivation: Costs and Benefits of Selfishness and Otherishness." *Annual Review of Psychology* 68: 299–325.
- Dahl, Cortland, Antoine Lutz, and Richard J Davidson. 2017. "Reconstructing and Deconstructing the Self: Cognitive Mechanisms in Meditation Practice To Cite This Version : HAL Id : Hal-01599345 HHS Public Access." 19(9): 1–9.
- Dahl, Cortland, Christine D. Wilson-Mendenhall, and Richard J. Davidson. 2020. "The Plasticity of Well-Being: A Training-Based Framework for the Cultivation of Human Flourishing." *Proceedings of the National Academy of Sciences* In press: 1–10.
- Dalai Lama. 2012. *Beyond Religion: Ethics for a Whole World*. Random House.
- Davidson, Richard J., and Brianna S. Schuyler. 2015. "Neuroscience of Happiness." *World happiness report*: 88–105.
- Davidson, Richard J, and Bruce S Mcewen. 2013. "Social Influences on Neuroplasticity." *Natural Neuroscience* 15(5): 689–95.
- Deci, Edward L., and Richard M. Ryan. 2008. "Hedonia, Eudaimonia, and Well-Being: An Introduction." *Journal of Happiness Studies* 9(1): 1–11.
- Deci, Edward L, and Richard M Ryan. 2004. *Handbook of Self-Determination Research*. University Rochester Press.
- Delle Fave, Antonella, Fausto Massimini, and Marta Bassi. 2011. "Hedonism and Eudaimonism in Positive Psychology." In *Psychological Selection and Optimal Experience across Cultures*, Springer, 3–18.
- Diamond, Jared. 2013. *Guns, Germs and Steel: A Short History of Everybody for the Last 13,000 Years*. Random House.
- Diener, Ed. 1984. "Subjective Well-Being." *Psychological Bulletin*.
- Diener, Ed, Robert A Emmons, Randy J Larsen, and Sharon Griffin. 1985. "The Satisfaction With Life Scale." *Journal of Personality Assessment* 49(1): 71–75. https://doi.org/10.1207/s15327752jpa4901_13.
- Diener, Ed, Richard E Lucas, and Richard E Lucas. 2006. "Beyond the Hedonic Treadmill : Revising the Adaptation Theory of Well-Being." 61: 305–14.
- Diener, Ed, Shigehiro Oishi, and Richard E Lucas. 2003. "Personality, Culture, and Subjective Well-Being: Emotional and Cognitive Evaluations of Life." *Annual review of psychology* 54(1): 403–25.
- Diener, Ed, J. J. Sapyta, and E. Suh. 1998. "Subjective Well-Being Is Essential to Well-Being." *Psychological Inquiry* 9(1): 33–37.
- Diener, Ed, Christie Napa Scollon, and Richard E Lucas. 2009. "The Evolving Concept of Subjective Well-Being: The Multifaceted Nature of Happiness."
- Diener, Ed, and Martin E.P. Seligman. 2004. "Beyond Money: Toward an Economy of Well-Being."

- Psychological Science in the Public Interest* 5(1): 1–31.
- Diener, Ed, Eunkook Suh, and Shigehiro Oishi. 1997. “Recent Findings on Subjective Well-Being.” *Indian journal of clinical psychology* 24: 25–41.
- Dolan, Paul, Tessa Peasgood, and Mathew White. 2008. “Do We Really Know What Makes Us Happy? A Review of the Economic Literature on the Factors Associated with Subjective Well-Being.” *Journal of Economic Psychology* 29(1): 94–122.
- Easterlin, Richard A. 1974. “Does Economic Growth Improve the Human Lot? Some Empirical Evidence.” In *Nations and Households in Economic Growth*, eds. PAUL A DAVID and MELVIN W B T - Nations and Households in Economic Growth REDER. Elsevier, 89–125.
<http://www.sciencedirect.com/science/article/pii/B9780122050503500087>.
- Easterlin, Richard A. et al. 2010. “The Happiness - Income Paradox Revisited.” *Proceedings of the National Academy of Sciences of the United States of America* 107(52): 22463–68.
- Gelman, Andrew. 2008. “Scaling Regression Inputs by Dividing by Two Standard Deviations.” *Statistics in medicine* 27(15): 2865–73.
- Harrington, Rick, and Donald A. Loffredo. 2011. “Insight, Rumination, and Self-Reflection as Predictors of Well-Being.” *Journal of Psychology: Interdisciplinary and Applied* 145(1): 39–57.
- Harter, James K, Frank L Schmidt, and Theodore L Hayes. 2002. “Business-Unit-Level Relationship between Employee Satisfaction, Employee Engagement, and Business Outcomes: A Meta-Analysis.” *Journal of applied psychology* 87(2): 268.
- Helliwell, John F, Richard Layard, and Jeffrey Sachs. 2012. “World Happiness Report [2012].”
- Huta, Veronika, and Richard M Ryan. 2010. “Pursuing Pleasure or Virtue: The Differential and Overlapping Well-Being Benefits of Hedonic and Eudaimonic Motives.” *Journal of happiness studies* 11(6): 735–62.
- Huta, Veronika, and Alan S. Waterman. 2014. “Eudaimonia and Its Distinction from Hedonia: Developing a Classification and Terminology for Understanding Conceptual and Operational Definitions.” *Journal of Happiness Studies* 15(6): 1425–56.
- James, Spencer L. et al. 2018. “Global, Regional, and National Incidence, Prevalence, and Years Lived with Disability for 354 Diseases and Injuries for 195 Countries and Territories, 1990-2017: A Systematic Analysis for the Global Burden of Disease Study 2017.” *The Lancet* 392(10159): 1789–1858.
- Jefferson, Thomas. 1809. “Thomas Jefferson to James Madison.” *Recuperado de* [https://www. loc. gov/exhibits/jefferson/149. html](https://www.loc.gov/exhibits/jefferson/149.html).
- Kahneman, Daniel. 1999. “Objective Happiness.” *Well-being: The foundations of hedonic psychology* 3(25): 1–23.
- Kahneman, Daniel et al. 2004. “A Survey Method for Characterizing Daily Life Experience: The Day Reconstruction Method.” *Science* 306(5702): 1776–80.
- Kahneman, Daniel et al. 2006. “Would You Be Happier If You Were Richer? A Focusing Illusion.” *Science* 312(5782): 1908–10.
- Kahneman, Daniel. 2011. *Thinking, Fast and Slow*. Macmillan.
- Kahneman, Daniel, and Angus Deaton. 2010. “High Income Improves Evaluation of Life but Not Emotional Well-Being.” *Proceedings of the National Academy of Sciences of the United States of America* 107(38): 16489–93.
- Kahneman, Daniel, Ed Diener, and N Schwarz. 1999. *Well-Being: The Foundations of Hedonic Psychology*. Citeseer.
- Kahneman, Daniel, D Kahneman, and A Tversky. 2003. “Experienced Utility and Objective Happiness: A Moment-Based Approach.” *The psychology of economic decisions* 1: 187–208.
- Kahneman, Daniel, and Alan B Krueger. 2006. “Developments in the Measurement of Subjective Well-Being.” 20(1): 3–24.
- Kashdan, Todd B, Paul Rose, and Frank D Fincham. 2004. “Curiosity and Exploration: Facilitating Positive Subjective Experiences and Personal Growth Opportunities.” *Journal of personality assessment* 82(3): 291–305.

- Kesebir, Pelin et al. 2019. "Emotional Style Questionnaire: A Multidimensional Measure of Healthy Emotionality." *Psychological assessment* 31(10): 1234.
- Killingsworth, Matthew A., and Daniel T. Gilbert. 2010. "A Wandering Mind Is an Unhappy Mind." *Science* 330(6006): 932.
- Kok, Bethany E. et al. 2013. "How Positive Emotions Build Physical Health: Perceived Positive Social Connections Account for the Upward Spiral Between Positive Emotions and Vagal Tone." *Psychological Science* 24(7): 1123–32.
- Lequiller, François, and Derek Blades. 2014. *Understanding National Accounts*. OECD. https://www.oecd-ilibrary.org/economics/understanding-national-accounts_9789264214637-en (September 11, 2020).
- Lobel, Diana. 2017. *Philosophies of Happiness: A Comparative Introduction to the Flourishing Life*. Columbia University Press.
- McKnight, Patrick E., and Todd B. Kashdan. 2009. "Purpose in Life as a System That Creates and Sustains Health and Well-Being: An Integrative, Testable Theory." *Review of General Psychology* 13(3): 242–51.
- Nanamoli, Bhikkhu, and Bhikkhu Bodhi. 1995. "The Middle Length Discourses of the Buddha." *Kandy: Buddhist Publication Society*: 499.
- National Institute of Mental Health. 2017. "Any Anxiety Disorder." <https://www.nimh.nih.gov/health/statistics/any-anxiety-disorder.shtml> (September 9, 2020).
- Nikolaev, Boris. 2018. "Does Higher Education Increase Hedonic and Eudaimonic Happiness?" *Journal of happiness Studies* 19(2): 483–504.
- Norton, David. 1976. *Personal Destinies: A Philosophy of Ethical Individualism*. Princeton, NJ: Princeton University Press.
- OECD. 2011. "Compendium of OECD Well-Being Indicators."
- OECD. 2013. *Guidelines on Measuring Subjective Well-Being*. OECD. https://www.oecd-ilibrary.org/economics/oecd-guidelines-on-measuring-subjective-well-being_9789264191655-en (September 14, 2020).
- OECD. 2020. *How's Life? 2020: Measuring Well-Being*. Paris. <https://doi.org/10.1787/9870c393-en>.
- Peterson, Christopher, and Martin E P Seligman. 2004. *1 Character Strengths and Virtues: A Handbook and Classification*. Oxford University Press.
- Pinker, Steven. 2011. *The Better Angels of Our Nature: The Decline of Violence in History and Its Causes*. Penguin uk.
- Ricard, Matthieu. 2015. *Happiness: A Guide to Developing Life's Most Important Skill*. Atlantic Books Ltd.
- Ritchie, H., and M. Roser. 2018. "Mental Health." *Our World in Data*. <https://ourworldindata.org/mental-health> (September 9, 2020).
- Ryan, Richard M., and Edward L. Deci. 2001. "On Happiness and Human Potentials: A Review of Research on Hedonic and Eudaimonic Well-Being." *Annual Review of Psychology* 52(1): 141–66.
- Ryan, Richard M., and Edward L. Deci. 2000. "Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being." *American psychologist* 55(1): 68.
- Ryff, Carol D. 2013. "Psychological Well-Being Revisited: Advances in the Science and Practice of Eudaimonia." *Psychotherapy and Psychosomatics* 83(1): 10–28.
- Ryff, Carol D., and Burton H. Singer. 2008. "Know Thyself and Become What You Are: A Eudaimonic Approach to Psychological Well-Being." *Journal of Happiness Studies* 9(1): 13–39.
- Ryff, Carol 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.
- Ryff, Carol D. 1995. "Psychological Well-Being in Adult Life." *Current directions in psychological science* 4(4): 99–104.
- Ryff, Carol D., and Corey Lee M Keyes. 1995. "The Structure of Psychological Well-Being Revisited." *Journal of personality and social psychology* 69(4): 719.
- Seligman, Martin E P. 2011. "Flourish: A New Understanding of Happiness and Well-Being--and How to

- Achieve Them.” *Boston: Nicholas Brealey.*
- Stiglitz, Joseph E., Jean-Paul Fitoussi, and Martine Durand. 2018. *For Good Measure: Advancing Research on Well-Being Metrics Beyond GDP.* OECD. https://www.oecd-ilibrary.org/economics/for-good-measure_9789264307278-en (May 20, 2020).
- Stiglitz, Joseph E. 2019. *Measuring What Counts: The Global Movement for Well-Being.* The New Press.
- Stiglitz, Joseph, Amartya Sen, and Jean-Paul Fitoussi. 2009. “The Measurement of Economic Performance and Social Progress Revisited.” *Reflections and overview. Commission on the measurement of economic performance and social progress, Paris.*
- Stone, Arthur A., and Alan B. Krueger. 2018. “Understanding Subjective Well-Being.” In *For Good Measure*, OECD, 163–201.
- Stone, Arthur A., and Christopher. Mackie. 2013. Subjective well-being: Measuring happiness, suffering, and other dimensions of experience. *Subjective Well-Being: Measuring Happiness, Suffering, and Other Dimensions of Experience.* eds. Arthur A Stone and Christopher Mackie. Washington, DC, US: National Academies Press.
- Vaillant, George E. 2008. *Aging Well: Surprising Guideposts to a Happier Life from the Landmark Study of Adult Development.* Hachette UK.
- Vázquez, C, L Hernangómez, and G Hervás. 2004. “Longevidad y Emociones Positivas [Longevity and Positive Emotions].” *Longevidad: Tratado integral sobre salud en la segunda mitad de la vida:* 752–61.
- Wallace, B. Alan, and Shauna L. Shapiro. 2006. “Mental Balance and Well-Being: Building Bridges between Buddhism and Western Psychology.” *American Psychologist* 61(7): 690–701.
- Watson, David, Lee Anna Clark, and Auke Tellegen. 1988. “Development and Validation of Brief Measures of Positive and Negative Affect: The PANAS Scales.” *Journal of personality and social psychology* 54(6): 1063.
- WHO. 2018. *Global Health Estimates 2016: Disease Burden by Cause, Age, Sex, by Country and by Region, 2000-2016.* Geneva. https://www.who.int/healthinfo/global_burden_disease/estimates/en/index1.html (September 9, 2020).