



universität
wien

MASTERARBEIT / MASTER'S THESIS

Titel der Masterarbeit / Title of the Master's Thesis

„Maximizing Subjective Well-Being:
Is human behaviour as simply explained as that? “

verfasst von / submitted by

Jean-Marc Schneider, B.Sc.

angestrebter akademischer Grad / in partial fulfilment of the requirements for the degree of
Master of Science (MSc)

Wien, 2022 / Vienna 2022

Studienkennzahl lt. Studienblatt /
degree programme code as it appears on
the student record sheet:

UA 066913

Studienrichtung lt. Studienblatt /
degree programme as it appears on
the student record sheet:

Masterstudium Volkswirtschaftslehre

Betreut von / Supervisor:

Univ.-Prof. Dr. Wieland Müller

Mitbetreut von / Co-Supervisor:

Dipl.-Math. oec. Dr. Christian Koch

Abstract

This Masters' Thesis presents a novel approach regarding a survey-based analysis upon the role of subjective well-being in our preferences. Indeed, I implement a binary framework which helps to monitor the evolution of preferences, especially the role of happiness in comparison to other relevant life aspects, in different time horizons. These scenarios are considering the next four years on the one side and the deathbed, i.e. the longest possible perspective on the other side. This aims to reveal the true ends that humans try to maximize and oppose them to their means. Considering the seven most prominent life facets, "Happiness", "Eudaimonia", "Health", "Freedom", "Goal attainment", "Finance", and "Family", I shed light upon the relative role of the most important life aspects in our daily life. In the end, this study with 35 students uncovers that people do in fact seek to maximize happiness in the long run more than in the short run. However, other life aspects such as the happiness of ones' family seem to be (nearly) equivalently important.

Diese Masterarbeit stellt einen neuen Ansatz bezüglich der auf Umfragen basierten Rolle des subjektiven Wohlbefindens dar. Dazu führe ich einen binären Rahmen ein, der es ermöglicht die Veränderung der Präferenzen, insbesondere die Gegenüberstellung von Zufriedenheit und der anderen Lebensaspekten, in verschiedenen Zeithorizonten zu beobachten. Diese Szenarien betrachten auf der einen Seite die nächsten vier Jahre und auf der anderen Seite das Sterbebett, was als längster bekannter Zeitrahmen des Menschen bekannt ist. Dies zielt darauf ab die wahren Ziele, die der Mensch versucht zu maximieren, und seine Mittel zum Zweck aufzudecken. In Anbetracht der sieben bedeutendsten Lebensaspekte, "Glück", "Eudaimonie", "Gesundheit", "Freiheit", "Zielerreichung", "Finanzen" und "Familie", beleuchte ich die relative Rolle der bestimmenden Lebensaspekte unseres Alltags. Zusammenfassend, zeigt diese Studie mit 35 Studierenden, dass Menschen versuchen, ihr Glück auf lange Sicht mehr zu maximieren als es auf kurze Sicht der Fall ist. Nichtsdestotrotz, erscheinen andere Aspekte wie z.B. das Glück der Familie (nahezu) gleich relevant.

Contents

List of Figures:	I
List of Tables:	III
1. Introduction	1
2. Literature review	4
3. Experiment	8
3.1. Description of the experiment	8
3.2. Life Aspects.....	9
3.2.1. Current status quo	9
3.2.2. Factors and vignettes	10
3.2.3. Deathbed vignettes	11
3.2.4. Next four years vignettes	12
3.3. Survey Design	14
3.3.1. Structure.....	14
3.3.2. OTree-Programming.....	17
3.4. Deathbed scenario	17
4. Conjectures	18
5. Results	20
5.2.1. Means (with statistics)	22
5.2.2. Binary choices (With statistics).....	24
5.3. Regressions.....	32
5.3.1. Next four years	33
5.3.2. Deathbed.....	34
5.4. Feedback and introspection from respondents	35
6. Outlook	38

References.....	39
Appendix.....	V
A1. Introduction	V
A2. Demographics.....	VI
A3. Explanations	VII
A4. Comprehension questions.....	VIII
A5. Life Aspects.....	IX
A6. Next four years questions	X
A7. Happiness contemplation	XIX
A8. Deathbed questions.....	XXI
A9. Understanding and Feedback	XXXI

List of Figures:

Figure 1: Life aspects of interest	2
Figure 2: Likert-scale with the six possible choices	2
Figure 3: Introduction to the choices that are requested	15
Figure 4: Likert-Scale about the contributors of happiness	16
Figure 5: Stata output Fisher`s exact test (Eudaimonia).....	23
Figure 6: Wilcoxon signed rank test stata output.	28
Figure 7: Share of respondents choosing happiness (deathbed framework asked first).....	29
Figure 8: Share of respondents choosing happiness (deathbed framework asked second)....	29
Figure 9: Stata output of the linear regression for the life aspects (next four years framework)	34
Figure 10: Stata output of the linear regression for the life aspects (Deathbed)	35

List of Tables:

Table 1: Demographics	21
Table 2: Results of each life aspect (means) in the different scenarios	23
Table 3: P-Values obtained by the Wilcoxon signed rank test	28

1. Introduction

We live in a highly dynamic era as we utilize technologies ruling our daily life that didn't even exist 20 years ago. Along with this extreme lively everyday life, our society is in steady movement. New policies arise and economists are no longer focusing exclusively on monetary outcomes. The last decades saw the rise of behavioural economics and more recently happiness as a possible new measure of development. Consequently, ten years ago, the first world happiness report was published pointing out great contradictions of our time. While we have reached unprecedented economical wealth, "new crises of obesity, smoking, diabetes, depression, and other ills of modern life" have upsurged (Sachs 2012, p. 3). In order to accentuate this critical evolution, former UK Prime Minister David Cameron claimed in 2010 that „it is time we admitted that there's more to life than money and it's time we focused not just on GDP but on GWB – general wellbeing" (Stratton 2010). This transformation led economists to show growing interest in studying happiness and subjective well-being (SWB). While making progress in studying the means and determinants of happiness, a lot of the literature on happiness (see Benjamin et al. 2012, p. 2107) implicitly assumes that "SWB data represents idealized-preference utility in the sense of what individuals would choose if the predictions of the SWB consequences of their choices were not biased." But is happiness the only end that people are trying to maximize? Are people only focusing on one aspect in life? Or are they willing to trade-off happiness in order to achieve other goals (as e.g. health, liberty, purpose)? If the latter is true, SWB data and preferences are distinct. So far, body of literature has already arisen pursuing these questions. In my thesis I want to shed further light upon the long run preferences, i.e. the determinants, of our species. By conducting a survey that compares stated preferences in different time horizons I am able to give initial insights about the general motivations of human beings. On one side, I implemented a short run time horizon, called "next four years". This framework is compared throughout my work with the long run time horizon, called "deathbed", on the other side. This approach enables me to monitor the evolution of preferences in the two time-horizons. Indeed, a variation in the long run compared to the short run can provide a hint regarding the means and ends of our life. While an end is expected to have a low variation over time, because it is important throughout a lifespan, a means may play a more important role in the short run than it will in the long run. In fact, the long run preferences are highlighting the true ends that human

1. INTRODUCTION

seek to maximize while the short run intends to give broader aspects that are likely to help achieving a higher level of an end, therefore called means.

In order to already give a first insight of the approach I further used, figures 1 and 2 are provided. Figure 1, taken directly from the self-programmed survey, shows the two choices that the respondents are facing in each step. Here, the survey takers must consider the two options, i.e. “healthy” and “happy”. Furthermore, the respondents are provided with the other eight relevant options, i.e. “purposeful”, “rich in traveling”, “full of options”, “rich in family happiness”, “exciting/eventful”, “financially secure”, “eco-friendly” and “professionally successful”. The crosses mention which two options are considered.

Figure 1: Life aspects of interest

In the <u>next four years</u> you will be/ your life will be ...										
	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/eventful	healthy	financially secure	eco-friendly	professionally successful
Option 1	--	--	--	--	--	--	X	--	--	--
Option 2	X	--	--	--	--	--	--	--	--	--

Figure 2 then displays a six-point Likert-scale where the respondents have to indicate the extent to which they prefer one of both stated options. This introductory example presents the framework “next four years”. The results of figure 2 are used for the analysis: in fact, people chasing “happiness” in their life will state “much prefer option 2” while people focusing on their “health” a little bit more than on their “happiness” are expected to choose “slightly prefer option 1”.

Figure 2: Likert-scale with the six possible choices

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1			Option 2		
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Whereas Benjamin et al. (2012) analyse one moment in time, like most of the fellow researchers in SWB, I implement two different time horizons in order to monitor the evolution of the respondents preferences. This procedure aims to reveal the truly final life aspect that people are trying to maximize, if there is indeed, solely one life goal, that is likely to be happiness. In fact, I suggest, that people may overestimate some life aspects such as financial freedom during their life only in order to reach a higher level of happiness in the long run, i.e. at the end of their life. For example, the financial life aspect is expected to play an important role in the short run preferences. This is believed to be opposed to a relatively low level in the long run. Therefore “Finance” would be a classical means to a long run happiness. The core work of my thesis is to implement this new dichotomous framework and to find data-based evidence to the distinction of means and ends in our preferences. The necessity for the longest possible time horizon motivated the implementation of the “deathbed scenario”, being the most distant point in life one may think of. By adding this two-dimensional framework, I want to push the research towards a deeper understanding upon the motivators of human behaviour and therefore contribute to the existing literature that aims to work on a universal development index using subjective well-being as an indicator among others.

2. Literature review

In this part, I will have a look at the main papers that already investigate similar questions than those raised in the introduction. The first paper is Benjamin et al. (2012). In their work “What do you think would make you happier? What do you think you would choose?” Benjamin et al. try to analyse whether people choose with the goal of maximizing their SWB or not. Based upon a survey, the participants are presented with numerous hypothetical scenarios involving binary choices such as earning a lot of money and having a little sleep versus having a decent amount of money and more sleep. This framework introduces the status quo of research on SWB done in economics. Indeed, most of the papers I studied during my master’s thesis are relying on binary choices between possible aspects of life. In this paper, respondents indicate which option they believe would maximize their happiness, and to what extent. Specifically, the extent is here measured by the possible following answers for each of the two options, i.e. “Definitely happier”, “Probably happier” and “Possibly happier”. This six point Likert-scale is primarily used by the majority of researchers in the SWB field, making this early published paper a main source of information. Secondly, the respondents were asked which option they would probably choose in real life. Thereby, I am able to compare the outcome of choice questions and SWB questions. The study’s main finding is that in many cases the answers match, implying that subjective well-being/happiness appears to be a good proxy for utility. However, the authors also find reversals: some people at some time appear not to want to maximize their happiness. Following up on this, the authors establish a sub-sample that (hypothetical) choices are sometimes driven by other factors (e.g. social status, purpose or family happiness) but that SWB remains “uniquely important” (p. 2107).¹

Partly, based on the results of the previous paper, Benjamin et al. (2014a) present a novel methodology for tracking well-being and its determinants with a survey. Based on the interdisciplinary work with psychologist, philosophers and economists, the authors create a comprehensive list of more than 100 well-being determinants. Those life aspects, and especially their ranking played a fundamental role for my work. This comprehensive list aggregates prominent life aspects such as health, happiness, and financial security with more specific aspects such as “how often you smile” or “how often you become deeply engaged in your daily activities”. Using this list, they estimate marginal utilities of these different aspects of well-being. To achieve this, the

¹ Szabo and Ujhlyi (2017) provide a replication study with a South African sample finding substantial fewer reversals.

authors present their participants with (hypothetical) choices between these life situations. These choices are again differentiated using a six-point Likert-scale. The options here are labelled as follows, “Much prefer Option 1”, “Somewhat prefer Option 1” and “Slightly prefer Option 1”. The same possibilities for option 2 can be chosen. Benjamin et al. (2014a) deliver a significant contribution to the research by ranking these aspects using marginal utility estimates. These estimates are achieved with a probit regression. The study’s main finding is that people put a lot of weight not only on happiness but also on a range of other factors such as family, health, security, values, and freedom. This cast doubt on the assumption that happiness is a good proxy for utility. The work of Benjamin et al. (2014a) played a central role in my master’s thesis, as the intention was to modify it in order to get a deeper understanding about the evolution of the preferences regarding the different time horizons, i.e. a long run with a deathbed scenario and a short run with a next four years horizon.

In another attempt, Benjamin et al. (2014b) revive the question of happiness and utility. This time, unlike in the two previous studies, the authors examine actual choices of 561 US medical school students, i.e., they look at choice rankings over residencies to the National Resident Matching Program. They compare these choices with estimates of these students about the SWB implications of different choices: in particular, they elicit the expected features of the residencies (e.g. prestige). Again, happiness proves to be an important driver of decisions but other factors matter as well. There are in fact substantial differences between choice and anticipated SWB rankings: “relative to the choice-based estimates, all anticipated-SWB estimates underweight residency prestige-and-status and residency desirability while overweighting social life and life seeming worthwhile during the residency” (p. 3500). These, for my work, short run preferences, show that people do in fact trade off happiness and other life aspects, here prestige. The respondent group is homogenous with only students. Therefore, the preferences could evolve during their lifespan. This possible evolution of choices and preferences is the cornerstone of my master’s thesis. My work focuses on the long run, i.e. final objectives of human beings. Indeed, it could be the case that in Benjamins’ et al. (2014b) work the respondents are selecting a choice that goes against their expected SWB in the short run as they expect that this behaviour would increase their SWB in the long run while lowering it at first sight. In fact, this tradeoff could be seen more as an investment. In order to exclude this, my work implements the two frameworks with different time horizons and tries to elicit the true motivation of the respondents.

2. LITERATURE REVIEW

The fourth paper I would like to discuss is Fleurbaey and Schwandt (2015). This study stresses the fact that the current literature is not yet sure whether SWB is just an argument of or the utility itself that people are trying to maximize. To establish whether happiness is the final goal, the authors ask their respondents if they can think about changes in their current life that would improve their SWB score. The idea behind this is that if people can easily think of some aspects that would improve their score, then the SWB would only be an argument. Supposing people already maximize their SWB, they will not know how to improve it further. While quite a number of people state ways to improve their happiness, only 10% refrain from implementing these changes because they want to reach other goals. This leads to the authors' main conclusion that around 90 % of the people are in fact seeking to maximize their SWB. This contribution to the literature increases the role of the idea that people trade off happiness only in the short run with the aim of improving their final goal, i.e. SWB.

The last paper is from Adler, Dolan and Kavetsos (2017). The authors modify the approach of Benjamin et al. (2012) and Benjamin et al. (2014a). Indeed, they rise existential questions upon the different forms happiness can take in ones' life. This explicit differentiation introduces the complexity that happiness research has already reached. In fact, the first step of new research works needs to define exactly what definition lies under the term happiness. In fact, according to Adler, Dolan and Kavetsos (2017), happiness can be experienced as (1) affective happiness, i.e. the occurrence of positive feelings, (2) evaluative happiness, i.e. the overall satisfaction with life or (3) eudaimonic happiness, i.e. the thought that ones' life is worthwhile. This required scrupulosity motivated the implementation of definitions introduced as vignettes in my survey. The idea is based upon the vignettes used by Adler et al (2017) with the difference that my vignettes don't describe the life of a third person but want to reach the respondents directly. (For further details see chapter 3). Once the authors made this crucial clarification their emphasis is on the relative importance of happiness/SWB with respect to other factors such as health, income, family, success, education etc. in life decisions. They propose some smaller modifications with respect to previous authors, e.g the use of vignettes and find that people do trade off happiness with other factors. That being said, all happiness variables, however, feature more importantly in decisions than other factors with the exception of health. This last paper accentuates the relevance of happiness in human decision-making process and underlines its' value in economic research.

Overall, the literature seems to agree that there is evidence that happiness/SWB data cannot always be treated as (a good proxy for) utility and that at least some people trade it off against other factors. At the same time, there are still major discrepancies. While e.g. Fleurbaey and

Schwandt (2015) actually conclude that equating happiness with utility seems to be fine for 90% of their subjects (a finding somewhat in line with the conclusion of Benjamin 2012), the results of Benjamin et al. (2014) and Adler, Dolan and Kavetsos (2017) seem to hint to a much more frequent trade-off between happiness and other factors. Notably, there are additional inconsistencies. Most prominently, Benjamin et al. (2014) and Adler, Dolan and Kavetsos (2017) conclude that health is a central factor which people trade off against happiness. Interestingly, in Benjamin et al. (2012) health plays no significant role in their participants' decision making.

3. Experiment

3.1. Description of the experiment

The initial idea of the master thesis project was to use a simplified methodology of Benjamin et al. (2014a) and contrast it with modifications as explained below. The underlying idea was that I hypothesize that different methodologies may have different abilities to distinguish between means and ends. As an example, there seems to be no doubt in the literature that health is an important determinant for happiness (Steptoe 2019). Nonetheless, people may still see it as a means to achieve happiness and not an end in itself. Thus, previous studies may have underestimated the extent happiness is perceived as an end in itself. The core idea of my experimental design is to give happiness a more central role in order to be perceived as the final goal by explicitly dealing with the issue of means and ends. This is done in two ways.

Firstly, I implement two scenarios with the aim of analysing the evolution of the role of happiness. Whereas I rely on the next four years framework as a baseline for the short run, the main value I am adding to the existing literature is the implementation of the deathbed scenario. Indeed, I expect happiness to play a more fundamental role in the long run than is intended by the short run aspirations of human behaviour.

Secondly, while Benjamin et al. (2014a) leave the definition of each life aspect to the respondents, I provide participants with explicit definitions of the facets. This aims to give a more detailed approach of what the life aspects mean so that it contributes to the understanding of the life aspects. Therefore, I implement a simple way that makes it easier for subjects to perceive some aspects as means and others as ends. This fact adds an additional value to the current status quo of subjective well-being research by increasing the common understanding of happiness and each of the other relevant life aspect that all of us face in their daily decision making. Bearing these factors in mind, I sketched the idea of a simple survey study based on Benjamin et al. (2014a). The survey has three components: In a first step, I wanted to replicate Benjamin et al. (2014a), albeit in much simplified way. Where Benjamin et al. (2014a) include more than 100 factors, I wanted to focus on those elements they identified as very important. This included 2 happiness/SWB measures and 6 other factors such as health, family, purpose etc. Part of the project was to select the right variables. After finding the right variables, the implementation of the first survey part was conceptually simple as it basically followed Benjamin et al. (2014a). The second part of the survey reformulated the way variables are presented to participants. While Benjamin et al. (2014a) present situations involving e.g. either more happiness or health

alluding to the next four years, I tried to put participants in a different frame of mind that might make it easier for subjects to distinguish between means and ends. More precisely, subjects were told to choose between two life aspects (ones rich e.g. in happiness, other rich in health) by considering them as if they lie on their deathbeds, giving priority to a “distant perspective reflecting on one’s life ex post facto” (Frey and Stutzer 2012, p. 667). Therefore, I implemented two framings in my survey. The first one simply used the next four years as a proxy for short run intentions of the respondents and the second one was the one with the deathbed scenario that aimed to elicit the long run desires. Each respondent had to answer both framings.

In the third part of the survey, I followed Benjamin et al. (2021). They proposed a new methodology: Ask subjects a happiness question and afterwards elicit the subject’s introspection about how they came up with their happiness evaluation. While the authors focused on time horizons and other-regarding preferences and their relation to happiness questions, I intended to use their method to establish what factors subjects consider as mere determinants or means of happiness and what other factors they consider as ends. The idea was to directly ask subjects for their introspection.

3.2. Life Aspects

3.2.1. Current status quo

As described in the first part of this chapter, the first step of the work was to define which life aspects could be the most prominent in our daily life. Benjamin et al. (2014a) ranked the aspects as follows. With respective marginal utilities 0.46, 0.43, 0.42, the top three personal aspects were “the overall well-being of you and your family”, “the happiness of your family” and “your health”. As these marginal utility estimates (MUE) are clearly close one to another, it seems obvious that humans are aiming to reach goals that are multidimensional and not focusing on maximizing (solely) their own happiness or another life aspect. In the top ten aspects out of these 136, the succeeding variables with MUEs over 0.3 can be found: “Your financial security”, “Your sense of security about life and the future in general” and “You having many options and possibilities in your life and the freedom to choose among them”. These aspects are introducing some important facets that are at the cornerstone of my master’s thesis, i.e. the financial, the general security and the opportunity components. Finally, it is crucial to mention that “How satisfied you are with your life” only comes 11th with a MUE of 0.31. This ranking

3.2. LIFE ASPECTS

underlines the fact that there seems to be plenty of components to the subjective well-being utility function.

The intention for my work was to implement a survey design that helps to shed light upon whether those aspects are means or real ends in themselves. Before I'm turning to a detailed explanation of the structure of my survey it is imperative to promulgate the aspects and introduce the precise descriptions, I used for picking up every respondent from the same starting point. This aspires to make the results more reliable and tries to remove interpretation bias regarding the wording or the definition of some aspects, especially happiness (Adler 2017).

3.2.2. Factors and vignettes

Based on the results of Benjamin (2014a) and an extensive documentation work of the current status quo, Adler et. al (2017) focused on analysing eight variables with three Subjective Well-Being (SWB) aspects and five non SWB aspects. The SWB dimensions were life satisfaction, happiness and sense of purpose. Opposing those, the five non SWB dimensions chosen by Adler were income, family, career success, education and knowledge. Built on these restrictive, but most decisive aspects I started my research for my own factors. In order to analyse whether human behaviour can be as simply explained as maximizing Well Being, inducing a single variable, I decided to pick only one SWB aspect which I called Happiness. Competing with it, I implemented "Eudaimonia", "Family", "Finance", "Freedom", "Health" and "Goal" as non SWB aspects in my survey. This minimalist description for each variable leads to a main issue in Behavioural Economics, i.e. the interpretation bias. I wanted to create a survey that leaves not much place for interpretation in the main part. That drove me to work on vignettes following the example of Adler et. al (2017). The difference to Adler was to formulate two vignettes. One for the short run framing, i.e. the next four years and one for the long run, i.e. the deathbed framing. Another difference is that I decided to phrase the vignette without a third party. I was able to implement it because I did not look at current situations but on future situations. In that way respondents were able to provide insights of what were most likely to drive their own actions in a close or a far future. In the following I provide my vignettes. All aspects are defined first in the deathbed framework and then again in the next four years.

3.2.3. Deathbed vignettes**Happiness:**

“Looking back on your life from your deathbed you will conclude that your life has been happy and satisfying. By this, we mean that your main goal in life will have been to seek pleasurable/happy moments and try to avoid painful ones and you will have largely succeeded: you, personally, will have lived a very pleasant life, experiencing a lot of joy and good feelings and few anxieties/bad feelings as well as only minimal discomfort.”

Eudaimonia:

“Looking back on your life from your deathbed you will conclude that your life has been worthwhile and purposeful. By this, we mean that your main goal in life will have been to achieve meaning in life and you will have largely succeeded: you will have lived a life according to your own values even though this required some effort and sacrifice, considering yourself a good and moral person.”

Finance:

“Looking back on your life from your deathbed you will conclude that your life has been lived in financial security (as a rich man/woman). By this, we mean that a main goal in your life will have been to earn a lot of money and accumulate a lot of wealth. You will have largely succeeded: Due to your effort, you will not have had to worry about money a day in your life and you will have been able to save a lot of money and afford (at least) the things that are most important to you.”

Health:

“Looking back on your life from your deathbed you will conclude that your life has been long and healthy. By this, we mean that your main goal in life will have been to care for your health, be active and (with a bit of luck) you largely succeeded: you will not have had to visit the doctor often. Instead, due to your effort, you will have been in a very good physical and mental condition almost all your life, allowing you to pursue almost any kind of physical activities.”

Goal:

„Looking back on your life from your deathbed you will conclude that your life has been professionally successful and that you yourself have gained a lot of social esteem. By this, we mean that your main goal in life will have been to achieve your professional goals/climb the career ladder (to the very top). You will have largely succeeded: Due to your effort, you will have had to work a lot but you will have gained a lot of responsibility (supervising others for example) and achieved a very high social status and power.

Family:

„Looking back on your life from your deathbed you will conclude that your family's life has been happy and satisfying. By this, we mean that your main goal in your life will have been to make your family happy often even at the expense of your own happiness and you will have largely succeeded: While it required personal effort and sacrifice, you will have had a rich and satisfying family life.“

Freedom:

“Looking back on your life from your deathbed you will conclude that your life has been full of options and opportunities. By this, we mean that you will have been privileged enough to live in (and a main goal of your life will have been to search for) inspiring environments with lots of opportunities. You will have largely succeeded: Due to your own effort, you will have been able to choose freely among many options.“

3.2.4. Next four years vignettes

Happiness:

“In the next four years your life will be happy and satisfying (for you personally). By this, we mean that your focus in the next four years will be to seek pleasurable moments and try to avoid painful ones and you will largely be successful: you, personally, will have a very pleasant time,

experiencing a lot of joy and good feelings and few anxieties/bad feelings as well as only minimal discomfort.”

Finance:

“In the next four years you will earn a lot of money and be financially secure. By this, we mean that your focus in the next four years will be to become rich, earn a lot of money and accumulate some wealth. You will largely be successful: Due to your effort, you will not have to worry about money on a daily basis and you will be able to save a lot of money and afford (at least) the things that are most important to you.”

Eudaimonia:

“In the next four years you will make your life worthwhile and purposeful. By this, we mean that your focus in the next four years will be to achieve meaning in your life and you will largely be successful: you will live your life according to your own values even though this required some effort and sacrifice, considering yourself a good and moral person.”

Health:

“In the next four years you will be healthy. By this, we mean that your focus in the next four years will be to care for your health, be active and (with a bit of luck) you are successful: you will not have had to visit the doctor often. Instead, due to your effort, you will be in a very good physical and mental condition, allowing you to pursue almost any kind of physical activities.”

Goal:

“In the next four years you will be very successful in your professional life gaining a lot of social esteem. By this, we mean that your focus in the next four years will be to make significant progress in achieving your professional goals/climbing the career ladder. You will be successful: Due to your effort, you will have to work a lot but you will gain a lot of responsibility (supervising others for example) and also achieve high social status and power.”

Family:

“In the next four years you will make your family happy. By this, we mean that your focus in the next years will be to bring your family happiness often even at the expense of your own happiness and you will largely be successful: while it will require personal effort and sacrifice, you will have a rich and satisfying family life.”

Freedom:

„In the next four years you will have a lot of options and opportunities. By this, we mean that you will be privileged enough to live in (and a focus in the next four years will be to search for) surroundings that provided you with these options. You will largely be successful: Due to your own effort, you will be able to choose freely among many option”

3.3. Survey Design

3.3.1. Structure

The ultimate study I created was built on five parts. At first, I wanted to ask some demographics in order to better understand the population and make sure that I could reuse this survey for a following work and compare the new results with the current results of my master’s thesis. Participants were provided common demographics like the age, the marital status, the household size or the race and the citizenship the respondent holds. Before turning to the real questionnaire, a comprehension part was introduced in order to make sure that every participant had understood what the requested task was. In case of a wrong answer the respondent had to go back and correct his answer. It was not possible to get to the questionnaire without answering correctly to all the comprehension questions. This procedure had two aspirations, first make sure that no one was just clicking through without thinking and second that everyone giving answers fully understood the exercise.

In the second and one of the two most important parts, I introduced the core functioning without explicitly telling the purpose of this survey, see figure 3. Indeed, I kept veiled the intent of my research topic with the objective to get rid of the issue of meta-preferences. I used this strategy because people answer more realistically when they are not familiar with the topic. That is, because they don’t try to figure out what would be socially expected and don’t answer with the aim of fitting into the social desired outcome. In this second part, I revealed that the respondents

had to choose between two choices and that they had to state to what extent they prefer either option. Also, I provided them with a table with all the options that were relevant for the survey, see Figure 1 already provided in chapter 1. Figure 3 shows an example of the set-up as it is for all aspects. In this example, option 1 would be that your life will be “exiting and eventful” and option 2 would be that your life will be “rich in travel”. Further details with all the relevant aspects of this study are provided in part 3.2 Life Aspects.

Figure 3: Introduction to the choices that are requested

Part 2

We are our choices

- Jean-Paul Satre

In **Part 2**, we would like you to answer some questions about different "life choices".

The idea of these questions is that you will have to **evaluate two different life options** (Option 1 and Option 2). In evaluating these two different options, we would like you to take the following **perspective**: The two options are predicted to have different effects over the **next four years** but to have the same effects after that. In addition, each option will focus on only one aspect of life. Both options are meant to have similar effects on other aspects listed (or not listed) in the table (below).

EXAMPLE:

In the next four years your life will be ...

	exiting and eventful	eco-friendly	rich in travel
Option 1	X	--	--
Option 2	--	--	X

The example features 3 life choices/qualities and two options. *In the following, you will always be asked which of the **two options (Option 1 and Option 2)** you prefer.* In the example, you are basically asked to decide whether you prefer an exiting life or lots of traveling. Similar to the example, you may sometimes feel in the following questions that the two options "**overlap**":

- Maybe you like traveling quite a bit but what you are really after is to get a bit of adventure in your life. In other words, traveling could be **one way/means** (among others) to achieve your real goal of making your life more exiting. If this is true, we would ask you to choose Option 1 as Option 2 really focuses *only* on traveling per se (and not the excitement and other consequences it might lead to).
- Alternatively, of course, you may actually fancy a more quite life and like traveling to tranquil and calm places to relax or you may simply like travelling per se. In this case we ask you to choose Option 2 in the example.

Of course, as illustrated in the example, you may also be concerned with **other life aspects** such as an environmental-friendly way of life. While traveling might be more problematic for the environment than other forms of excitement (e.g. a fulfilling love life), we ask you to **ignore** any such third factors when evaluating Options 1 and 2. While Option 1 only refers to excitement per se, Option 2 only refers to traveling as such.

*The real questions will actually feature **10 life choices** (instead of 3) but you will always **choose among 2 options**. On the next screen, we will present these 10 life choice/options a bit more in detail. Please read them carefully as you will face a few simple comprehension questions before the questions start.*

Next

3.3. SURVEY DESIGN

The choice that the survey takers had to face was a Likert-Scale with six possible answers. The scale was built symmetrically where every option could be “preferred much”, “preferred” or “preferred slightly”. No option “indifferent” was implemented in order to get rid of a lazy default answer. For a clear view see figure 2 taken directly from the survey and introduced in the first chapter of my thesis.

In the third part, I asked the respondents to reveal what makes them “happy”. After reminding our happiness definition the respondents were asked to contemplate what and to what extent contributes to their happiness. The factors were the nine other aspects of our study, see part 3.2 Life Aspects. Therefore, a Likert-Scale was once more implemented. See Figure 4.

Figure 4: Likert-Scale about the contributors of happiness



This additional part aims to give supplementary information about what could be a means to happiness or what could be an end in itself.

In the fourth and the second most important part, I asked the same questions as in part 2 but with the other framing, i.e. either the next four years or the deathbed. This part, in cooperation with the second part, builds the cornerstone of my work. Indeed, the differences in the results that have been observed (see chapter 4) explain the discrepancies in the long run aspirations and the short run choices that humans make during their life. Those two parts are therefore essential in finding an answer regarding my research questions, i.e. the evolution of preferences during a lifetime and especially which life aspects are ends in themselves.

In the fifth and last part, I asked for understanding and feedback from the survey takers. The opener was to interrogate whether the overall study was perceived as “very un/clear”, “un/clear”, “somewhat un/clear”. Then the respondents had to tell whether they understood the general description of the ten life options. Additionally, they were asked how they would rate their English skills. Low English skills might interfere in the reliability of truthful answers and so falsify the results of the study. The second group of feedback was to rate the clarity and plausibility of the individual descriptions of the ten life options. In order to help them to recall the vignettes, all of them were added at the bottom of the page. The ultimate section of this

closing part gave the opportunity to transmit an own definition of happiness and the current level of happiness on a scale from 1 to 10 (where 10 is the highest happiness). Finally, space for a concluding comment was offered.

3.3.2. OTree-Programming

Once I had the elements and structure that I intended to implement in my survey, I had to choose which program I could use in order to make it as clear as possible for the respondents. Due to the new components of my survey, I couldn't use an available work. Therefore, I analysed the different offers. I contacted several organisations with the aim of getting a discount or a test opportunity as I am a student, and I didn't get any budget. Unfortunately, I got no responses. Therefore, I decided to program my own survey with oTree, a framework based on Python that enables to create surveys and multiplayer strategies games. This program empowered me to develop the survey regarding my expectations. It came along with a huge amount of work but the result and the flexibility that I gained from it added a vast value to my thesis.

3.4. Deathbed scenario

The main purpose of my master thesis project was to analyse whether happiness could be a good proxy for utility or, if instead, humans are willing to trade it off for other aspects. Therefore, it is crucial to implement a long-term horizon. Unfortunately, it is not possible to track the evolution of the preferences of the same respondents over years or even through a lifetime during a master thesis project. In order to create a framework that enables the researcher to observe potential evolutions in preferences of respondents, I carried out the longest possible time horizon that we can think of, our own deathbed. By projecting ourselves into that situation we might come as close as possible to our inner aspirations. Indeed, I used this psychological tool in order to simulate an evolution of our ambitions throughout a lifespan. On one hand, as explained before, I implemented in my survey the next four years horizon to extract the short run preferences of my respondents. On the other hand, the projection to the deathbed intended to expose the long run desires. Comparing the evolution of these preferences, enables me to get closer to my research topic, i. e. is happiness the only end that people are trying to maximize or are they willing to trade it off in order to achieve other goals? Indeed, a difference in preferences in these two scenarios would be a signal that one aspect could be just a mean in order to reach another goal later in life. These assumptions are going to be explained in more detail in my next part, 4. Conjectures.

4. Conjectures

Now that we have seen the purpose of the deathbed scenario implementation into my survey and its' general structure, i.e. shedding light upon the long run evolution of preferences and getting closer to establish whether happiness is the superior aspect of our life, I will disclose the main expected results.

Conjecture 1: Respondents do maximize happiness.

First, my main prior forecast is that people do in fact want to maximize happiness. Undoubtably, happiness plays a growing role in our life and a shift in western societies is observable. This conjecture is expected to be translated as a higher share of respondents choosing happiness than the other life aspects challenging happiness. Additionally, we anticipate that the means of the Likert-scales will be higher than 3, i.e. that more people choose happiness and put a higher weight on it. However, we forecast that this shift towards happiness is increasing in time. This conjecture would be in line with the second assumption that predicts that the long run framework (the deathbed) would show a higher weight on happiness. Although happiness seems to be the overarching goal of humans, it is clear, that we do not put all our efforts into a constant happiness. Other goals seem to attract us, at least in the short run. But these goals could be part of our happiness and therefore just be means to reach even higher happiness in the long run.

Conjecture 2: More respondents maximize happiness in “deathbed” time framing compared to “next-four-year” framing

Therefore, the second conjecture is that people focus solely on the role of happiness in the long run. Indeed, we expect that in the short run the choices between life aspect are more homogeneous. By that, we mean that people don't choose one aspect relatively more than the other but in fact that they want to achieve several life aspects at the same time. Put in other words we expect that the respondents' answers will lead to means in the Likert-scale close to 3, meaning that happiness and the other life aspect considered as important in the short run. In contradiction to this normal distributed results in the short run, we expect that results in the deathbed scenario will be consequently different. In fact, we expect that the mean and the share of respondents that choose happiness will be significantly higher than in the next four years. This would imply

that the survey takers are chasing happiness in the long run while they are willing to trade off happiness in the short run. This evolution over time would lead to think that some life aspects are less important than others.

Conjecture 3: Some life aspects, “Money” and “Health” serve more as instruments for happiness than other, “Family” and “Freedom”.

The third and last conjecture states that some life aspects, especially “Money” and “Health” serve more as instruments for happiness than others, e.g. “Family” and “Freedom”. While some goals might play a secondary role in line with the second conjecture, other goals may be more than just servants to happiness. Life aspects that are expected to play an independent role are related to the happiness of our closest family and aspects that go beyond our person, for example the freedom that our society permits its’ individuals. These three conjectures will be investigated based upon the results revealed in chapter 5.

5. Results

My survey respondents were bachelor students of the course “Grundlagen der Finanzwissenschaften” at the University of Vienna. On May 11th, 2021, they were asked to participate on my online questionnaire². In the end, 35 students took the questionnaire and finished it.

5.1. Population

Table 1 describes the demographic characteristics of the 35 respondents. It is important to note that the group of respondents is extremely homogeneous. None of them is married or has a child. It could be interesting to analyse whether the marital situation or a child would change the preferences of some life aspects. Furthermore, all, except one, are aged between 16 and 29. Only five are non-Europeans. In a following study, a representative sample with more diversity would be needed in order to display a more realistic situation of the different preferences. Indeed, a more heterogeneous group regarding the educational level, the age, the income and the race would add a broader value to my approach.

² In agreement with Dr. Koch (the lecturer) the contributors were given a 5% extra on their grade in case they fully answered the survey.

Table 1: Demographics

	<i>Details</i>	<i>Share of respondents (%)</i>
Marital status	married	0
	Never married	100
Highest education	High school	80
	Some uni/college	14,28
	Bachelor	5,71
	Master/PhD	0
Age	16-29	97,14
	30-39	2,86
	40-49	0
	50-64	0
	65 or older	0
Household Income	Less than 10.000	54,28
	10.000 – 19.999	28,57
	20.000 – 29.999	0
	30.000 – 39.999	5,71
	40.000 – 49.999	0
	50.000 – 74.999	2,86
	75.000 – 99.999	2,86
	100.000 or above	5,71
Race	White	85.71
	Black	8.57
	Hispanic/Latino	2.86
	Asian	2.86
	Other	0
	Prefer not to say	0
Household size	1	37.14
	2	22.86
	3	14.28
	4 or above	25,71
Employment status	Employed/student	77.14
	Unemployed	14.28
	Not in labor force	8.57

5.2. Main findings

This part reveals the core results of my research. In the first part, I present the means that are related with the detailed preferences given to the Likert-scale. In the second part, the results are aggregated with the aim of eliciting which life aspect is preferred without differentiating the extent of the aspect.

5.2.1. Means (with statistics)

In the previous part I described the methodology of my survey. Before we will have a look upon the share of respondents choosing each life aspect in comparison to happiness, we are going to discuss the means obtained by the Likert-scales of each aspect. Table 1 summarizes the means with standard errors in brackets. For each answer 1 point is given to “prefer much” happiness, 2 points are handed to “prefer” happiness, 3 points are given for “prefer slightly” happiness. Therefore 4, 5 and 6 points are given to the alternative life aspect to “Happiness” respectively for increasing importance of “Happiness”. That is, the mean of 3.5 would imply that both variables are equally important. A mean lower than 3.5 would imply that “Happiness” is the most relevant aspect and a mean above 3.5 would imply that the alternative life aspect is a more influential life aspect. Accordingly, the aspect with the higher preference over happiness is Family in the deathbed scenario with a mean of 3.68 implying that Family seems to be more relevant than happiness in the long run. The lowest mean, with 2.51 is related to the achievement of goals in the deathbed scenario. This rather low value translates a strong predilection for happiness. It is important to note, that freedom and Health have a very stable means with differences under 0.1. One possible explanation for it would be that those life aspects are either not important at all or as important as happiness. The fact that both variables have mean between 3.5 and 4 could be interpreted as similar interest in those variables than happiness. Indeed, health was introduced as possible alternative for an end in different studies, e.g. Adler et al (2017).

Table 2: Results of each life aspect (means) in the different scenarios

<i>Life aspect</i>	<i>Eudaimonia</i>	<i>Health</i>	<i>Finance</i>	<i>Goal</i>	<i>Family</i>	<i>Freedom</i>
Deathbed	2.68** (1.45)	3.11 (1.46)	2.57* (1.31)	2.51 (1.40)	3.68 (1.67)	3.14 (1.55)
Next four years	3.02** (1.63)	3.17 (1.47)	3.37* (1.66)	3.57 (1.77)	3.28 (1.54)	3.17 (1.29)
Exact	0.049	0.214	0.085	0.214	0.308	0.582
P-Values						

Figure 5: Stata output Fisher's exact test (Eudaimonia)

```

Enumerating sample-space combinations:
stage 6: enumerations = 1
stage 5: enumerations = 3
stage 4: enumerations = 44
stage 3: enumerations = 1538
stage 2: enumerations = 2498
stage 1: enumerations = 0

```

Happiness_ Eudaimonia_ _next	Happiness_Eudaimonia_deathbed						Total
	1	2	3	4	5	6	
1	5	2	1	0	0	0	8
2	4	1	3	0	0	0	8
3	0	1	2	1	0	0	4
4	1	2	1	3	1	0	8
5	0	1	0	2	1	0	4
6	0	0	0	1	1	1	3
Total	10	7	7	7	3	1	35

Fisher's exact = 0.049

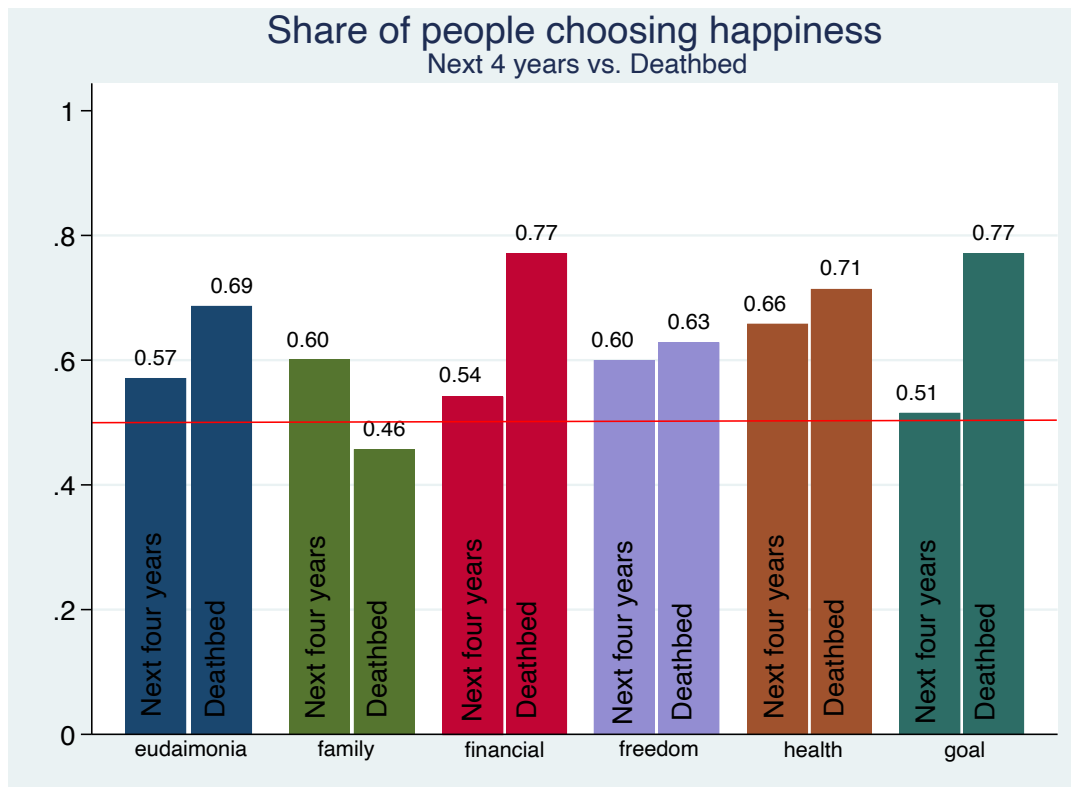
The Significance levels: *** < 0.01, ** < 0.05, * < 0.1, are obtained with the Fisher's exact test. The Fisher's exact test is a non-parametric statistical method used for significance tests with small sample sizes. Figure 5 shows the test for the Eudaimonia variable in both scenarios, i.e. the next four years on one side and the deathbed on the other side. Recall that, in my study, the variables are always compared to happiness in order to elicit whether the happiness or the

5.2. MAIN FINDINGS

other variable, here Eudaimonia, is relatively more important to the respondents. Fisher's exact test yields a p-value of 0.049 for the Eudaimonia life aspect, admitting the conclusion that this result is significant. In the same manner, table 2 aggregates the p-values obtained by the Stata outputs for the other variables of concern. Therefore, we can say, that the life aspect "Finance" is also significant with a p-value of 0.085. Unfortunately, the other variables are not significant. Indeed, the p-value of "Health", "Family", "Freedom" and "Goal" are respectively 0.214, 0.308, 0.582 and 0.214.

5.2.2. Binary choices (With statistics)

In order to simplify the analysis, I aggregated the results of my six scale Likert-scale into a dichotomous outcome. Indeed, I combined the answers "prefer slightly", "prefer" and "prefer much" into the more general statement "prefer at least slightly". The new results are "prefer at least slightly" happiness and "prefer at least slightly" the other life aspect. This has the advantage that I can more simply compare the relevant observation, i.e. does a respondent prefer happiness over another life aspect or not. The magnitude of the preferences will be examined in more detail in chapter 5.3 regression analysis.

Figure 6: Share of all respondents choosing happiness

Result 1: While a majority of people tend to choose happiness over other life choices, a non-negligible proportion also trades happiness off.

Figure 6 shows the results of this dichotomous outcomes. On the x-axis we have the six relevant life aspects that I compared to happiness in my thesis. Each aspect has two bars. The left bar stands for the percentage (y-axis) of people choosing at least slightly happiness in the next four years scenario while the right bar reveals the percentage of respondents choosing at least slightly happiness in the deathbed scenario. Therefore, we have for the financial life aspect, showed in red, 54% of the respondents preferring at least slightly happiness over the financial aspect in the short run (next four year) scenario and 77% of the respondents' choosing happiness in the long run (deathbed) scenario. The results of the other aspects can be read in the same manner. The red line in figure 6 aims to visualize the threshold where either happiness or the other life aspect is preferred. This helps to identify family in the long run framework as the only aspect that seems more relevant to my sample than happiness.

5.2. MAIN FINDINGS

Result 2: There is a clear tendency in “deathbed” for “Happiness” to become more important relatively to “next-four-years”. An important exception is “Family”, the only life aspect that increases in the long run besides “Happiness”. Therefore, “Family” can also be seen as an end.

The results of Figure 6, show that “Happiness” is, with a huge advantage, the life aspect that respondents prefer. In the next-four-years, it can be already seen, that most respondents choose happiness over the other life aspects. With only 51% choosing “Happiness” over “Goal”, “Goal” is the most dominant aspect in the next-four-years. Then the financial aspect is the second key aspect, in the short run with 54% preferring “Happiness”, i.e. 46% prefer the financial components of life. “Eudaimonia” with 57% preferring “Happiness” is the third life aspect. Then “Freedom” and “Family” do loose against “Happiness” with 60% picking the prominent option. The less important aspect in comparison to “Happiness” in the next-four-years is “Health”. Indeed 66% choose “Happiness” over “Health” in that framework. In the deathbed, all aspects except “Family” loose relevance against “Happiness”, leading to the conclusion that people do maximize happiness in the long run.

Result 3: “Goal” and “Finance” serve more as instruments for happiness than other aspects.

The highest gaps in shares of respondents choosing happiness in the long run versus the short run can be observed for the goal and finance aspects. It can be seen that the share of people choosing happiness over finance jumps by 23% points from 54% to 77%. The jump for the goal aspect is even extremer with 26% points from 51% to 77%. This can be interpreted as follows. While in the short run more aspects challenges happiness as overarching goal, happiness takes the leading role in the long run. That is because chasing different outcomes can be catalysing happiness in the long run. Therefore, this result underlines the fact that some aspects serve more as instruments for happiness than others.

Figures 7 and 8 are showing similar results as figure 6 with just one, but relevant, difference. While figure 6 contains the complete sample, figure 7 consists of the results of the respondents that started with the deathbed scenario and figure 8 involves the results of the survey takers that started with the next four years questions. In order to check the reliability of the results that I

reported, I will present the results of the second nonparametric tests usually used for small sample sizes, i.e. the Wilcoxon signed rank test. While the Fisher's exact test was applied for the analysis of the Likert-scale, the Wilcoxon signed rank test is used for a binary output, in this case either the choice of happiness or the alternative life aspect as describe above. Table 1 shows the p-values obtained by the Wilcoxon signed rank test. All values in the table were directly taken from the Stata outputs as it can be seen in figure 6 the variables "Happiness" and "Goal" for both scenarios. In fact, the Wilcoxon signed rank test compares in the H_0 Hypothesis whether the life aspects are distributed in the same way in both scenarios. If the p-value is smaller than the threshold value (e.g. 0.05) then one can state that the variables are significant and the results commented in chapter 4 can be used with statistical proof. Given this threshold we can see in table 1, that only Goal and the Financial aspects in comparison to happiness are significant results. Indeed, "Goal" has a p-value of 0.0009 and the "Financial" aspect has a p-value of 0.0109. Then we can observe that Eudaimonia with a p-value of 0.1435 and Family with a p-value of 0.1857 have moderate p-values. Finally, Health and Freedom have p-values of 0.6468 and 0.5764 respectively, meaning that these two results are not significant at all. Overall, the Wilcoxon signed rank test shows poor significance level for the observed variables in my master thesis. Even though, this test is used for small sample sizes, a higher number of participants is likely to improve these results. Checking my results with another non-parametric method with the aim of obtaining a higher statistical significance led me to consider the Fisher's exact test.

5.2. MAIN FINDINGS

Table 3: P-Values obtained by the Wilcoxon signed rank test

<i>Aspects</i>	<i>p-values</i>
Happiness/Health	0.6468
Happiness/Eudaimonia	0.1435
Happiness/Family	0.1857
Happiness/Freedom	0.5764
Happiness/Financial	0.0109
Happiness/Goal	0.0009

Figure 6: Wilcoxon signed rank test stata output.

Wilcoxon signed-rank test

sign	obs	sum ranks	expected
positive	4	85	282
negative	20	479	282
zero	11	66	66
all	35	630	630

unadjusted variance **3727.50**

adjustment for ties **-71.88**

adjustment for zeros **-126.50**

adjusted variance **3529.12**

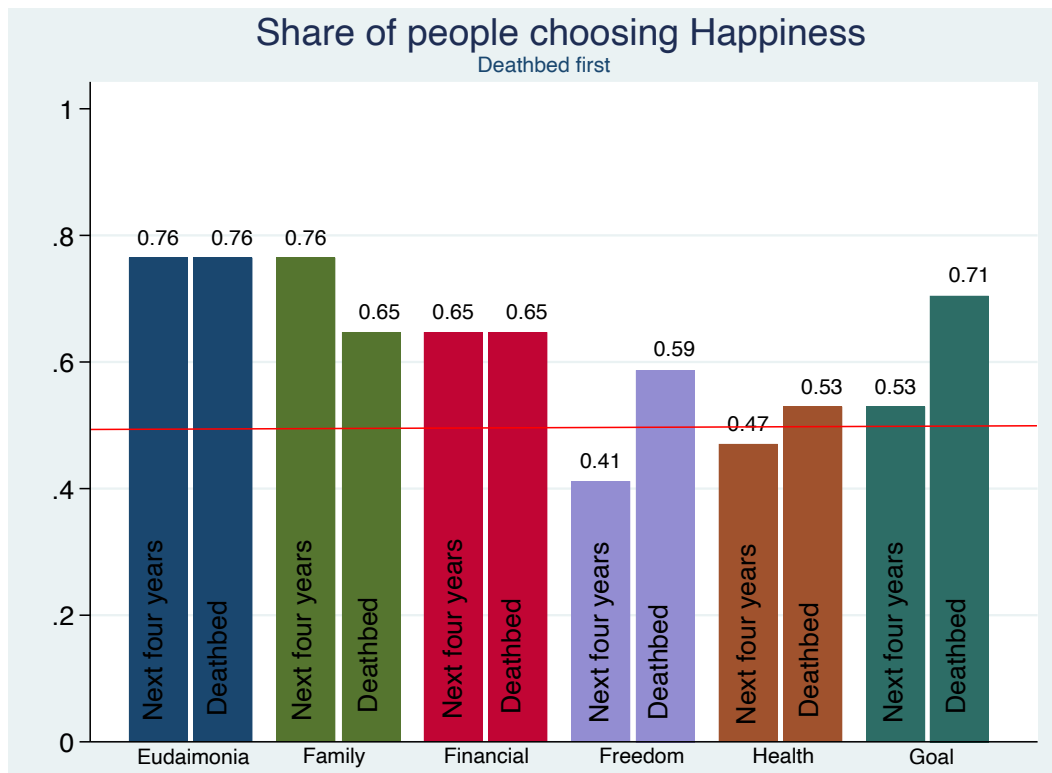
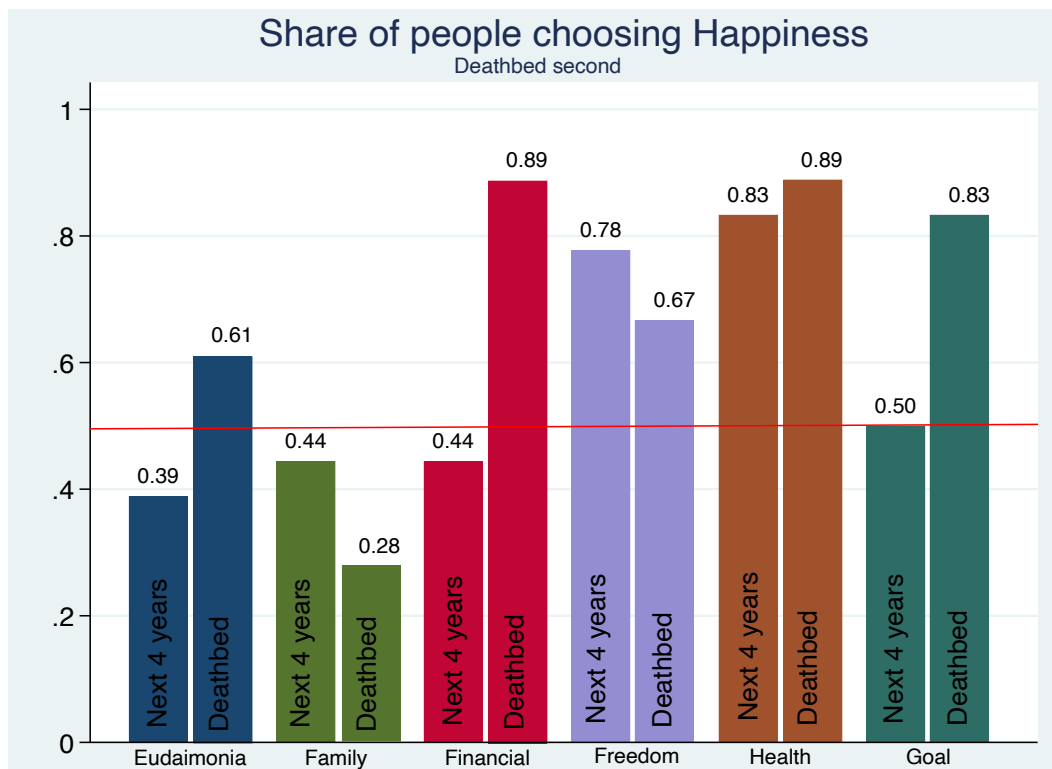
Ho: happiness_goal_deathbed = happiness_goal_next

z = **-3.316**

Prob > |z| = **0.0009**

Exact Prob = **0.0006**

So far, the results are straightforward. But what do these results tell us regarding the complete research.

Figure 7: Share of respondents choosing happiness (deathbed framework asked first)**Figure 8:** Share of respondents choosing happiness (deathbed framework asked second)

5.2. MAIN FINDINGS

At first, it is striking that, except family, all life aspects see their share of people choosing happiness increase in the deathbed scenario versus the next four years. Indeed, while half of the people that are facing a choice between goal and happiness in the short run framework choose goal and half choose happiness, only 23% choose goal in the deathbed scenario. This is a first sign that goal attainment is just a mean to reach long run happiness in one's life.

Similarly for the financial aspect question we can observe an increase in people choosing happiness over the financial aspect from 54% in the short run versus again 77% in the long run.

Put together these two results show us that three quarters of my respondents choose happiness in the long run and choose it much more frequently than in the short run. This result is especially interesting because both aspects, financial and goal are often related to a conservative thinking of a successful life with maximizing monetary outcomes and pushing oneself as high as possible in the career ladder.

In contrast to these two aspects with a substantial increase, freedom and health are worth to be highlighted. With only an increase of less than 5%, hence an increase, those aspects are stable over an expected lifetime. Two explanations can be considered for this finding.

On one hand, freedom is a global aspect that affects society and is not only given to myself. That means, that it could be considered as an important and liberal goal of our whole society. Hence, it is unlikely that I will improve my freedom as an individual. This lack of personal impact could be an explanation why people are not changing their mind on this aspect. Nevertheless, it seems to be an important aspect with more than one third of people choosing it over happiness.

On the other hand, health is a common example of a stable and relevant goal of human life in the literature. My result, that is that only 5% of my respondents switched to happiness, more precisely 5% more choose happiness, in the long run versus in the short run is a clear statement in order to go along with the literature. Counter this idea is the low percentage of respondents choosing health over happiness. Only one third of the students choose health over happiness.

The fact that it is stable over an expected life span is favourable to the suggestion that health is an end in itself but the low share of people preferring it to happiness is a piece of circumstantial evidence that health is a less important end in itself than happiness.

After having put some explanations on the stable and losing aspects versus happiness, I now want to introduce the only aspect that not only has a long run increase but also is the only one where respondents choose it more often than happiness. This aspect is family. As explained before, all other aspects were put against ones' own happiness. But how do we choose if our

happiness is compared to the happiness of our family? Are we willing to put more effort for ourselves than for our family? The answers given to my survey might give a first hint.

Indeed, 60% choose their own happiness over their family's happiness, which makes it one of the highest values (second ex eco). That seems to match the egoistic perception of the western societies. However, "Family Happiness" is the only aspect that gathered more respondents in the long-run versus the short run. While 40% choose family happiness to be more in their interest in the next four years than their own happiness, 54% of the respondents picked their family happiness to be at least slightly more important to them than their own happiness in the deathbed. One possible interpretation to this fact is, that in younger ages we want to take care of ourselves and build our own life and happiness – not helping our parents. Once we achieved it, we might want to create our own family and emphasize the happiness of our partner and children more than our own – because we might have had time to focus on us, first. Summarizing, we could claim that our different familial situation may be the reason of this decrease in people choosing their own happiness.

The last life aspect that I analysed in my work is eudaimonia. This aspect cannot be put to either of the two first groups because it has no consequent change in the frameworks nor it has only a small change. With 12% more respondents choosing happiness over eudaimonia in the long run than in the short run, eudaimonia seems to be less important with longer horizon. This result might be counterintuitive. In fact, reaching worthwhileness with good moral manners appeared to be an extremely long run purpose. In my work, this fact would have been translated by an increasing share of respondents choosing eudaimonia in the long run. This did not happen and only 31% stated that they, at least, prefer slightly eudaimonia to happiness in the deathbed scenario.

As I have two different scenarios with half of the respondents starting with one of them and the other half starting with the other framework, it was crucial to examine whether the timing of the different scenarios has an impact on the respondents' behaviours. Therefore, we have again to take a look at the figures 7 and 8. Indeed, as described above, we can clearly observe a consequent difference in both scenarios. We have to analyse further if these differences are as consequent as it seems or if there can be a plausible explanation.

The first observation one can make is that if the deathbed scenario had to be answered first, the outcomes of both scenarios are much more similar than when the next four years part is answered first. This could be due to a learning effect. Respondents might not be familiar with the topic at first and don't really internalize what role happiness plays in their daily decisions. Once they dealt with the personal decision making, they might answer more reliably. Another

5.3. REGRESSIONS

possibility is that the purpose of the survey, i.e. the importance of happiness in one's life, was so obvious that my survey structure nudged them into choosing happiness over another life aspect. Nevertheless, as explained in part 3 experiment description, I used decoy variables in order to hide this purpose. The fact, that some respondents state in their feedback that they would be interested in knowing the purpose of my thesis or that they are not sure about what the goal of my survey is, underlines the effectiveness of my structure and especially the effectiveness of the decoy variables. For more details see part 4.3. This allows me to believe that my survey did not nudge the respondents into one or another direction. Now that this nudge can be excluded, we can have a deeper look at what might have led the respondents to be more likely choosing happiness once they had a deeper understanding of what they prefer to achieve in life. This assumption is also in line with the results described before.

While the “Financial” and the “Goal” aspects, commonly understood as describing best the behaviour of the homo-oeconomicus, are even less important in the long run if the deathbed scenario is played second, the family aspect becomes even more important. This fact supports my assumption that playing the deathbed scenario second increases the amplitude of already observable preferences. Thus, the results that can be found in figure 6 can be regarded as reliable for my study. One could argue, that playing deathbed always second, in a further work with more participants should be kept. But I think that it gives a better understanding of the decision making of the respondents and that, in any case, it could bring more reliable results in case of discrepancies that might occur with a bigger sample.

5.3. Regressions

In the previous sections I revealed the percentages of respondents that choose either happiness or one of the alternative life aspects in the two different scenarios and their significance levels. The current section aims to elicit further details regarding the relative relevance of each life aspect. Regression (1) gives the expression considered for each scenario:

$$\text{StatedPreference}_i = \alpha_i + \text{Aspects}_i' * \beta_i + \varepsilon_i$$

$\text{StatedPreference}_i$ is the same “latent dependent variable” as in Benjamin (2014). α_i is the constant and $\text{Aspects}_i'$ is the vector of life aspects that can take the following values relative to the six possible outcome of the Likert-scale, i.e. (-3; -2; -1; 1; 2; 3) for (“prefer much option 1”;

“prefer option 1”; “prefer slightly option 1”; “prefer slightly option 2”; “prefer option 2”; “prefer much option 2”). β_i is the regression coefficient and ε_i is the error term.

5.3.1. Next four years

Figure 9 shows the linear regression Stata output gained from the regression (1). Here we can observe that happiness and goal (both coefficient 0) are the baseline variables. That means that the coefficients of the other variables are showing the relative importance of goal compared to the importance of this other variable against happiness. Expressed in numbers we see that “Goal” is 65% more important than health compared to happiness in the next four years framework. As all the coefficients are positive, we can note that all other aspects are less important than goal in the next four years. This is in line with the results presented in figure 6. Indeed, goal is the life aspect that gets the lowest number of respondents that are choosing happiness (51% vs. 66% for health) against another variable meaning that there is no other variable that gets as many respondents choosing the alternative variable to happiness. Given the interpretation introduced, we can mention that financial is the second most important variable challenging happiness with goal having a relative importance only 5% above the importance of the financial life aspect. Additionally, it is important to remark that family is the least important life aspect in the short run scenario with goal having a relative importance of nearly 150% higher than family. Finally, we can pay attention to the significance levels obtained. While family has the highest significance level of the variables, it is also the only aspect that shows a high significance level with a p-value of 0.006 (<0.01). The other significant, however less significant, variable is health with a moderate significance level of 0.078 (<0.1 but >0.05). The remaining variables are not significant with p-values up to 0.803 for the financial life aspect. It is crucial to mention again the interest of performing the same survey with a considerably higher sample size. The best possible results would be obtained with a representative sample. This was not possible because it would have been too extensive for a master thesis. The main goal of the thesis was to test the structure of this new survey and give first insights of the results that could be expected of a large-scale research.

5.3. REGRESSIONS

Figure 9: Stata output of the linear regression for the life aspects (next four years framework)

Linear regression

Number of obs

F(5, 34)

Prob > F

R-squared

Root MSE

=

=

=

=

=

210

2.40

0.0571

0.0697

1.8937

(Std. Err. adjusted for 35 clusters in subject_id)

statedpref	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
happy	0	(omitted)				
health	.6571429	.3616122	1.82	0.078	-.0777415	1.392027
financial	.0571429	.2270629	0.25	0.803	-.4043045	.5185902
goal	0	(omitted)				
family	1.485714	.5037398	2.95	0.006	.4619919	2.509437
eudaimonia	.2571429	.4051759	0.63	0.530	-.5662737	1.080559
freedom	.7714286	.4714533	1.64	0.111	-.1866798	1.729537
_cons	1.257143	.3030663	4.15	0.000	.6412379	1.873048

5.3.2. Deathbed

The regression for the deathbed scenario follows the same structure and uses the exact same regression as in the next four years framework. Once more the two baseline variables are “Happiness” and “Goal”, see figure 10. While goal was the most relevant life aspect different to happiness in the next four years it completely changed in the deathbed. This can be seen with the fact that all coefficients of the other life aspects are negative in the deathbed regression. This translates an opposite effect compared to the effect previously seen in the next four years regression. Indeed, here we can see that health has a coefficient of -0.54 meaning that goal is 54% less important than health in the long run scenario, i.e. the deathbed framework. Once again, the closest coefficient of another variable compared to the coefficient of the goal variable is the financial life aspect. Here we can observe that goal is 23% less important than the financial aspect. This result reinforces the results stated in chapter 4, i.e. that goal and the financial aspect are similarly relevant in one’s life and that these life aspect are assured to be means for a long run happiness.

Figure 10: Stata output of the linear regression for the life aspects (Deathbed)

Linear regression		Number of obs	=	210		
		F(5, 34)	=	0.41		
		Prob > F	=	0.8381		
		R-squared	=	0.0106		
		Root MSE	=	2.0103		
(Std. Err. adjusted for 35 clusters in subject_id)						
statedpref	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
happy	0	(omitted)				
health	-.5428571	.4827444	-1.12	0.269	-1.523912	.4381975
financial	-.2285714	.2627208	-0.87	0.390	-.7624842	.3053414
goal	0	(omitted)				
family	-.3714286	.5427583	-0.68	0.498	-1.474446	.7315889
eudaimonia	-.6	.4605798	-1.30	0.201	-1.536011	.3360109
freedom	-.4857143	.4737953	-1.03	0.313	-1.448582	.4771537
_cons	-.0571429	.3824397	-0.15	0.882	-.8343539	.7200682

Unfortunately, all the results on the regression are not significant. Indeed, the lowest p-value is related to eudaimonia with a value of 0.201. As already mentioned previously, a more extensive number of respondents is likely to improve the quality of the results and lower the p-values meaning an increase in statistical significance. Nevertheless, the regression results are increasing the quality of the research and give further details upon the relative relevance of each life aspect by differentiating even more the amplitudes of each input factor of a human life.

5.4. Feedback and introspection from respondents

The last part of my survey asked the respondents to give feedback upon the general survey and to give their own definition of happiness, i.e. their contribution to the research. The most common answers the students gave in the survey can be summed up to these statements “to be at peace” and “to feel d’accord with oneself”. This translates the aspiration of the younger generation to achieve self-fulfillment in life and to live according to ones’ own ideas. This could be a contrast to the do whatever it takes to earn money what might have been predominant in the

5.4. FEEDBACK

second half of the second part of the 20th century. Another recurrent introspection was that happiness is “a rare moment where everything fits, but never a permanent state”. This dynamic characteristic is in line with the differences I intended to emphasize with my survey. Indeed, I showed that short and long run preferences are different and could be a sign for happiness being one end with other aspects, especially monetary outcomes, being only means to reach a long lasting and stable happiness. This role as final outcome is underlined by the following introspection of one respondent. To me happiness is “many of the above properties together”. This phrasing stresses the fact that several life aspects are input factors to a more general outcome that might be defined as happiness or SWB. But the deathbed scenario also made it clear that other aspects, e.g. family happiness and health, are very likely to be an end as important as one’s own happiness. This preference for social relations can be found in many happiness definitions of the respondents. For example, one respondent’s feedback emphasized this complexity. By defining happiness as “if everybody in my social environment is healthy” he elevates not only his family and friends as being as important as his own happiness but also their health. Finally, regarding the introspection of the respondents, it is clear, there cannot be one and only one life aspect that can be observed in order to describe what matters most to human beings. Therefore, we can state that humans are willing to maximize their own happiness but not to the cost of all other life aspects that are relevant.

The other element of the survey’s fifth and last part was to give the respondents a possibility to reflect on the survey and give some feedback in order to help improving the research on subjective well-being. Firstly, I want to mention that I was surprised by the quality of comments the respondents gave to this rather long study. Only a few (7) gave no or just quick answers like “great survey” or “very good experiment”. The majority made constructive and encouraging statements. Regarding these qualitative answers, three aspects must be pointed out. First, three respondents explicitly shared their hesitancy about the purpose of the work, e.g. “[...] I would very much like to know the purpose and the outcome of the study”. That feedback increases the perception of reliable answers and helps to exclude respondents to answers what would be socially expected and believe that the survey structure helps to elicit their real preferences. Second, the preponderance of positive and interested messages, for example questions about whether the respondents could get the results of the study, boosts the relevance of the research field of experimental and behavioural economics. Indeed, the fact that a vast majority of the students took the survey to the end and “enjoyed the survey” shows that this already growing field of economics is on the cornerstone of modern science. This leads us to the third relevant observation of the final comments of the respondents. Five respondents mentioned that the

study “reflects [their] actual life situation” or at least “made [them] reflect their selves”. This accentuates the value of the research made upon SWB and legitimizes further research in this modern field.

6. Outlook

Our economic understanding has been subject to perpetual changes. Research evolves and new concerns will always shape the future of our human interests. This dynamic situation has led economists to keep discovering new areas of science. In the past decade, immeasurable achievements have been made in the subjective well-being field. What are the input factors of SWB? To what extent SWB is leading our choices? Is Happiness the main goal of human behaviour? In this sense research is now orientated on finding a universal answer of the possible trade-offs in different life aspects and the true end that grow intrinsically in all of us.

Related to this, the main contribution of my work was to find a way that enables us to find differences in preferences regarding the different time horizons. This research aims to elicit the superordinate life aspect that most human beings try to maximize. According to prior research this aspect could be subjective well-being. In order to shed some additional light upon the preceding achievements I implemented two frameworks. The next four years was used as proxy for the short run horizon and the deathbed scenario was the proxy for the long run scenario. This structure enabled me to monitor the expected evolution of the preferences and especially the role of happiness.

The main result that emerged was that the respondents choose “Happiness” much more often in the deathbed scenario than in the next-four-years. For example, 54% choose “Happiness” over their “Finance” in the next-fours-years and 77% did in the deathbed. Consequently, the questions stated at the beginning can be answered as follows. Happiness seems to be the most important end that people try to maximize during their life. However, in the short run, people do in fact trade-off happiness for other life aspects such as financial security and goal achievement.

Two interrogations that would be interesting to study in future research loom from these findings. First, do the results would be similar for a representative sample? Second, do people really trade-off happiness in the short run in order to maximize it in the long run? The best way to answer these questions would be a study that uses panels over decades. This study would have the advantage that the same respondents would answer this survey during different times in their life. This structure would pave the way for monitoring the discrepancies between expected choices and real choices. In this way we would be able to get closer to find what truly motivates humans and the policy makers would be able to allocate the public resources much more efficiently and facilitate economic development.

References

- Adler, M.D., Dolan, P., Kavetsos, G. (2017). Would You Choose To Be Happy? Tradeoffs Between Happiness and The Other Dimensions of Life in a Large Population Survey. *Journal of Economic Behavior and Organization* 139, 60-73.
- Benjamin, D.J., Heffetz, O., Kimball, M.S., Rees-Jones, A. (2012). What Do You Think Would Make You Happier? What Do You Think You Would Choose? *American Economic Review* 102(5), 2083-2110.
- Benjamin, D.J., Heffetz, O., Kimball, M.S., Szembrot, N. (2014a). Beyond Happiness and Satisfaction: Toward Well-Being Indices Based on Stated Preference. *American Economic Review* 104(9), 2698-2735.
- Benjamin, D.J., Heffetz, O., Kimball, M.S., Rees-Jones, A. (2014b). Can Marginal Rates of Substitution Be Inferred from Happiness Data? Evidence from Residency Choices. *American Economic Review* 104 (11), 3498-3528
- Benjamin, D.J., Debnam Guzman, J., Fleurbaey, M., Heffetz, O., Kimball, M. (2021). What Do Happiness Data Mean? Theory and Survey Evidence. *NBER Working Paper* 28438.
- Fleurbaey, M., Schwandt, H. (2015). Do People Seek to Maximize Their Subjective Well-Being? *IZA Discussion Paper No. 9450*.
- Frey, B.S., Stutzer, A. (2012). The use of happiness research for public policy. *Social Choice and Welfare* 38, 659-674.
- Ryan, R. M., Deci, E. L. (2001). On Happiness and Human Potentials: A Review of Research on Hedonic and Eudaimonic Well-Being. *Annual Review of Psychology* 52(1), 141-166.
- Sachs, J., Helliwell, J., Layard, R. (2012). World Happiness Report 2012. *World Happiness Report*. <https://worldhappiness.report/ed/2012/>
- Szabo, A., Ujhelyi, G. (2017). Choice and Happiness in South Africa. *Economic Letters* 155, 28-30.
- Step toe, A. (2019). Happiness and Health. *Annual Review of Public Health* 40, 339-359.
- Stratton, A. (2010, November 14). David Cameron aims to make happiness the new GDP. *The Guardian*. <https://www.theguardian.com/politics/2010/nov/14/david-cameron-wellbeing-inquiry>.

Appendix

A1. Introduction

STUDY 1

Welcome to our questionnaire about life choices

In the following, we will ask you some questions about "**life choices**". This questionnaire is part of a Master thesis. If you answer all the questions and finish the whole questionnaire, you will get **2.5** bonus points for the course "Grundlagen der Finanzwissenschaft".

While we will ask you for your "Matrikelnummer" (registration number) at the very end, this is only done to establish whether a student has done the questionnaire (and is eligible for the bonus points) or not. Your answers will be treated **absolutely confidential** and no link between your name and your entries will be made.

Study 1 consists of **5 parts**. Before each parts starts, we will inform you about what type of questions you will have to answer. Please click "Next" if you are ready to start the questionnaire.

Next

A2. Demographics

Part 1: Demographic Questions

In this part, we would like you to answer a few demographic questions

What is your marital status?

What is highest education level you have completed?

What is your age?

What is your yearly household income?

What is your race?

What is your household size?

What is your employment status?

In which country were you born?

What is the country of your (primary) citizenship

Next

A3. Explanations

Part 2

We are our choices
- Jean-Paul Satre

In **Part 2**, we would like you to answer some questions about different "**life choices**".

The idea of these questions is that you will have to **evaluate two different life options** (Option 1 and Option 2). In evaluating these two different options, we would like you to take the following **perspective**: The two options are predicted to have different effects over the **next four years** but to have the same effects after that. In addition, each option will focus on only one aspect of life. Both options are meant to have similar effects on other aspects listed (or not listed) in the table (below).

EXAMPLE:

In the next four years your life will be ...

	exiting and eventful	eco-friendly	rich in travel
Option 1	X	--	--
Option 2	--	--	X

The example features 3 life choices/qualities and two options. *In the following, you will always be asked which of the **two options (Option 1 and Option 2)** you prefer.* In the example, you are basically asked to decide whether you prefer an exiting life or lots of traveling. Similar to the example, you may sometimes feel in the following questions that the two options "**overlap**":

- Maybe you like traveling quite a bit but what you are really after is to get a bit of adventure in your life. In other words, traveling could be **one way/means** (among others) to achieve your real goal of making your life more exiting. If this is true, we would ask you to choose Option 1 as Option 2 really focuses *only* on traveling per se (and not the excitement and other consequences it might lead to).
- Alternatively, of course, you may actually fancy a more quite life and like traveling to tranquil and calm places to relax or you may simply like travelling per se. In this case we ask you to choose Option 2 in the example.

Of course, as illustrated in the example, you may also be concerned with **other life aspects** such as an environmental-friendly way of life. While traveling might be more problematic for the environment than other forms of excitement (e.g. a fulfilling love life), we ask you to **ignore** any such third factors when evaluating Options 1 and 2. While Option 1 only refers to excitement per se, Option 2 only refers to traveling as such.

*The real questions will actually feature **10 life choices** (instead of 3) but you will always **choose among 2 options**. On the next screen, we will present these 10 life choice/options a bit more in detail. Please read them carefully as you will face a few simple comprehension questions before the questions start.*

Next

A4. Comprehension questions

Here are some simple comprehension questions ...

Please try to answer these questions. In case you make a mistake, you will be given a second chance ...

As explained before, we will ask you to decide between different options. Between how many options do you to decide?

- ☐ Between 2 options (Option 1 vs. Option 2)
- ☐ Between 3 options (Option 1 vs. Option 2 vs. Option 3)
- ☐ Between 5 options (Option 1 vs. Option 2 vs. Option 3 vs. Option 4 vs. Option 5)

The life choices (features in the options) might sometimes *overlap*: You might e.g. like to *travel* (Option 2) quite a bit but traveling is really a way/means for you to get some *excitement* (Option 1) in your life. In this case, which Option do we ask you to choose?

- ☐ Option 2 (traveling). [Since you like traveling quite a bit.]
- ☐ Option 1 (excitement). [Since Option 2 (traveling) really focuses on traveling per se and not the implied excitement.]

How do we define happiness (i.e. a happy life)?

- ☐ seeking pleasurable/happy moments.
- ☐ experiencing a lot of joy/good feelings and few anxieties/bad feelings.
- ☐ trying to avoid painful moments.
- ☐ all of the above

How do we define a worthwhile life?

- ☐ Maximizing pleasure moments and minimizing painful ones.
- ☐ Making your family happy.
- ☐ Seeking meaning in life/being a good and moral person
- ☐ Having a lot of options in life

How do we define a professionally successful life?

- ☐ Being healthy.
- ☐ Being rich and financially secure.
- ☐ Achieving one's professional goals/climbing the career ladder
- ☐ All of the above

In which way do you have to evaluate the Options?

- ☐ You should evaluate the options according to how your life IS at the moment.
- ☐ You should evaluate the options according to what life you would PREFER/ WOULD LIKE to have in the future?
- ☐ You should evaluate the options according to BOTH how your life is at the moment and how you wish it to be.

Next, you will answer 9 questions in which you have to evaluate different Options.

Next

A5. Life Aspects

10 life choices/aspects

Here is a description of 10 life choices/aspects we would like you to read carefully. We will ask some simple questions on the next screen about them.

In the next four years ...

... your life will be **happy and satisfying**. By this, we mean that your focus in the next few years will be to seek pleasurable moments and try to avoid painful ones and you will largely be successful: you, personally, will have a very pleasant time, experiencing a lot of joy and good feelings and few anxieties/bad feelings as well as only minimal discomfort.

... you will make your life **worthwhile and purposeful**. By this, we mean that your focus in the next few years will be to achieve meaning in your life and you will largely be successful: you will live your life according to your own values even though this required some effort and sacrifice, considering yourself a good and moral person.

... you will be **traveling** to many new places. By this, we mean that your focus in the next few years will be to spend a lot of your time traveling, exploring and discovering many places and you will largely be successful: you will travel to many places that you have not visited before, further discovering the world.

... you will have a lot of **options and opportunities**. By this, we mean that you will be privileged enough to live in (and a focus in the next few years will be to search for) surroundings that provided you with these options. You will largely be successful: Due to your own effort, you will be able to choose freely among many options.

... you will make your **family happy**. By this, we mean that your focus in the next years will be to bring your family happiness often even at the expense of your own happiness and you will largely be successful: while it will require personal effort and sacrifice, you will have a rich and satisfying family life.

... you will live an **exciting and eventful** life. By this, we mean that a focus in the next few years will be to make a lot of different experiences, gaining a lot of exiting memories and you will largely be successful: you will explore new hobbies and almost never get bored with your life.

... you will be **healthy**. By this, we mean that your focus in the next few years will be to care for your health, be active and (with a bit of luck) you are successful: you will not have had to visit the doctor often. Instead, due to your effort, you will be in a very good physical and mental condition, allowing you to pursue almost any kind of physical activities.

... you will earn a lot of money and be **financially secure**. By this, we mean that your focus in the next few years will be to become rich, earn a lot of money and accumulate some wealth. You will largely be successful: Due to your effort, you will not have to worry about money on a daily basis and you will be able to save a lot of money and afford (at least) the things that are most important to you.

... you will live an **eco-friendly** life. By this, we mean that a focus in the next few years will be to gather knowledge about environmental issues such as climate change and and live more environmental-friendly. You will largely be successful : Not only, will you manage to reduce your own carbon footprint but you will also motivate friends and family to do the same.

... be very **successful** in your professional life gaining a lot of social **esteem**. By this, we mean that your focus in the next few years will be to make significant progress in achieving your professional goals/climbing the career ladder. You will be successful: Due to your effort, you will have to work a lot but you will gain a lot of responsibility (supervising others for example) and also achieve high social status and power.

APPENDIX

A6. Next four years questions

Question 1

In the next four years you will be/ your life will be ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco- friendly	professionally successful
Option 1	X	--	--	--	--	--	--	--	--	--
Option 2	--	X	--	--	--	--	--	--	--	--

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1				Option 2	
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:
In the next four years ...

Option 1:

... your life will be **happy and satisfying**. By this, we mean that your focus in the next few years will be to seek pleasurable moments and try to avoid painful ones and you will largely be successful: you, personally, will have a very pleasant time, experiencing a lot of joy and good feelings and few anxieties/bad feelings as well as only minimal discomfort.

Option 2:

... you will make your life **worthwhile and purposeful**. By this, we mean that your focus in the next few years will be to achieve meaning in your life and you will largely be successful: you will live your life according to your own values even though this required some effort and sacrifice, considering yourself a good and moral person.

Question 2

In the next four years you will be/ your life will be ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco-friendly	professionally successful
Option 1	X	--	--	--	--	--	--	--	--	--
Option 2	--	--	--	--	--	--	--	--	--	X

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1			Option 2		
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:
In the next four years ...

Option 1:

... your life will be **happy and satisfying**. By this, we mean that your focus in the next few years will be to seek pleasurable moments and try to avoid painful ones and you will largely be successful: you, personally, will have a very pleasant time, experiencing a lot of joy and good feelings and few anxieties/bad feelings as well as only minimal discomfort.

Option 2:

... be very **successful** in your professional life gaining a lot of social **esteem**. By this, we mean that your focus in the next few years will be to make significant progress in achieving your professional goals/climbing the career ladder. You will be successful: Due to your effort, you will have to work a lot but you will gain a lot of responsibility (supervising others for example) and also achieve high social status and power.

APPENDIX

Question 3

In the next four years you will be/ your life will be ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco-friendly	professionally successful
Option 1	--	--	--	X	--	--	--	--	--	--
Option 2	X	--	--	--	--	--	--	--	--	--

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1			Option 2		
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:
In the next four years ...

Option 1:

... your life will be **happy and satisfying**. By this, we mean that your focus in the next few years will be to seek pleasurable moments and try to avoid painful ones and you will largely be successful: you, personally, will have a very pleasant time, experiencing a lot of joy and good feelings and few anxieties/bad feelings as well as only minimal discomfort.

Option 2:

... you will have a lot of **options and oportunities**. By this, we mean that you will be privileged enough to live in (and a focus in the next few years will be to search for) surroundings that provided you with these options. You will largely be successful: Due to your own effort, you will be able to choose freely among many options.

Question 4

In the next four years you will be/ your life will be ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco- friendly	professionally successful
Option 1	X	--	--	--	--	--	--	--	--	--
Option 2	--	--	--	--	--	--	--	X	--	--

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1				Option 2	
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:
In the next four years ...

Option 1:

... your life will be **happy and satisfying**. By this, we mean that your focus in the next few years will be to seek pleasurable moments and try to avoid painful ones and you will largely be successful: you, personally, will have a very pleasant time, experiencing a lot of joy and good feelings and few anxieties/bad feelings as well as only minimal discomfort.

Option 2:

... you will earn a lot of money and be **financially secure**. By this, we mean that your focus in the next few years will be to become rich, earn a lot of money and accumulate some wealth. You will largely be successful: Due to your effort, you will not have to worry about money on a daily basis and you will be able to save a lot of money and afford (at least) the things that are most important to you.

APPENDIX

Question 5

In the next four years you will be/ your life will be ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco-friendly	professionally successful
Option 1	--	--	--	--	--	--	X	--	--	--
Option 2	X	--	--	--	--	--	--	--	--	--

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1			Option 2		
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:

In the next four years ...

Option 1:

... your life will be **happy and satisfying**. By this, we mean that your focus in the next few years will be to seek pleasurable moments and try to avoid painful ones and you will largely be successful: you, personally, will have a very pleasant time, experiencing a lot of joy and good feelings and few anxieties/bad feelings as well as only minimal discomfort.

Option 2:

... you will be **healthy**. By this, we mean that your focus in the next few years will be to care for your health, be active and (with a bit of luck) you are successful: you will not have had to visit the doctor often. Instead, due to your effort, you will be in a very good physical and mental condition, allowing you to pursue almost any kind of physical activities.

Question 6

In the next four years you will be/ your life will be ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco-friendly	professionally successful
Option 1	--	--	--	--	--	X	--	--	--	--
Option 2	--	--	--	--	--	--	--	--	X	--

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1			Option 2		
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:
In the next four years ...

Option 1:

... you will live an **exciting and eventful** life. By this, we mean that a focus in the next few years will be to make a lot of different experiences, gaining a lot of exciting memories and you will largely be successful: you will explore new hobbies and almost never get bored with your life.

Option 2:

... you will live an **eco-friendly** life. By this, we mean that a focus in the next few years will be to gather knowledge about environmental issues such as climate change and and live more environmental-friendly. You will largely be successful : Not only, will you manage to reduce your own carbon footprint but you will also motivate friends and family to do the same.

Question 7

In the next four years you will be/ your life will be ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco-friendly	professionally successful
Option 1	--	--	X	--	--	--	--	--	--	--
Option 2	--	--	--	--	--	--	--	--	X	--

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1			Option 2		
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:
In the next four years ...

Option 1:

... you will be **traveling** to many new places. By this, we mean that your focus in the next few years will be to spend a lot of your time traveling, exploring and discovering many places and you will largely be successful: you will travel to many places that you have not visited before, further discovering the world.

Option 2:

... you will live an **eco-friendly** life. By this, we mean that a focus in the next few years will be to gather knowledge about environmental issues such as climate change and and live more environmental-friendly. You will largely be successful : Not only, will you manage to reduce your own carbon footprint but you will also motivate friends and family to do the same.

Question 8

In the next four years you will be/ your life will be ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco- friendly	professionally successful
Option 1	--	--	X	--	--	--	--	--	--	--
Option 2	--	--	--	--	--	X	--	--	--	--

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1			Option 2		
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:
In the next four years ...

Option 1:

... you will be **traveling** to many new places. By this, we mean that your focus in the next few years will be to spend a lot of your time traveling, exploring and discovering many places and you will largely be successful: you will travel to many places that you have not visited before, further discovering the world.

Option 2:

... you will live an **exciting and eventful** life. By this, we mean that a focus in the next few years will be to make a lot of different experiences, gaining a lot of exiting memories and you will largely be successful: you will explore new hobbies and almost never get bored with your life.

Question 9

In the next four years you will be/ your life will be ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco-friendly	professionally successful
Option 1	--	--	--	--	X	--	--	--	--	--
Option 2	X	--	--	--	--	--	--	--	--	--

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1				Option 2	
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:
In the next four years ...

Option 1:

... your life will be **happy and satisfying**. By this, we mean that your focus in the next few years will be to seek pleasurable moments and try to avoid painful ones and you will largely be successful: you, personally, will have a very pleasant time, experiencing a lot of joy and good feelings and few anxieties/bad feelings as well as only minimal discomfort.

Option 2:

... you will make your **family happy**. By this, we mean that your focus in the next years will be to bring your family happiness often even at the expense of your own happiness and you will largely be successful: while it will require personal effort and sacrifice, you will have a rich and satisfying family life.

A7. Happiness contemplation

Part 3

You have finished Part 2. In Part 3, we would like you to contemplate what makes you happy

As a reminder, our definition of happiness. In the next four years ...

... your life will be **happy and satisfying**. By this, we mean that your focus in the next few years will be to seek pleasurable moments and try to avoid painful ones and you will largely be successful: you, personally, will have a very pleasant time, experiencing a lot of joy and good feelings and few anxieties/bad feelings as well as only minimal discomfort.

Following this definition, to what extent do you think your happiness depends on other aspects discussed earlier?

Before you answer: Note that some aspects might be very important to you but they may not make you happy in the above sense. If taken very seriously, leading an eco-friendly life e.g. could be very burdensome and demanding. Even though it might be very important to you it might not necessarily lead to "a lot of joy and good feelings".

For me, a happy life in the above sense depends ...

not at all/ (may be important but does not contribute to happiness)	☐	☐	☐	☐	☐	☐	a lot	on purpose/meaning
not at all (" ")	☐	☐	☐	☐	☐	☐	a lot	on traveling a lot
not at all (" ")	☐	☐	☐	☐	☐	☐	a lot	on having a lot of options
not at all (" ")	☐	☐	☐	☐	☐	☐	a lot	on my family being happy
not at all (" ")	☐	☐	☐	☐	☐	☐	a lot	on having an exciting life
not at all (" ")	☐	☐	☐	☐	☐	☐	a lot	on being healthy
not at all (" ")	☐	☐	☐	☐	☐	☐	a lot	on being financially secure
not at all (" ")	☐	☐	☐	☐	☐	☐	a lot	on living eco- friendly

not at all (" ")	☐	☐	☐	☐	☐	☐	a lot	on living eco- friendly
not at all (" ")	☐	☐	☐	☐	☐	☐	a lot	on being successful professionally

Next

As a reminder, here are the 10 choices/option:

... you will make your life **worthwhile and purposeful**. By this, we mean that your focus in the next few years will be to achieve meaning in your life and you will largely be successful: you will live your life according to your own values even though this required some effort and sacrifice, considering yourself a good and moral person.

... you will be **traveling** to many new places. By this, we mean that your focus in the next few years will be to spend a lot of your time traveling, exploring and discovering many places and you will largely be successful: you will travel to many places that you have not visited before, further discovering the world.

... you will have a lot of **options and opportunities**. By this, we mean that you will be privileged enough to live in (and a focus in the next few years will be to search for) surroundings that provided you with these options. You will largely be successful: Due to your own effort, you will be able to choose freely among many options.

... you will make your **family happy**. By this, we mean that your focus in the next years will be to bring your family happiness often even at the expense of your own happiness and you will largely be successful: while it will require personal effort and sacrifice, you will have a rich and satisfying family life.

... you will live an **exciting and eventful** life. By this, we mean that a focus in the next few years will be to make a lot of different experiences, gaining a lot of exiting memories and you will largely be successful: you will explore new hobbies and almost never get bored with your life.

... you will be **healthy**. By this, we mean that your focus in the next few years will be to care for your health, be active and (with a bit of luck) you are successful: you will not have had to visit the doctor often. Instead, due to your effort, you will be in a very good physical and mental condition, allowing you to pursue almost any kind of physical activities.

A8. Deathbed questions

Part 4

I'am the one that's got to die when it's time for me to die, so let me live my life the way I want to.
– Jimi Hendrix

In Part 4, we would like you to answer similar questions about "life choices" (as in Part 2) but **this time from a different perspective**.

As in Part 2, the idea of the following questions is that you will have to **evaluate two different life options** (Option 1 and Option 2). In evaluating these two different options, we would like you to take a different **perspective** than before: Instead of looking ahead for the next four years, **imagine for a moment a date – hopefully – in in the far away future: You will be very old and actually lying on your deathbed, your demise being imminent**.

Hypothetically looking back on your life, we ask you to state what option you would prefer as a description of your own life. Notably, each option will focus on only one aspect of life. Both options are meant to have similar effects on other aspects listed (or not listed) in the table.

EXAMPLE: [The same as in Part 2]

Looking back at your life from your deathbed, you conclude that your life has been ...

	exiting and eventful	eco-friendly	rich in travel
Option 1	X	--	--
Option 2	--	--	X

The example features 3 life choices/qualities and two options. *In the following, you will always be asked which of the **two options (Option 1 and Option 2) you prefer***. In the example, you are basically asked to decide whether you prefer an exiting life or lots of traveling. Similar to the example, you may sometimes feel in the following questions that the two options "**overlap**":

- Maybe you like traveling quite a bit but what you are really after is to get a bit of adventure in your life. In other words, traveling could be **one way/means** (among others) to achieve your real goal of making your life more exiting. If this is true, we would ask you to choose Option 1 as Option 2 really focuses *only* on traveling per se (and not the excitement and other consequences it might lead to).
- Alternatively, of course, you may actually fancy a more quite life and like traveling to tranquil and calm places to relax or you may simply like travelling per se. In this case we ask you to choose Option 2 in the example.

Of course, as illustrated in the example, you may also be concerned with **other life aspects** such as an environmental-friendly way of life. While traveling might be more problematic for the environment than other forms of excitement (e.g. a fulfilling love life), we ask you to **ignore** any such third factors when evaluating Options 1 and 2. While Option 1 only refers to excitement per se, Option 2 only refers to traveling as such.

*The real questions will actually feature **10 life choices** (instead of 3) but you will always **choose among 2 options**.*

Next

APPENDIX

Question 1

Looking back on your life on your **deathbed**, you will conclude that your life has been ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco-friendly	professionally successful
Option 1	X	--	--	--	--	--	--	--	--	--
Option 2	--	X	--	--	--	--	--	--	--	--

Between these two options, which life do you think you would prefer? Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.

Option 1			Option 2		
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:

Looking back on your life from your deathbed, you will conclude that your life has been ...

Option 1:

... **happy and satisfying**. By this, we mean that your main goal in life will have been to seek pleasurable/happy moments and try to avoid painful ones and you will have largely succeeded: you, personally, will have lived a very pleasant life, experiencing a lot of joy and good feelings and few anxieties/bad feelings as well as only minimal discomfort.

Option 2:

... **worthwhile and purposeful**. By this, we mean that your main goal in life will have been to achieve meaning in life and you will have largely succeeded: you will have lived a life according to your own values even though this required some effort and sacrifice, considering yourself a good and moral person.

Question 2

Looking back on your life on your **deathbed**, you will conclude that your life has been ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco-friendly	professionally successful
Option 1	x	--	--	--	--	--	--	--	--	--
Option 2	--	--	--	--	--	--	--	--	--	x

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1			Option 2		
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:

Looking back on your life from your deathbed, you will conclude that your life has been ...

Option 1:

... **happy and satisfying**. By this, we mean that your main goal in life will have been to seek pleasurable/happy moments and try to avoid painful ones and you will have largely succeeded: you, personally, will have lived a very pleasant life, experiencing a lot of joy and good feelings and few anxieties/bad feelings as well as only minimal discomfort.

Option 2:

... professionally **successful** and that you yourself have gained a lot of **social esteem**. By this, we mean that your main goal in life will have been to achieve your professional goals/climb the career ladder (to the very top). You will have largely succeeded: Due to your effort, you will have had to work a lot but you will have gained a lot of responsibility (supervising others for example) and achieved a very high social status and power.

Question 3

Looking back on your life on your **deathbed**, you will conclude that your life has been ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco-friendly	professionally successful
Option 1	--	--	--	X	--	--	--	--	--	--
Option 2	X	--	--	--	--	--	--	--	--	--

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1				Option 2	
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:

Looking back on your life from your deathbed, you will conclude that your life has been ...

Option 1:

... **happy and satisfying**. By this, we mean that your main goal in life will have been to seek pleasurable/happy moments and try to avoid painful ones and you will have largely succeeded: you, personally, will have lived a very pleasant life, experiencing a lot of joy and good feelings and few anxieties/bad feelings as well as only minimal discomfort.

Option 2:

... full of **options and opportunities**. By this, we mean that you will have been privileged enough to live in (and a main goal of your life will have been to search for) inspiring environments with lots of opportunities. You will have largely succeeded: Due to your own effort, you will have been able to choose freely among many options.

Question 4

Looking back on your life on your **deathbed**, you will conclude that your life has been ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco-friendly	professionally successful
Option 1	X	--	--	--	--	--	--	--	--	--
Option 2	--	--	--	--	--	--	--	X	--	--

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1			Option 2		
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:

Looking back on your life from your deathbed, you will conclude that your life has been ...

Option 1:

... **happy and satisfying**. By this, we mean that your main goal in life will have been to seek pleasurable/happy moments and try to avoid painful ones and you will have largely succeeded: you, personally, will have lived a very pleasant life, experiencing a lot of joy and good feelings and few anxieties/bad feelings as well as only minimal discomfort.

Option 2:

... been **financial secure** (i.e. you have been a rich man/woman). By this, we mean that your main goal in life will have been to earn a lot of money and accumulate a lot of wealth. You will have largely succeeded: Due to your effort, you will not have had to worry about money a day in your life and you will have been able to save a lot of money and afford (at least) the things that are most important to you.

Question 5

Looking back on your life on your **deathbed**, you will conclude that your life has been ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco-friendly	professionally successful
Option 1	--	--	--	--	--	--	X	--	--	--
Option 2	X	--	--	--	--	--	--	--	--	--

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1				Option 2	
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:

Looking back on your life from your deathbed, you will conclude that your life has been ...

Option 1:

... **happy and satisfying**. By this, we mean that your main goal in life will have been to seek pleasurable/happy moments and try to avoid painful ones and you will have largely succeeded: you, personally, will have lived a very pleasant life, experiencing a lot of joy and good feelings and few anxieties/bad feelings as well as only minimal discomfort.

Option 2:

... **long and healthy**. By this, we mean that your main goal in life will have been to care for your health, be active and (with a bit of luck) you largely succeeded: you will not have had to visit the doctor often. Instead, due to your effort, you will have been in a very good physical and mental condition almost all your life, allowing you to pursue almost any kind of physical activities.

Question 6

Looking back on your life on your **deathbed**, you will conclude that your life has been ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco-friendly	professionally successful
Option 1	--	--	--	--	--	X	--	--	--	--
Option 2	--	--	--	--	--	--	--	--	X	--

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1				Option 2	
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:

Looking back on your life from your deathbed, you will conclude that your life has been ...

Option 1:

... **exciting and eventful**. By this, we mean that a main goal in your life will have been to make a lot of different experiences, gaining a lot of exciting memories and you will have largely succeed: you will have had explored a lot of different hobbies and almost never got bored with your life.

Option 2:

... **eco-friendly**. By this, we mean that a main goal in your life will have be to gather knowledge about environmental issues such as climate change and live an environmental- friendly life. You will have largely succeeded: Not only, will you have managed to reduce your own carbon footprint but you will also have motivated friends and family to do the same.

Question 7

Looking back on your life on your **deathbed**, you will conclude that your life has been ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco-friendly	professionally successful
Option 1	--	--	X	--	--	--	--	--	--	--
Option 2	--	--	--	--	--	--	--	--	X	--

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1			Option 2		
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:

Looking back on your life from your deathbed, you will conclude that your life has been ...

Option 1:

... rich in **traveling**. By this, we mean that a main goal in your life will have been to spend a lot of time traveling, exploring and discovering new locations and you will have largely succeeded: You will have discovered the world, visiting almost all countries of the world.

Option 2:

... **eco-friendly**. By this, we mean that a main goal in your life will have be to gather knowledge about environmental issues such as climate change and live an environmental- friendly life. You will have largely succeeded: Not only, will you have managed to reduce your own carbon footprint but you will also have motivated friends and family to do the same.

Question 8

Looking back on your life on your **deathbed**, you will conclude that your life has been ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco-friendly	professionally successful
Option 1	--	--	X	--	--	--	--	--	--	--
Option 2	--	--	--	--	--	X	--	--	--	--

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1			Option 2		
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:

Looking back on your life from your deathbed, you will conclude that your life has been ...

Option 1:

... rich in **traveling**. By this, we mean that a main goal in your life will have been to spend a lot of time traveling, exploring and discovering new locations and you will have largely succeeded: You will have discovered the world, visiting almost all countries of the world.

Option 2:

... **exciting and eventful**. By this, we mean that a main goal in your life will have been to make a lot of different experiences, gaining a lot of exciting memories and you will have largely succeed: you will have had explored a lot of different hobbies and almost never got bored with your life.

APPENDIX

Question 9

Looking back on your life on your **deathbed**, you will conclude that your life has been ...

	happy	purposeful	rich in traveling	full of options	rich in family happiness	exciting/ eventful	healthy	financially secure	eco-friendly	professionally successful
Option 1	--	--	--	--	X	--	--	--	--	--
Option 2	X	--	--	--	--	--	--	--	--	--

Between these two options, which life do you think you would prefer? *Remember: Both options are meant to affect only one life quality/feature and have no affect on all the other ones (even though this may be a bit unrealistic). In particular, if you like one option but you really chase it as a way/means to achieve the other option we would like you to choose this other/latter option.*

Option 1				Option 2	
much prefer Option 1	prefer Option 1	slightly prefer Option 1	slightly prefer Option 2	prefer Option 2	much prefer Option 2
☐	☐	☐	☐	☐	☐

Next

As a reminder, what do we mean with the life options/choices above:

Looking back on your life from your deathbed, you will conclude that your life has been ...

Option 1:

... **happy and satisfying**. By this, we mean that your main goal in life will have been to seek pleasurable/happy moments and try to avoid painful ones and you will have largely succeeded: you, personally, will have lived a very pleasant life, experiencing a lot of joy and good feelings and few anxieties/bad feelings as well as only minimal discomfort.

Option 2:

... **your family's life** has been **happy and satisfying**. By this, we mean that your main goal in your life will have been to make your family happy often even at the expense of your own happiness and you will have largely succeeded: While it required personal effort and sacrifice, you will have had a rich and satisfying family life.

A9. Understanding and Feedback

Part 5: Understanding and Feedback

At the end of this study, we would ask you for some feedback, in particular with respect to your understanding of the study. In addition, please provide your Matrikelnummer (registration number). We will only make use of your Matrikelnummer with respect to the bonus points earned in the course.

What is your Matrikelnummer? In case you do not know, please provide your name

Feedback on clarity/understanding of the study

Overall, how would you rate the clarity (and plausibility) of the study and the description of the 10 "life options"? How did you understand the study due to its use of the English language

	very unclear	unclear	somewhat unclear	somewhat clear	clear	very clear
overall study	☐	☐	☐	☐	☐	☐
descriptions of 10 life options	☐	☐	☐	☐	☐	☐
any language problems?	☐	☐	☐	☐	☐	☐

In detail, how would you rate the clarity (and plausibility) of the individual descriptions of the 10 "life options" (you can read these descriptions again below)?

	very unclear	unclear	somewhat unclear	somewhat clear	clear	very clear
happy	☐	☐	☐	☐	☐	☐
purposeful	☐	☐	☐	☐	☐	☐
full of options	☐	☐	☐	☐	☐	☐
family happiness	☐	☐	☐	☐	☐	☐
healthy	☐	☐	☐	☐	☐	☐
financially secure	☐	☐	☐	☐	☐	☐
professionally successful	☐	☐	☐	☐	☐	☐
traveling	☐	☐	☐	☐	☐	☐
excitement	☐	☐	☐	☐	☐	☐
eco-friendly	☐	☐	☐	☐	☐	☐

Final Questions

We would welcome your own definition of happiness. It could be a word, a feeling, a sentence or your own vignette -- Anything that comes to your mind!

On a scale from 1 to 10 (where 10 is highest happiness) how would you rate your happiness?

Any final comments/feedback about the experiment?

Next