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UNIVERSIDADE D
COIMBRA

Elvisnei Camargo Conceição

**HAPPINESS AND EDUCATION: EXPLORING
PEOPLE'S PERCEPTIONS IN SEARCH OF
HAPPINESS IN LIFE AND IN THE HIGHER
EDUCATION ENVIRONMENT.**

Doctoral Thesis in Business Management,
supervised by Doctor Professor Arnaldo Fernandes de Matos Coelho,
presented to Faculty of Economics of Coimbra University

December 2021



FEUC FACULDADE DE ECONOMIA
UNIVERSIDADE DE COIMBRA

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The interpretation we give to the events in our lives is the way we manipulate happiness
(ECC, 2021)

Acknowledgements

Once, at the beginning of my academic career, a professor told me: "This will not be your life's work. Leave your efforts and energy for the doctorate!!!". I believed him.

I started my academic career with a degree in management, followed by a specialization, then another. I started a teaching career. Then came the Masters course in Administration and Business and, just when I thought it was going to stop there, came the doctorate at FEUC.

The decision to pursue a doctorate abroad was motivated by an old desire. However, this would have to face some challenges. Initially it was the financial challenge. Overcome this challenge, I faced a marital crisis that changed my personal life. Over these years, several challenges were encountered and, one by one, they were overcome with resilience and a lot of persistence. It is important to say that, in these 11 years of doctoral studies, I have always had the help of Special Beings. First of all, from the Divine Holy Spirit who always illuminated my decisions. I also had the hidden help of Masters and Spiritual Tutors who accompany me since my birth.

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I thank my parents and ancestors who, in a way, root for my success. To my sisters Gicelda and Maria de Fátima, my children Diego and Arthur, my nephew Fabinho and other family members who followed these years of theses. To my dear girlfriend Francine who, with her words of comfort and affection, always understood and supported me at all times. Anyway, there is no space here to thank everyone who helped in my success. I want to register here my sincere thanks: Thank you very much !!!!

Abstract

Purpose: The world society is going through increasingly turbulent times of change and at a speed never seen before. The frenetic pace of life has kept people from thinking about the essence and purpose of the Human Being: happiness. On the other hand, it is observed that this is changing. Over the past ten years, research and scientific publications have shown growing interest in the subject. Some countries have been concerned with getting to know the subject better to support their public policies. Business organizations have shown greater attention to people in defining their strategies. Society in general seems to pay more attention to health than to illness. All of this inspired this researcher to define the objective of this thesis as “The deepening of scientific knowledge already developed about happiness, in order to deliver more value to society, inviting people to reflect on their lives and what makes them happy and, with that, contribute to the construction of a happier society”. To this end, three independent but complementary studies were developed. They are: 1) a bibliometric analysis and systematic literature review on the topics of happiness and education; 2) survey carried out with higher education students in the business area; 3) a field research involving the general public, with the objective of proposing, testing and validating a happiness scale that presented some difference in relation to the existing scales. In total, fifteen specific objectives were outlined: (1) to verify the evolution of the publications of articles on happiness and education; (2) identify the organizations, countries and journals that publish the most scientific articles on happiness and education; (3) identify and analyze the authors who publish the most on these topics; (4) identify and analyze the most cited authors; (5) analyze the articles with the highest number of citations; (6) visualize the clusters formed by authors, organizations, countries and journals; (7) analyze the most recently published articles and their research gaps, as well as the suggestions for future research contained therein; (8) analyze the factors that contribute to the students' perception of value with their academic experience; (9) analyze the relationship of these values with student satisfaction; (10) verifying whether, based on this satisfaction, students would be more willing to share it with others; (11) verifying whether student satisfaction results in a greater perception of career success; (12) test the moderating effect of Corporate Reputation on these relationships; (13) identify and study the main measurement scales of the components of Happiness; (14) build an integrated scale for measuring perceived happiness, which assesses the cognitive, emotional and psychological components of individuals' happiness (15) to test and validate the scale proposed in intercultural studies.

Methodology: The three studies involved different research techniques: a) bibliometric analysis and systematic literature review. This research, after the various analysis filters performed with the VOSviewer software, resulted in 2112 articles that served as the basis for the analysis. b) in field studies 1 and 2, multivariate data analysis techniques (EFA; CFA; SEM) were used in Excel, IBM SPSS and AMOS software. The first field study had the participation of 383 participants and was carried out with higher education students. In the second field study 604 respondents (Brazilian and Portuguese) participated.

Findings: Briefly, this thesis: (1) verified a significant increase in publications on the topics of this research; (2) identified the outstanding participation of Finnish, Australian, American and Spanish universities. A recent participation of countries like China, Russia, India, Poland and South Korea, in the publications; (3) identified the renewal of participation of authors who publish the most on the topic; (4) verified that there is a tendency to study the educational environment and the factors associated with happiness and well-being in that environment; (5) verified that epistemic and emotional values are the most related to student satisfaction with their academic experience and (6) tested and validated the psychometric qualities of the proposed scale, as well as its predictive capacity.

Implications / originality: This thesis contains several contributions however, I consider the main implications of these studies: (a) to have presented a “drawing” of the research scenario on happiness in the context of business and education (b) to have contributed to alert managers of the HEIs on the importance of knowing more deeply the behavior of students and their structure of perception of value and satisfaction. And, mainly (c) having created, tested and validated the Perceived Happiness Scale. The perceived happiness scale is the only one that synthetically considers the emotional, cognitive, meaning and purpose of life. Providing a fundamental instrument to measure happiness at an individual level.

Limitations: We consider as limitations of our thesis: a) in the bibliometric study the choice of only one database; b) in our research on student value perception, we understand that the large number of variables were initially included in the questionnaire; c) in the research that originated the perceived happiness scale, the choice of online data collection limited the scope of the research and reduced the possibility of generalizing the results.

Keywords: happiness; subjective well-being; education; higher education; value perception.

Resumo

Objetivos: A sociedade mundial vive momentos de mudança cada vez mais disruptivos e com uma velocidade nunca vista antes. O ritmo frenético de vida tem afastado as pessoas da reflexão sobre a essência e propósito do Ser Humano: a felicidade. Por outro lado, observa-se que isso está mudando. Nos últimos dez anos as investigações científicas e publicações tem demonstrado crescente interesse sobre o assunto. Alguns países têm se preocupado em conhecer melhor o assunto para fundamentar suas políticas públicas. Organizações empresariais têm demonstrado maior atenção às pessoas ao definirem suas estratégias. A sociedade em geral, parece dar maior atenção à saúde ao invés da doença. Tudo isso inspirou este investigador a definir como propósito desta tese “O aprofundamento do conhecimento científico já desenvolvido sobre a felicidade, a fim de entregar mais valor à sociedade, convidando as pessoas a refletirem sobre suas vidas e o que as faz felizes e, com isso, contribuir para construção de uma sociedade mais feliz”. Para atingir este propósito foram desenvolvidos três estudos independentes, porém complementares. São eles: 1) uma análise bibliométrica e revisão sistemática da literatura sobre os temas felicidade e educação; 2) uma pesquisa realizado com estudantes de ensino superior da área de negócios; 3) uma pesquisa de campo envolvendo público em geral, com o objetivo de propor, testar e validar uma escala de felicidade que possuísse algum diferencial em relação às escalas existentes. No total foram fixados quinze objetivos específicos: (1) verificar a evolução das publicações de artigos sobre felicidade e educação; (2) identificar as organizações, países e periódicos que mais publicam artigos científicos sobre felicidade e educação; (3) identificar e analisar os autores que mais publicam sobre estes temas; (4) identificar e analisar os autores mais citados; (5) analisar os artigos com maior número de citações; (6) visualizar os clusters formados por autores, organizações, países e periódicos; (7) analisar os artigos publicados mais recentemente e suas lacunas de pesquisa, bem como as sugestões de pesquisas futuras neles contidas; (8) analisar os fatores que contribuem para a percepção de valor dos estudantes com sua experiência acadêmica; (9) analisar a relação destes valores com a satisfação do estudante; (10) verificar se, desta satisfação, os estudantes estariam mais dispostos a divulgar para outras pessoas; (11) verificar se a satisfação do estudante resulta em maior percepção de sucesso em sua carreira; (12) testar o efeito moderador da Reputação Corporativa sobre estas relações; (13) identificar e estudar as principais escalas de mensuração dos componentes da Felicidade; (14) construir uma escala integrada de mensuração da felicidade percebida, que avalie os componentes:

cognitivo, emocional e psicológico da felicidade dos indivíduos (15) testar e validar a escala proposta, em estudos interculturais.

Metodologia: Os três estudos envolveram várias técnicas de pesquisas: a) análise bibliométrica e revisão sistemática da literatura. Esta pesquisa, após os vários filtros de análise realizados com o software VOSviewer, resultou em 2112 artigos que serviram de base para análise. b) nos estudos de campo 1 e 2, utilizaram-se técnicas de análise multivariada de dados (AFE; AFC; MEE) com uso dos softwares Excel, IBM SPSS e AMOS. O primeiro estudo de campo contou com a participação de 383 participantes e foi realizado com estudantes do ensino superior. No segundo estudo de campo participaram 604 respondentes (brasileiros e portugueses).

Achados: Resumidamente, esta tese: (1) verificou um aumento significativo das publicações sobre os temas desta pesquisa; (2) identificou a destacada participação de universidades finlandesas, australianas; americanas e espanholas. Uma ‘nascente’ participação de países como a China, Rússia, Índia, Polônia e Coréia do Sul, nas publicações. (3) identificou a renovação na participação de autores que mais publicam sobre o tema; (4) verificou que há uma tendência para estudar o ambiente educacional e os fatores associados à felicidade e bem-estar nesse ambiente; (5) verificou que os valores epistêmico e emocional são os mais relacionados à satisfação dos estudantes com sua experiência acadêmica, e (6) testou e validou as qualidades psicométricas da escala proposta bem como de sua capacidade preditiva.

Contribuições/originalidade: Esta tese contém várias contribuições, no entanto, considero como principais implicações destes estudos: (a) ter apresentado um “desenho” do cenário da pesquisa sobre felicidade no contexto dos negócios e da educação (b) ter contribuído para alertar aos gestores das Instituições de Ensino Superior a importância de conhecer mais profundamente o comportamento dos estudantes e de sua estrutura de percepção de valor e satisfação. E, principalmente (c) ter criado, testado e validado a Escala de Felicidade Percebida. A escala de felicidade percebida é a única que considera sinteticamente os aspectos emocionais, cognitivos, o significado e o propósito da vida. Sendo fundamental para medir a felicidade no nível individual.

Limitações: Consideramos como limitações: a) no estudo bibliométrico a escolha de somente uma base de dados; b) em nossa pesquisa sobre percepção de valor do estudante, entendemos que o número grande de variáveis inicialmente incluídas no questionário ocasionou perda de tempo e energia do pesquisador; c) na pesquisa da escala de felicidade percebida, a recolha de dados online limitou o alcance da pesquisa e reduziu a possibilidade de generalização dos resultados

Palavras-chave: felicidade; bem-estar subjetivo; educação; ensino superior; percepção de valor.

List of Abbreviations

AMOS	Analysis of Moments Structures
BC	Before Christ
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CR	Composite reliability
EFA	Exploratory Factor Analysis
ESS	European Social Survey
EU-SILC	European Union Statistics on Income and Living Conditions
EXC	Career success expectation
FV	Functional Value
GDP	Gross Domestic Product
GFI	Goodness of Fit Index
HEI	Higher Education Institutions
HEI	Higher Education Institutions
IFI	Incremental Fit Index
KMO	Kaiser-Meyer Olkin
MAR	Mobile Augment Reality
MECVI	Maximum likelihood Expect Cross-Validation Index
MS	Monetary sacrifices
NA	Negative Affect

NMS	Non-monetary sacrifices
OECD	Organisation for Economic Cooperation and Development
PA	Positive Affect
PANAS	Positive and Negative Affect Schedule
PANES	Positive and Negative Experience Scale
PCA	Principal Components Analysis
PHI	Perceived Happiness Index
PHS	Perceived Happiness Scale
PWB	Psychological Well-Being
RMSEA	Root Mean Square Error of Approximation
SEM	Structural Equation Modeling
SPANE	Scale of Positive and Negative Experience
SPSS	Statistical Package for Social Sciences
SRW	Standardized Regression Weights
SWB	Subjective Well-Being
SWC	Satisfaction With Academic Experience OR Satisfaction of course
SWLS	Satisfaction With Life Scale
TLI	Tucker-Lewin Index
UAE	United Arab Emirates
UK	United Kingdom
UN	United Nations

UNDP	United Nations Development Programme
USA	United States of America
WHR	World Happiness Report
WOM	Word of Mouth
WoS	Web of Science
WVS	World Values Survey

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CHAPTER I – BACKGROUND

1.1 Research Context

The world society is currently experiencing moments of change, faster and, in some cases, disruptive. The frenetic pace of life had negative effects on people's lives and led to the departure from the essence and purpose of the Human Being: happiness. Processes of change are a constant in human history, but the speed with which they occurred has consequences for life and the sustainability of the planet, which has caused great concern to many Heads of State and Government.

The speed with which changes occur, in some cases, does not give societies enough time to react to them. From the point of view of environmental sustainability: ecological and environmental disasters, climate change and pollution or even the scarcity of essential factors for life, such as drinking water and clean air, have frequently occurred and raised concerns about the present and future of generations. From the point of view of social sustainability: hunger, unbalanced income distribution, precarious access to resources and basic conditions of health and human dignity have been another factor of concern. From an economic point of view, both on the macro and microeconomic levels, increasingly unstable markets, the structure of the global financial system, the energy and technological matrix and the weaknesses of economic models have been the object of reflection and discussion. Based on a society of consumption and indebtedness, the current model, which should provide quality of life, seems exhausted and requires changes.

All these concerns have been shared and discussed for some years in world forums, many of them promoted and organized by the UN - United Nations, through the United Nations Program for Sustainable Development - UNDP. This is the case of the United Nations Conference on Environment and Development - ECO 92, held in June 1992 and Rio + 20 held in 2012, in the city of Rio de Janeiro (Brazil); the Millennium Summit held in September 2000 at United Nations Headquarters in New York (USA) and the World Summit on Sustainable Development, held in Johannesburg (South Africa) in 2002. In 2015 in New York (USA) countries became met to define the Sustainable Development Goals. The 2030 Agenda, as it is called, is composed of a set of goals to be achieved by the 193 signatory countries of the agreement, in the period 2015-2030. Directly and indirectly, the focus of discussion in these

forums has been the current living conditions on the planet and the well-being of people, in the present and in the future.

With regard to people's well-being, the object of study of this thesis, it is necessary to know in depth how people think and act and how organized society can provide them with a dignified and happy life. In this sense, the concern that science has given to the topic is demonstrated by the growing number of studies and scientific publications on the topic of happiness (Diener, 2013; Diener, Suh, Lucas, and Smith, 1999 among others). A set of studies was approved and published by UNDP/UN. This is the World Happiness Report, a global milestone in collecting and processing data related to global happiness. These studies have been published annually since 2012 and, in addition to classifying countries according to the level of happiness, they provide a scientific basis for discussing what to do to define public policies that contribute to making people happier and more satisfied with life.

Within the scope of the World Happiness Report (WHR) several studies have been conducted by renowned experts in the areas of economics, psychology, health, education, neuroscience, statistics and politics, among other areas related to life in society. (Helliwell, Layard, Sachs and De Neve, 2020). These studies use the Gallup World Poll database to analyze life satisfaction and positive and negative emotions resulting from people's life experiences.

Another great boost that the topic of happiness received is due to the recognition and importance given by several world leaders. For example: German Chancellor Angela Merkel, former French President Nicolas Sarkozy; former British Prime Minister David Cameron and His Highness Sheik Mohammed bin Rashid Al Maktoum, current Prime Minister and Vice President of the UAE since 2006, are leaders who have understood the importance of well-being as a guide for their nations (UAE, 2015, apud WHR, 2015, p. 4). One of the examples of using Happiness as a reference for present decisions, designed for a better future, comes from the United Arab Emirates. When the Dubai Plan 2021 was launched in December 2014, Sheikh Mohammed bin Rashid Al Maktoum said: "The first objective of the Dubai Plan 2021 is to achieve people's happiness." (United Arab Emirates, 2015 apud WHR, 2015).

In the UK, the focus on happiness and well-being is special because it was based from the outset on extensive consultation, data collection and experimentation (Hicks, 2012). So far, these efforts "have produced a sufficiently large body of data to allow for analysis and evaluation of policy at the local and national levels." (WHR, 2015, p.4) There are several surveys that clearly demonstrate the intention to "monitor" behaviors, habits and values, among

other factors in people's lives. Examples include the Gallup / Healthways Daily Poll (private initiative) and the US National Institutes of Health's Behavioral Risk Factor Surveillance System (public initiative). involves collections of 1000 daily participations and obtains evaluative and experiential data, to which are added the ESS (European Social Survey) and other national or regional surveys, such as those in Canada, United Kingdom and Europe, through the EU-SILC module (Statistics on Income and Living Condition” (World Happiness Report, 2015, p. 14).

All these large surveys were useful to show similarities and differences between the various methodologies for measuring Subjective Well-Being and to cross them with other sociodemographic indicators. All of this gives measurement mechanisms greater credibility and allows for comparisons and validations across countries and within countries.

Another theme that makes up, in a secondary but no less important way, this thesis is education. By stating that the world needs transformations and that these come with changes in human behavior, we could not fail to address the relational and formative role of education. Although in this thesis the main focus is associated with happiness, we recognize the fundamental role of education in preparing individuals' values for life in society and, therefore, in participating in people's state of happiness. Education is a broad and interdisciplinary theme that permeates various stages of human life, starting with the formation of personal values developed in the family and extending through the social and professional interaction provided in the schooling process. We decided, when approaching education, that the focus of attention would be higher education and the business environment, as it is in higher education that the leaders of our society are prepared. In this context, it was decided to investigate the behavior of students as users of the services of Higher Education Institutions and main evaluators of satisfaction with their academic experience. Therefore, it is in this sense that we recognize the value of including in our investigation the higher education environment and its relationship with people and their well-being. In the next few chapters, we'll delve into these themes.

1.2 Research problem

From the above, it is clear that the current moment is one of paradigm shift in societies. It seems that the success of a nation is not only measured by its capacity to increase its GDP (Gross Domestic Product), but mainly by its capacity to generate well-being and quality of life

for its population. Therefore, the whole scenario described above inspired this researcher to define the purpose of this thesis as

“To deepen the scientific knowledge already developed about happiness, in order to deliver more value to society, inviting people to reflect on their lives and what makes them happy and, with that, contribute to the construction of a happier society”.

Atypically, this path emerged after the conclusion of the thesis qualification project and changed it almost completely. At the suggestion of the professor, a preliminary exploratory research was carried out on the theme of happiness and education, which resulted in the identification of some premises for the investigative process. Are they:

- a) the growing interest of societies (Jain, Sharma, and Mahendru, 2019) and governments in happiness (Cummins, Lau, Mellor, and Stokes, 2009);
- b) the finding that, in some countries, the basis for the construction of public policies is to identify what makes people feel happy and satisfied with their lives (Helliwell, Layard and Sachs, 2015);
- c) the need to identify mechanisms for people's well-being; as a way to improve physical, mental and psychological health (Thoits, 2011);
- d) in the interest of organizations, especially those working in higher education, in 'deciphering' the mechanisms of motivation, assessment and opinion formation of students (Perelygina et. al., 2020) and
- e) in the modern relationship between education and business, where technology and online education must be combined with happiness and well-being (Harrison, 2021; Sole Blanch, 2020)

From these findings, knowledge gaps that needed investigation were identified:

- a) as the field of knowledge about happiness expands, it becomes increasingly difficult to follow empirical and theoretical advances (Diener et. al. 2018) and, therefore, a greater quantity and quality of research is needed;
- b) The context of education, especially in higher education, is undergoing competitive changes, which requires a new posture. This new posture requires a differentiated look at stakeholders,

in particular, at the behavior of students (Osiyevskyy and Dewald, 2018; Carvalho and de Oliveira Mota, 2010; Moosmayer and Siems, 2012)

c) Research on student behavior is more focused on their satisfaction than their happiness (Elwick and Canizzaro, 2017)

d) There is a scarcity of studies on the academic experience of students and the perception of value in Brazil. (Campos, Santos, and Castro, 2017; Carvalho and de Oliveira Mota, 2010; Santini, Ladeira, et al., 2015; Wilmot, Rushton, and Zandona Hofmann, 2016), especially in higher education institutions, mainly in the educational sector private (Khoo et. al, 2017);

Based on these gaps, the objectives of the thesis were established and are described in the next subchapter.

As the objective of this thesis is broad, some preliminary research decisions were taken. The first of them was to include in the investigation about happiness, information of a philosophical, religious or even popular character, as long as they were cited in scientific sources. The second decision was to include the business and educational environment as a research element, as it is understood as coherent with the interest of the university environment where this thesis is being carried out. The third decision is that the thesis includes a bibliometric study that allows understanding the “state of the art” of the theme of happiness and that it has a “delivery” to society, as a result of this investigative work.

1.3 Thesis structure and objectives

Within the scope of these decisions, a thesis structure was developed, consisting of three stages: 1) a bibliometric analysis and systematic literature review on the topics of happiness and education; 2) field study carried out with higher education students in the business area; 3) a field research involving the general public, with the objective of proposing, testing and validating a happiness scale that had some difference in relation to the existing scales.

The first stage: bibliometric study and systematic literature review, emerged:

1) Due to the interdisciplinary nature of areas related to the topic of happiness (Diener, Lucas and Oishi, 2018; Dominko and Verbic, 2019) and the growing number of scientific publications (Diener, Suh, Lucas and Smith, 1999; Diener et al, 2013) the need for permanent updating of

the state of the art was perceived. Based on this finding, it was decided to carry out a bibliometric study that aimed to:

- a) Check the evolution of publications of articles on happiness and education;
- b) Identify the organizations, countries and journals that most publish scientific articles on happiness and education;
- c) Identify and analyze the authors who publish the most on these topics and in the areas of education and business;
- d) Identify and analyze the most cited authors;
- e) Analyze the articles with the highest number of citations;
- f) View the clusters formed by authors, organizations, countries and journals.
- g) Analyze the most recently published articles and their research gaps, as well as the suggestions for future research they contain.

The second stage originated from the following premises:

2) The changes that the educational environment, especially in higher education, has undergone in recent decades (Howell and Buro, 2015; Elwick and Canizzaro, 2017, among others) reinforce the need for Higher Education Institutions (HEIs) to better understand their stakeholders, in particular, his students. Allied to this, there is a lack of studies that analyze the student's happiness. From these findings, the following objectives were defined:

- a) Analyze the factors that contribute to the students' perception of value with their academic experience;
- b) Analyze the relationship of these values with student satisfaction;
- c) Check if, based on this satisfaction, students would be more willing to generate word-of-mouth for other people (WOM);
- d) Check whether student satisfaction results in a greater perception of career success.
- e) Test the moderating effect of corporate reputation on these relationships.

The third stage of our studies arose from the finding that:

a) Research on happiness, for the most part, has been carried out at the national or global level, lacking adequate metrics for small groups of people or for specific contexts.

b) The main methods and metrics to measure happiness were carried out using scales that measure isolated aspects of happiness. They lacked an integrated metric involving the various components of happiness;

c) It was not enough to carry out a theoretical-empirical study. We understand that it is essential to “deliver” a tool that allows organizations to identify the levels of people's happiness and use them as an element to improve well-being (corporate social sustainability).

Based on these assumptions, this stage had the following objectives:

- a) Identify and study the main measurement scales of the components of happiness;
- b) Build an integrated scale to measure perceived happiness, which assesses the cognitive, emotional and psychological components of individuals' happiness
- c) Test and validate the proposed scale, in intercultural studies.

This thesis consisted of three investigations that gave rise to three scientific articles, submitted for publication in international journals. Each of the investigations will be detailed in the methodology chapter. The articles resulting from the investigations are entitled:

Paper 1 - Happiness and education: a bibliometric analysis in the area of business and education, from 1945 to 2021.

Paper 2 - Is being at university "paying off"? A study on the student's perception of value and their satisfaction with the academic experience.

Paper 3 - Being happy = more creativity + more career success? Testing the Perceived Happiness Scale.

The present doctoral thesis is structured as follows: chapter 1 introduces and contextualizes the main theme, presents the premises for the development of the study and the research objectives. Chapter 2 deepens the main concepts related to the study, creating the bases for the analysis and discussion of the results. Chapter 3 presents the research methodology adopted, as well as data collection and analysis procedures. Chapters 4, 5 and 6 bring the articles produced from the studies described above. Finally, chapter 7 presents the main conclusions of the studies that

make up the thesis, addressing their limitations and contributions, as well as suggesting future research for the continuation of the scientific process.

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CHAPTER II - LITERATURE REVIEW

2.1 Introduction

In order not to make the literature review presented in chapters IV, V and VI (articles chapters) repetitive, we bring here a brief discussion of the main themes developed throughout this thesis. The central themes refer to two central axes: happiness and education. As cross-cutting themes, we discussed the relationship of the central themes with career success, word of mouth and creativity.

2.2 Happiness and Education

Taking into account popular knowledge, it is possible to observe happiness from various 'angles' or senses. Some people understand that happiness is a state of “intense joy”, others understand that happiness is a state of serenity or emotional balance (Larsen, 2009). There are those who believe that happiness is momentary, 'it happens and it passes', returning at another time. There are also those who believe that it occurs continuously and perennially and that it is perceived throughout a set of moments in life, where positive emotions are more present than negative ones. In this sense, happiness is understood as a 'balance' of emotions and feelings (Kahneman and Krueger, 2006; Larsen, 2009). In this affective balance, the greater the predominance of positive over negative affects, the happier the person feels. However, it is necessary to consider that there are other factors that interfere with the perception of happiness (Stiglitz, Sen and Fitoussi, 2009). One of these factors is biological and is related to the memory capacity that each person has. Our ability to remember the defining moments in our lives (positive or negative moments) is crucial to our cognitive assessment of life satisfaction. It is known that the more recent or emotionally intense the lived moments, the more we will use them to assess our happiness or satisfaction with life (Lyubomirsky, King and Diener, 2005). Another factor that influences our assessment is related to brain function. The nucleus accumbens is the area of the brain responsible for storing emotions. The more positive somatic markers stored in this region of the brain, the happier we will feel (Nettle, 2005). Also from a biological point of view, there are individual characteristics, such as personality, psychological profile, etc., which have been identified as determinants of personal differences. Another factor that also determines our perception of happiness is related to our social behavior. It is known that people are social beings who often make comparisons of their lives with those of other

people. In this sense, educational, personal, social and cultural values form a web called culture that also influences our cognitive and emotional assessment, determining how we assess the world and feel happy, or not, with the life we lead (Veenhoven, 2012).

In this sense, we highlight the important role of education as an element in the individual's preparation for life. Education, whether in the family environment, in the community or even in the schooling process, is, or should be, a fundamental element for people's well-being (Seligman et al., 2009). As we've seen before, there are several dimensions of human life that are important in our perception of happiness. We do not intend in this thesis to exhaust the subject, but we want to bring some elements that allow us to fulfill the greater purpose of the thesis presented in Chapter 1.

This chapter begins by providing a background on happiness and then introduces the main concepts and differences in these constructs. It should be clarified that, throughout the text, the term happiness will be used as a synonym for subjective well-being and representative of people's well-being.

2.3 Happiness throughout history

Happiness throughout history has been seen in many ways, some with similar approaches, others on a whole new spectrum. Many of the assumptions of ancient thinkers (Thales of Miletus; Democritus; Epicurus, Socrates, Plato, Aristotle, among others) are still valid today. Csikszentmihalyi (1990) notes that, compared to the Greeks of 2400 years ago, [...] we don't know much more about happiness. This author notes that it is common today for people to feel that their lives are being wasted and that, instead of happiness, they are filled with boredom, anxiety and dissatisfaction. This is not surprising, as contemporary values in much of the Western world point to the belief that we will be happier if we are richer, dress fashionably, consume certain products, and have a certain physical appearance.

One of the earliest recorded conceptions of happiness comes from excerpts from texts attributed to the Greek philosopher Thales of Miletus. For him, whoever has a “strong and healthy body, good luck and a well-formed soul” is happy. When understanding the thinking of this philosopher, it is clear that for the Greeks happiness was related to having 'good luck' and that this was attributed to the design of the gods. Hence the concept of Eudaimonic Happiness so reported by Aristotle in his works. For the Greeks, the "I" which means "good"

and "Daimon", which means devil, give happiness to the individual who has this "good devil" or a "good genius".

For ancient Greek historians, between the 10th and 5th centuries BC, the predominant thought was that in human life the bad moments were more frequent than the good ones, generating a pessimistic view of human existence. Through philosophy, this pessimistic view was being modified. The philosophical orientation that man was allowed to be happy was gaining ground in life and society through many of his thinkers. Democritus of Abdera (approx. 460 BC / 370 BC), Greek philosopher, defended that man should seek happiness in the moderation of desires and in the recognition of the superiority of the soul over the body. For Democritus, although the body died, the soul remained, as it was composed of atoms and, therefore, its energy was eternal (Harvey, 1987).

The notion of virtue and justice as a principle for human happiness was left by another Greek philosopher named Socrates (469 BC / 399 BC). For him, happiness was not only related to the satisfaction of the body's desires and needs, but mainly of the soul. Therefore, the just and virtuous man was a happy man. Plato (427 BC / 347 BC), one of Socrates' greatest disciples, also postulated the virtue and justice of the soul as the best means of achieving happiness. Another disciple of Socrates who would add to the master's thinking the idea that the happy man is one who has autonomy or self-sufficiency, was Antisthenes (445 BC - 399 BC). The notion of virtue and justice is present in the line of philosophical thought that is conventionally called ethics. The latter was concerned with studying and identifying the good and bad habits of society, attributing to the State the responsibility of creating the necessary conditions for the happiness of its citizens. Ethics was very present in the vision of Aristotle (384 BC / 322 BC), a disciple of Plato and who, moving away from some of his master's precepts, recognized the need that, in addition to a virtuous and fair life, other elements such as good health, freedom and good socioeconomic status were necessary to make the individual happy. He understood that man as a rational being, had as one of his greatest virtues the reflection on life. In Aristotle's view, the exercise of thought "brings Human Beings closer to divinity" (Filippo, 1993).

Later, the so-called Hellenistic schools of philosophy professed that for man to be happy, in addition to being self-sufficient, he must develop an attitude of indifference to what happens around him. One of its exponents was Epicurus (341 BC - 271 BC). For him, pleasure was

indispensable to human happiness. His philosophy also called Hedonism ('Hedone' in Greek means 'pleasure'), very different from what his opponents interpreted as an exaltation of the body and senses, was more focused on a simple and pleasurable life. What Epicurus proposed was a new way of seeing and living life, whose main objective was human happiness. Epicurus' ethics defends that happiness is easily attainable, as long as some natural needs are satisfied, since "happiness is nothing more than the absence of physical pain and a state of mind free from any disturbance or passion". During the Middle Ages, happiness was somewhat forgotten, because in the ideals of Christian philosophers what mattered was the salvation of the soul and not human life on earth. Only in modernity, more precisely at the end of the 17th century and beginning of the 18th century, philosophers such as John Locke (1632-1704) and Leibniz (1646-1716) take up the theme again, admitting a relationship between happiness and lasting pleasure. It is no longer just a hedonistic view. Almost at the same time that the Enlightenment movement, through one of its philosophers Immanuel Kant (1724-1804), separates ethics from happiness, placing it in the realm of pleasure and desire, the idea of happiness as a human right gains space in the Constitution of the United States (1787) and in the ideals of the French Revolution (1789, apud Csikszentmihalyi, 1990; McMahon, 2006). In the 20th century, the Englishman Bertrand Russell (1872/1970) in his work "The conquest of happiness", argues that to be happy it is necessary to reconcile interests and relationships with things and with other men. It is a view that, to be happy, man does not depend on him alone. Another contemporary philosopher, the Spaniard Julián Marías (1989), in his book "Human Happiness", discusses the historical evolution of this theme and argues that the lack of philosophical reflection on happiness may be one of the causes of unhappiness in the world today.

2.4 Happiness in countries

The World Happiness Report is a document prepared by a group of consultants and supported by the Organization for Cooperation and Development (OECD) and which assesses the level of happiness of people in different countries around the world. The first WHR was held in 2012 and since then it has helped to understand happiness in every country.

Analyzing the levels of happiness presented in this report, the gap found between countries with higher levels of happiness and those with lower levels has been explained by differences in six (6) key variables. The variables that explain up to $\frac{3}{4}$ of the differences between the levels of happiness in these countries. Are they:

- Per capita income;
- Healthy life expectancy;
- Social support (measured by people's perception that in times of difficulty they can count on other people);
- Trust (measured by the perception that in government and in business, there is no corruption);
- Perception of freedom to make decisions about your life;
- Generosity (measured by the level of recent donations made in these societies, adjusted for differences in income in each society)

Social support, income and the expectation of a healthy life are the most important among these factors. Another important finding that has helped to better understand the perception of happiness refers to the effect of crises on happiness levels. What can be seen is that, although crises affect the perception of happiness, they are perceived differently. It was noted that countries with greater social capital take from crises opportunities to build greater community cohesion and even improve the perception of happiness. Therefore, environmental catastrophes for some are the 'end' while for others it may be the missing reason for 'a new beginning'. (World Happiness Report, 2015)

One of the arguments for preferring to use, in this thesis, the term happiness instead of subjective well-being is based on the understanding of chapter 2 authors (World Happiness Report, 2015) John F. Helliwell, Haifang Huank and Shun Wang who affirm that the greater justification is in the strength that the word happiness transmits and in the fact that it is culturally preferred and understood. Furthermore, the authors note that the term happiness tends to be understood with a double meaning. Both as an assessment of the current state, subject to mood swings, and a type of assessment of life. It turns out that when we ask about "How happy are you or do you feel?" the respondent tends to give an answer based on the emotion of feeling or wanting to feel happier than he actually can be. There is a strong emotional component based on the 'best personal image to convey'. When we ask "How satisfied are you?", we naturally perceive an evaluative component of life, that is, we tend to make a judgment about the past, that is, evaluate the past in relation to the present and, in this case, we tend to say that we are not "totally satisfied". There is a visible discourse of seeking to be better and better. With the exception of special cases, which are far from the average, we usually want to be better than we are.

Continuing this chapter, it is important to describe the concepts of Well-Being, Subjective Well-Being and Happiness.

2.5 Conceptual differences about happiness, well-being and subjective well-being

There is some confusion between the terms, although, in popular understanding, they are perceived as synonyms, that is, with the same meaning. Referring to Diener (2006), the measurement of Subjective Well-Being is usually considered restricted to the measurement of happiness. In fact, Subjective Well-Being is a broader concept. The concept of Subjective Well-Being used by the OECD (2013) is defined as: "Good mental state, including all the various assessments, positive and negative, that people make of their lives and people's emotional reactions to their experiences" (Diener, 2006; OECD, 2013 p. 10)

The OECD (2013) understands that this definition is inclusive, involving the various aspects of well-being. It shows the concern to understand how people evaluate their lives so far, allowing a balance between positive and negative feelings and also the meaning that people see in their lives. The measurement model used in the World Happiness Report also includes assessment in certain domains of their lives, such as how they feel about health, work, family relationships, finances, etc. In summary, this definition of subjective well-being involves three distinct assessments:

- Life satisfaction assessment - a reflective assessment of people's lives in general or in some specific area of their lives;
- Emotions - an assessment of people's emotional state or feelings they have experienced at certain times in their lives;
- Eudaimonia - an assessment of meaning and purpose in people's lives or good mental functioning.

2.5.1 Understanding life satisfaction assessment

Life satisfaction refers to a process of judgment that people make about the quality of their own lives, based exclusively on their own evaluation criteria (Pavot and Diener, 2009). This demonstrates your cognitive and conscious judgment of how you assess your own life. The assessment of general satisfaction with life allows a reflective look at the state of achievement of our personal goals, a look at what was good and what was not and, finally, a position about

it. Although this general assessment is influenced by assessments in specific domains of our lives, such as satisfaction with health, with work; and that each individual assigns different weights to each of these domains, Diener et al. (1985) argue that it is necessary to have this global judgment of the individual about their lives. However, this does not diminish the importance of assessing specific domains, as each individual assigns different weights of importance according to their pattern of success in life and these assessments provide additional useful information (Frisch, Cornell, Villanueva, Retzlaff, 1992). There is evidence that it is important to assess cognitive aspects separately from emotional or affective aspects. This is because, when evaluating emotional aspects, people can ignore or deny negative emotions, or even let themselves be influenced only by the moment of evaluation.

In affective or emotional assessment, we often do not know what is actually causing or influencing our perception. Therefore, it has a more subjective and unconscious character, often being influenced by mood (affective and momentary temperament). When we assess cognitive aspects, these are reflections of an objective and conscious assessment. This assessment must be complemented so that the conscious and unconscious levels manifest spontaneously.

In short: life satisfaction assessment allows us to reflect on what has happened so far in our lives. It's a general balance of pros and cons. This assessment is more objective and attentive to the circumstances of your life, as well as your values and goals. Therefore, it is understood that, for a more complete assessment of an individual's life, it is necessary to complement the cognitive and emotional aspects resulting in a more comprehensive assessment of subjective well-being or happiness.

2.5.2 Emotions and happiness

As mentioned earlier, emotions are intrinsically related to our ability to measure subjective well-being, which we'll call happiness here. In the view of Stiglitz et. al. (2009, p. 216) o "Subjective well-being encompasses three different aspects: cognitive assessments of a lifetime, positive (joy, pride) and negative (pain, anger, worry) emotions" and must be measured separately to obtain a measure a more comprehensive quality of life for people and allow a better understanding of its determinants. In the Gallup World Poll and in the OECD survey (2012: 2021), the positive and negative emotions considered were: happiness; smile or laugh; pleasure; feeling of security at night; feeling of rest and feeling of interest, as positive emotions, and anger, worry, sadness, depression, stress and pain, as negative emotions. This

relationship between emotions and happiness is mainly noticed when we realize that although we have many definitions of happiness “[...] most of them mention a positive emotional state, with a feeling of well-being and pleasure.” (Ferraz et al. 2007, p. 236) In the view of Ferraz et al. (2007, p. 236) “various states and experiences can produce happiness. Some examples are: love, joy, health, satiety, sexual pleasure, contentment, security and serenity. Emotions such as sadness, fear, anger and disgust, in addition to affective states such as anxiety, anguish, pain and suffering, tend to reduce happiness”. Also in this sense Watson (2000) when referring to happiness states that positive emotions play a role both as a cause and a consequence of happiness, while Huppert and Whittington (2003) identify an independence between emotions that generate positive good and the negative. to be. states that the individual may be in a "neutral state, not feeling particularly good or bad, and also experiencing positive and negative emotions at the same time. These authors point out that morbidity and mortality are more intensely associated with the absence of positive emotions from the than the presence of negative emotions.” (p. 239). Reinforcing this finding, the authors of the World Happiness Report (2013) have already cited that “the existence of positive emotions is much more important than the absence of negative emotions. .] first, it can be inferred that emotions Positive emotions play an important role in life evaluations and, secondly, that the greatest impact on positive emotions is due to the variables freedom and generosity. [...] Large samples of data available in the UK suggest that life purpose plays a large supportive role in life assessments, irrespective of life circumstances and emotions.” (World Happiness Report, 2013, p. 21) ”.

Although some research demonstrates that there is little correlation between external events and our well-being (Brickman et al., 1978; Scheier et al., 2001; Kahneman et al., 2006), Ferraz et al. (2007, p. 238) draw attention to the way we interpret reality. By paraphrasing the assertions of philosophers Democritus and Epictetus that "it is not what happens to the individual that can make him happy, but the way he interprets these events", the authors draw attention to the optimistic and pessimistic postures that individuals have. have to assume a represent what happens in their lives. Although not considered an emotion, but a belief that determines the individual's attitude towards the world, optimism has shown positive results in relation to: the increase in the perception of subjective well-being (Scheier et. al., 2001; Khoo and Bishop, 1997); with a decrease in negative emotions (Curbow et. al., 1993); better quality of life (Wrosch and Scheier, 2003) and high levels of life satisfaction (Chang, 1998). Seligman and Csikszentmihalyi (2000) state that optimism can manifest itself in a circumstantial way (belief that good things will happen in small everyday situations). Peterson (2000, apud Ferraz

et al., 2007, p. 239) considers that optimism has cognitive, emotional and motivational components. Note that people who tend to explain negative events as external to them ("It's not my fault"), unstable ("Won't happen again"), and specific ("this only applies to this event") often have a mood better, more motivation, more perseverance, in addition to achieving greater success and experiencing better physical health conditions" (p. 239). Another personality trait strongly associated with happiness is resilience. This concept refers to the individual's ability to face and overcome adverse situations, leaving these experiences strengthened and transformed. Luthar et al. (2000) define resilience as "a dynamic process that results in positive adaptation in contexts of great adversity". Another psychological aspect related to higher levels of happiness is gratitude. Studies show that people who report an increase in the frequency of this feeling have higher rates of positive affect, well-being, and happiness (McCullough et al., 2004; Emmons and McCullough, 2003).

2.5.3 Eudaimonia and happiness

Eudaimonia or eudaimonic happiness, portrayed by the Greek philosophers, especially Aristotle, always related to a life that does not exist just to enjoy the momentary pleasures, but to be lived in a balanced and harmonious way in the pursuit of the evolution of mind, body and spirit. Aristotle defines well the purpose of the Human Being by saying that "wealth is obviously not the good that we are seeking, because it serves only as a means, i.e. for getting something else" (Annet, 2016, p.39). A happy life is a life with a sense of being and, for those who perceive it as such, it is living with a purpose. A happy man is one who lives in balance with himself and with others.

Eudaimonic happiness is perceived by the sense of balance, justice and ethics that leads to life. According to Deci and Ryan (2008) eudaimonia focuses on living in accord with what is intrinsically worthwhile for human beings - purpose, meaningful relationships, good health, and contribution to community. Nussbaum (2004, p.39) defines eudaimonia as "kind of living that is active, inclusive of all that has intrinsic value and complete meaning, lacking in nothing that would make it richer or better." Annet (2016) summarizes that individuals seek personal fulfillment through a life with meaning of social relationship.

2.5.4 Happiness, creativity and professional success

In our thesis, when testing the perceived happiness scale, we chose two constructs that, invariably, have shown significant relationships with happiness. One of these constructs is creativity and the other is career success. Creativity is generally defined as the generation of ideas, insights, or problem solving that are original (ie, new) and intended to be useful (Ritter and Ferguson, 2017). There are several studies that aim to understand the relationship between creative behavior and happiness (Ahumada-Tello, 2019; Semedo et al., 2017) or to verify the relationship between creativity as a facilitator of personal and social development and student performance (Caballero Garcia et al., 2018). This is also true of the relationship between happiness and career success. Recently, studies replicated after a decade confirm a close link between happiness and personal and professional development (Boehm and Lyubomirsky, 2008; Walsh et al., 2018). In their studies Amabile et al. (2005) found evidence to suggest a linear and positive relationship between positive mood and creativity. Ceci and Kumar (2016) also found a positive relationship with positive mood and a weak relationship with negative mood. According to Semedo et al (2017) and Ahumada-Tello (2019), happiness can predict creativity. According to Boehm and Lyubomirsky (2008, p. 101) “the evidence suggests that happiness is not only correlated with success in the workplace, but that happiness often precedes success measures and that positive affect induction leads to better results in the workplace”. Recently, studies replicated after a decade confirm a strong link between happiness and personal and professional development (Boehm and Lyubomirsky, 2008; Walsh et al., 2018).

Therefore, the literature provides evidence that creativity is a determining factor for the success of people and businesses. It was found that creative behavior is responsible for changing the results in an innovative way that otherwise would not be achieved. Some studies address creativity and its relationship to career development and success in various contexts (Chen et al., 2018; Chen et al., 2015; Shin et al., 2018; Zagonari, 2019).

2.6 Education and the perception of value

In education, especially in the training of high-level professionals, the need to understand people is growing. Understand not only the behavior of individuals in the performance of their social role, for example, as students, but also understand them as Human Beings. However, it was observed that the literature on education has paid a lot of attention to the study of student

satisfaction and little attention to student happiness (Elwick and Cannizzaro, 2017). To change this reality, it is important to teach happiness in schools from the beginning of school life (Seligman et al., 2009; Whaters et al., 2017; White, 2016).

When trying to understand the student's behavior, as an antecedent of their satisfaction with the choice of university and a consequence of their happiness, it is essential to understand their perception of value. This construct is fundamental in the decision process and in student satisfaction. Below, we present a brief summary of concepts related to this and other constructs.

2.6.1 Perception of value in the context of Higher Education

We hear more and more about the importance of understanding human behavior to build long-term relationships. Long-term relationships are those that go beyond the moment of purchase of a product or service and generate more lasting bonds between the parties involved in this relationship (Kotler and Keller, 2012). For these relationships to emerge, it is necessary to know human behavior, from its internal structure (perception, learning, memory, motivation, values, etc.) to the external influences we suffer in the formation of attitudes and choices (Solomon et al., 2017). In the context of Higher Education Institutions, it is considered essential that relationships are created and maintained in order to allow positive word of mouth and, consequently, strengthen the corporate image and reputation.

Higher Education Institutions (HEIs) in general, and Business Schools in particular, have been suffering a major crisis. The need to meet the demands of economic sustainability often requires an increase in school fees and a reduction in operating costs (Cannon and Jagdish, 1994), which is not well regarded by students and, consequently, affects their perception of value. Faced with this situation, managers and teachers have long sought solutions to offer services that promise to add value to students (Stafford, 1994). According to Stafford (1994), a focus on value and a better understanding of the process by which students assess the value of their educational experience is justified in light of these realities. In Seymour's (1992) view, it is necessary to understand the value perspective from the student's perspective to allocate resources and design programs that meet students' needs. It is necessary to adapt the business school environment to the needs of students (Hampton, 1993). As a consequence, this should elicit positive emotional responses from students towards business school and generate positive word of mouth (Bone, 1995; Hirschman and Holbrook, 1982).

The perception of value is directly related to objective (rational expectations) and subjective (unconscious and subconscious) factors. For the purposes of this thesis, we use the perceived value framework described by LeBlanc and Nguyen (1999) and demonstrated in the article “Listening to the customer's voice: examining the perceived value of service among university business students”. The perceived cost structure, here divided into monetary sacrifices and non-monetary sacrifices, follows an adaptation of the questions used by Cronin et al. (1997).

LeBlanc and Nguyen (1999) used the following dimensions of customer value: functional value; epistemic value; social value; emotional value and conditional value, in addition to the corporate image. These dimensions, as mentioned above, comprise the perception of benefits expected or obtained from educational services. As stated by Sheth et. al. (1990) a decision can be influenced by any of the aforementioned values. It is worth briefly conceptualizing each of these values here. Functional value is described by Le Blanc and Nguyen (1999) as benefits related to the perception of the economic value of a good or service. In the educational context, the perception of the usefulness of the knowledge and training acquired in the university course may be associated with factors such as: improving the professional career, job promotion, creating an entrepreneurial activity or obtaining a better job. The epistemic value, in turn, in the view of Sheth, Newman and Gross (1991) is the one in which the decision maker values knowledge, curiosity and novelty. In the educational context, it can be deduced that this value is typical of individuals who constantly seek to be recognized for their knowledge, as they are always discovering new things and making a difference in their environment. Social value deals with the perception of the usefulness that a given choice will bring to those who make it, in terms of association with other people. It is, therefore, in the opinion of Sheth, Newman and Gross (1991) the perception that the relationships and associations resulting from a choice can bring 'fruits' both at a personal and professional level. With regard to the educational context, it can be deduced that those who perceive the social value see benefits in relationships and networking in the academic environment, whether with university professors and employees, or with colleagues. It is a representation of other people's influence on our choices. For example, the perception of social value is the belief that we need the acceptance of others to develop, improve or maintain self-image (Grewal and Levy, 2018). Therefore, when we understand that other people, directly or not directly related to a choice, can give us a reference about what is "right or wrong" for that social group, we are very likely to be concerned about the opinion of other people. as a way to guide our choices.

Emotional value is defined as the consumer's perception that a choice has the ability to arouse feelings or affective states. An alternative choice, whether product, service, or idea, “acquires

emotional value when associated with specific feelings or by precipitating or perpetuating those feelings” (Sheth, Newman and Gross, 1991, p. 161). In our research, the questions used by Le Blanc and Nguyen (1999) assess the students' feelings of pride, self-confidence and personal fulfillment, when reflecting on the choice they made for the university course.

The last of the five values pointed out by Sheth, Newman and Gross (1991) refers to Conditional Value. This is defined as a set of physical or social circumstances that increase the functional or social value of a given choice (Sheth, Newman and Gross, 1991). In our study, the conditional value is represented by the physical structure and other pedagogical actions (such as group work) that can be perceived as adding value to the student in their training.

Another variable used by Le Blanc and Nguyen (1999) in their article cited above is corporate image or also considered, if not in its entirety, as associated with corporate reputation. It is possible to interpret the corporate image as the way the organization is perceived in the present moment or compose an evaluation over time. Reputation, on the other hand, is the image built over the time the organization operates and how it operates. In our research, the corporate image variable is composed of questions that verify the student's perception of the influence of the reputation and image of their university on the value of their course. It also questions whether the student had positive word-of-mouth influences on his university.

On the other hand, the perception of value is made up of sacrifices that the student must face in their academic experience. Monetary sacrifices are the financial or economic costs that students incur in choosing an academic experience (Samara and Morsch, 2005; Gallarza, Seric and Cuadrado, 2017). On the other hand, non-monetary sacrifices refer, for example, to the costs of time and socializing with friends and family (Ledden et al., 2007) or of adaptation to the local culture (Gallarza, Seric and Cuadrado, 2017) that students have to “give up” when opting for this academic experience.

2.6.2 Student satisfaction with their academic experience

As we mentioned earlier when addressing value perception, people often make comparisons before formulating opinions and making decisions. This also occurs when assessing satisfaction or dissatisfaction with a product or service. In this sense, the assumptions of the Disconfirmation Paradigm (Parasuraman, Zeithaml and Berry, 1988) are still valid and current. The authors claim that we are continually forming opinions and creating expectations about the performance of something (products; services; ideas; etc.). When these expectations are met,

we will be satisfied; if performance falls short of expectations formed about a product or service, we will likely be dissatisfied. In this sense, satisfaction is the "feeling of pleasure or disappointment that results from the comparison between the perceived performance (or result) of a product and the buyer's expectations" (Tsiros, Mittal, and Ross, 2004). In the context of providing educational services, satisfaction can be understood as the way in which the student positively evaluates their academic experience. Extrapolating the academic environment, it is clear that a satisfactory experience is a factor that contributes to the well-being of students and impacts their assessment of satisfaction with life (Sheu and Bordon, 2017; Almeida et al., 2020).

As social beings, many people prefer to share their experiences and opinions. In this sense, the relationship between the level of satisfaction or dissatisfaction with a product or service and the sharing of this information is presumable. This concept is described in the literature as word of mouth (WOM).

2.6.3 Student satisfaction and Word of Mouth (WOM)

Word of mouth can be conceptualized as “[...] the level at which a customer informs their friends, colleagues and relatives about a product, which generated a certain level of satisfaction” (Parsa and Sadegh, 2015, p. 1249). In this sense, positive information about the student's level of satisfaction with the academic experience will likely have impacts on the perception of value and evaluation of other people with whom the student has shared the result of their experience. It is perceived, therefore, that a positive word of mouth will have effects on the perception of quality and reputation of a course or even a university (Özdemir et al., 2016). Positive comments from students about their satisfaction help to strengthen the brand, encourage other students and higher education candidates to decide to join and experience the services offered by universities, thereby helping to attract new students (Le, Robinson, and Dobele, 2020; Yang, Yen and Balmer, 2020).

2.6.4 Student satisfaction and expectations of career success

Choosing a career has always been an important decision in many people's lives for several reasons. One of them is that, normally, the choice of a career represents the choice of a profession that the individual will have for life (Yang et al., 2020). Another reason is that this

decision involves investments of time and money that, for many people, represent a “burden” in the personal or family budget. In addition, other factors such as: valuing the profession in society; duration of the chosen course; the demand for the profession, the possibility of professional success and the salaries offered are decisive in this decision (Lee and Lee, 2006). Liao and Ji (2015) state that when students choose a course aligned with their personal interests and that they have high expectations of success in their future career, they also tend to be more satisfied with the choice made, “[...] they make an effort to learn, feel competent to achieve their academic goals and more useful for their future careers, thus increasing their level of commitment to the course and the institution” (Liao and Ji, 2015, p.165). Beggs, Bantham and Taylor (2008), when studying the influencing factors in the choice of the course, also obtained similar results, confirming the correspondence between personal interests and the expectation of satisfaction with the course as the factor that most influenced the decision of students at a public university in the USA.

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CHAPTER III - METHODOLOGY

3.1 Introduction

In this chapter, we will describe the methodological procedures adopted in the three investigations that make up this thesis. The structure of the chapter describes the type of investigation, the data collection methods and techniques, the preliminary procedures adopted and the data analysis techniques adopted in each investigation.

3.1.1 Research strategies

Considering that the objective of this thesis aims to "deep scientific knowledge about happiness in order to add more value to society", and "recognise the role of education in the formation of personal values and, consequently, in the state of happiness, it was defined as an general objective of the thesis: "To analyze the knowledge already produced about happiness, in the context of business and education, to produce something that can be delivered to society." To achieve this general objective, the research strategy adopted was to carry out a comprehensive review of the literature in the form of a bibliometric analysis. Another strategy adopted was to understand the level of satisfaction / happiness of students with their academic experience through field research carried out. in a Business School. And finally, after the creation of a scale of Perceived Happiness, another field survey was carried out to test and validate this metric in society at large.

Each of the specific objectives, their results and contributions are presented in chapter VII. Next, we will detail each of the research strategies adopted.

3.2 Bibliometric analysis

In line with the purpose and objectives of this thesis, an extensive literature review was carried out to identify the body of scientific knowledge developed on happiness and education; the main research trends and, consequently, the knowledge gaps that would indicate opportunities for future research in this area. Therefore, a bibliometric study was used, complemented by a systematic literature review. According to Zupic and Cater (2015, p. 429), bibliometric studies "introduce a measure of objectivity in the evaluation of scientific literature and have the

potential to increase the rigor and mitigate researcher bias in scientific literature reviews, aggregating the opinions of several scholars working in the area".

Data were obtained through the Web of Science (WoS) platform. The Web of Science is a set of databases also known as the "Science Citation Indexes" compiled by the ISI (Institute for Scientific Information). In addition to these, the "Current Chemical Reactions" and "Index Chemicus" databases are also included in the Web of Science. From these databases, the impact factor of journals is calculated, as well as other bibliometric indicators present in the «Journal Citation Reports» (B-On, 2021). It is verified in the literature that several bibliometric works use this database (Kullenberg and Nelhans, 2015; Dominko and Verbic, 2019). Web of Science has one of the largest collections of academic publications, which allows it to analyze and filter information essential to the scientific mapping of publications, authors and citations, as well as the countries and organizations that publish the most. According to Dzikowski (2018, p. 283), "WoS provides a unique resource for citation counting, which allows qualifying the relative importance of articles from a large group through the use of an objective measure of influence". Bibliometric analysis was chosen because it is an adequate technique to analyze and classify a large volume of information (Pritchard, 1969).

Data collected from Web of Sciences were exported to Excel for Windows software and organized into tables and graphs. WoS data was also exported to VOSviewer software for construction and visualization of bibliometric networks and cluster analysis. VOSviewer is software that allows you to include, for example, journals, researchers, organizations and countries and build networks based on citation relationships, bibliographic coupling, co-citation or co-authorship. VOSviewer also offers text mining functionality that can be used to build and visualize co-occurrence networks of important terms drawn from a body of scientific literature (see VOSviewer.com).

Data collected in our bibliometric study included publications of scientific articles from 1945 to 2021. Data collection was limited to publications on Happiness and Education. For the search in WoS about happiness, the keywords recommended by Kullenberg and Nelhans (2015) were used: "happiness" OR "subjective well-being"; OR "satisfaction with life"; OR "positive affect", adding OR "eudaimonic happiness"; OR "satisfaction with life"; OR "negative affect" OR "affective balance". The latter have been included because they give fuller meaning to what we call perceived happiness (see Pavot and Diener, 1993; Helliwell, Layard, and Sachs, 2012). To search by education, the keywords were added: "education" OR "higher education".

In the initial search, 50,013 publications were found, most referring to articles in the field of psychology and its sub-areas. As our interest was academic-scientific publications in the area of business and education, we only filtered by type of document the “articles”, “proceeding papers” and “early access”. We only chose articles from the following Web of Science categories: "education educational research"; "education special"; “education scientific disciplines”; "management"; "economy"; "business"; "business finance"; "public administration"; “hospitality, leisure, sport, tourism”; "ethic"; "multidisciplinary sciences"; "social sciences interdisciplinary"; "behavioral sciences"; "sociology"; "philosophy"; "neurosciences"; "psychology"; "psychology applied"; "psychology multidisciplinary"; "psychology educational"; "psychology social". These categories were chosen because they are directly or indirectly related to business and education (they resulted in 2,112 articles).

These 2,112 publications were exported from the Web of Science platform and processed in VOSviewer and Excel software. Initially, a qualitative analysis was performed to exclude articles that did not meet the research objective. From then onwards, the bibliometric analyzes presented in Chapter IV were carried out.

3.3 Field study 1 - Perception of value and satisfaction with the academic experience

3.3.1 Research classification

This research aimed to understand the relationship between the student's perception of value and satisfaction with their academic experience, with possible consequences for the perception of career success and positive word of mouth. Due to the research problem and its objectives, it was considered appropriate to carry out a field research with a quantitative, descriptive and conclusive design approach. Hair Jr. et. al. (2014) state that descriptive research is based on three factors, namely: “(1) the nature of the problem or initial opportunity; (2) the research questions and (3) the research objectives. Descriptive studies in the view of Malhotra (2018) are particularly useful when one intends to identify the relationship between the - variables or even the degree to which these - variables are related. Hair Jr. et. al. (2014, p. 111) reinforces our choice arguing that “[...] if the task is to identify the relationships between the variables or to determine whether there are differences between the groups, then descriptive conceptions are more adequate in most cases”.

In terms of time, this research is classified as transversal due to the fact that collection takes place only at a given time. Malhotra (2018) states that cross-sectional research is the most used descriptive study in marketing research. At the end of the research, it was recommended that, in the future, longitudinal surveys be carried out, which will allow the monitoring of changes in students' behavior over time.

At the stage of defining hypotheses and reviewing the literature, secondary data sources were used. In the field research, primary sources were used through the online research method. Data collection methods and techniques, as well as the procedures performed in data collection, are described in the next section.

3.3.2 Population, unit of analysis and sample

The research was conducted at a Business School of a renowned university in southern Brazil that, for reasons of secrecy, will not be identified. The target population of the research was composed of all university students of this school, and the analysis and sample unit were those who consented and voluntarily adhered to the invitation, through the communication channel of the Business School on the social network Facebook. The questionnaire was made available online through the Qualtrics software. The target population considered was 2,659 enrolled students. The sample size was calculated in this population with a confidence level of 95% and a 5% margin of error. The calculated sample consisted of 336 students, however, 409 responses were collected. After removing the outliers, 383 valid questionnaires remained.

The sampling technique used was simple random probabilistic, that is, one in which all elements of the population have the same chance to participate in the research (Cooper, 2003; Hair Jr. et. Al., 2014; Malhotra, 2018). The main advantages of choosing this sampling method are: 1) the survey results can be generalized to the study population; 2) produce unbiased estimates of population characteristics; 3) ensures that all sampling units have the same chance of participation, which produces a valid representation of the population (Hair Jr. et. al., 2014).

3.3.3 Data collection instrument: construction, validation and pre-test.

The questionnaire was built from an exploratory study of the main measurement scales of the constructs and adapted according to the objectives of this research. It consists of 40 questions (see Appendix A). Below is a brief description of the issues related to each construct:

Construct on Value Perception - This construct aims to measure the students' perception of value in relation to their academic experience in a Business School. The 29 questions are presented in two dimensions. The first dimension is composed of 24 questions and aims to identify what the student 'expects or receives' in their experience as a student in a university course. The second dimension contains 5 questions and checks the students' perception of the sacrifices or costs they assume when enjoying this experience. The dimension of the value receivable "Get" follows the model adopted by LeBlanc and Nguyen (1999) and is composed of the variables: organizational image; functional value; social value; epistemic value; emotional value and conditional value. The dimension of the "Give" value is composed of non-monetary sacrifices and monetary sacrifices. This dimension follows the model used by Cronin et al. (1997), adapted to the context of educational services. The value for the student, in this relationship, is measured by the difference between the two dimensions, represented by the formula: $\text{Perceived Value} = \text{Perceived Benefits} - \text{Perceived Costs}$. The greater the perceived benefit in relation to the perceived costs, the greater the value to the student. The questions were measured on a 7-point Likert scale, with a score of 1 given for "strongly disagree" and a score of 7 for "strongly agree".

Construct about Satisfaction with the academic experience - This construct aims to measure the satisfaction that the student perceives when enjoying the academic experience. The four questions that make up the module were built from the model used by Halstead et al. (1994). These questions measure not only your satisfaction with the course, but also an assessment of your experience at the university. They also question whether the student considers his decision to choose the course to be correct and, if he had to choose again, he would keep the same decision. The responses were measured using a 7-point Likert scale, where the value 1 was assigned to "strongly disagree" and the value 7 was assigned to "strongly agree".

Construct about the possibility of positive word of mouth (WOM) - This module consists of four questions that assess the student's willingness to 'speak well' or positively propagate to other people the experience they had with the course, with the faculty and with the University. In addition to these questions, it ends with a question about the probability of speaking well about all the experience you have obtained or obtained at university. The answers were measured using a 7-point Likert scale, where the value 1 was assigned to "I totally disagree" and the value 7 was assigned to "I totally agree".

Construct on the expectation of career success – This module is composed of three questions, adapted from Turban and Dougherty (1994) whose answers are given on a 7-point Likert scale, according to the expectation of each one in relation to the possibility or expectation of career success. The student is asked about their expectations, after having already experienced university life. The answers were measured using a 7-point scale, where the value 1 was assigned to “very unsuccessful” and the value 7 assigned to “Very successful”.

Socio-demographic questions - This final module of the questionnaire was composed of the respondents' qualification variables. The variables used were: sex; course; academic semester you are currently in; was; marital status and monthly family income.

The data collection instrument (Questionnaire) was submitted to content validation carried out by four professors and researchers linked to the Graduate Program in Administration of the university where the collection took place.

To assess possible difficulties in understanding the terms, words, or even in the structure and filling out of the questions in the questionnaire, a pre-test was carried out, with the participation of 19 students from the Business School. The application of the pre-test was carried out at a specific time, in a room in the computer lab, ensuring that students had the necessary time to answer the questionnaire without interruptions or other factors that divert their attention. Each student had at their disposal a computer and access to the research link, seeking to maintain the ideal conditions for carrying out the pre-test.

Initially, the researcher described the objective of the research and the performance of the pre-test. He warned the participants that, at the end of the answers, they should remain in their places and, in silence, signal the researcher. They must record the time they took to respond. At the end of the pre-test, the researcher talked individually with each of the respondents, verifying the main difficulties they had in answering the questionnaire. The average response time to the online questionnaire was 17 minutes. Minor adjustments to the wording were made to facilitate understanding.

3.3.4 Procedures in data collection

Data collection was carried out through the survey method, with an online questionnaire as a data collection instrument (see Appendix A) which was available for 60 days. Students were

informed and encouraged to participate in the survey through posts on the business school website, on the social network Facebook. The response flow was monitored periodically by the researcher on the Qualtrics website. The method of data collection was the self-administered online questionnaire. As a data collection technique, the online questionnaire was used.

3.3.5 Data analysis methods and techniques

The collected data were generated in the Qualtrics platform and exported to the Statistical Package for Social Sciences (SPSS) software, where they were processed and analyzed. For the graphic treatment the IBM SPSS AMOS software was used. It was decided to use multivariate data analysis techniques, initially generating a measurement model (Exploratory Factor Analysis - EFA) and later a structural model (Confirmatory Factor Analysis - CFA). The model was tested using Structural Equation Modeling (SEM) (see Chapter V).

The factorial validity of this model, applied to a sample of 383 students from a Business School, was assessed through a confirmatory factor analysis with the AMOS software, as described in Marôco (2014). Construct reliability was assessed using Cronbach's Alpha (CRONBACH, 1951) and composite reliability (CR) and the average variance extracted for each factor (AVE) was assessed as described in Fornell and Larcker (1981). The general quality of fit of the factorial model was made according to the indices and respective reference values described in the tables of Maroco 4.1 (2014): X^2 / df , CFI, GFI, RMSEA, P [$rmsea \leq 0.05$] and MECVI . The quality of local adjustment was assessed by factor weights and individual item reliability. The model adjustment was made from the modification indices produced by AMOS and based on theoretical considerations. The reliability of the construct was assessed for each of the variables and showed a high degree of internal consistency (above 0.9). It is observed that, in general, the constructs present acceptable indices considering the reliability criteria estimated by Cronbach's alpha according to the classification of Murphy and Davidsholder (1988). Multivariate normality was assessed through the analysis of asymmetry (sk) and kurtosis (ku), and the variables that manifested themselves close to zero were found to be compatible with a normal distribution (Marôco, 2014). Factor validity was estimated by the standardized factor weights (λ - lambdas) of each item and all are greater than 0.5. The individual reliability of the item, represented by the λ^2 of each item, was also evaluated and the results obtained were higher

than 0.25. Therefore, it is common to admit that the results show that the factors have factorial validity (Marôco, 2014).

3.4 Field study 2 – Proposal and validity of a perceived happiness scale

3.4.1 Research classification

This research was carried out with the objective of testing and evaluating the psychometric properties of a unified scale of perceived happiness. It is called a 'unified' scale because it is composed of questions contained in several metrics that already exist and are validated, but that were presented in other studies, separately. To test the proposed scale, two studies were carried out, one in Portugal and the other in Brazil.

The research is classified as field research, carried out in two phases: an exploratory and a descriptive one (Malhotra, 2018). The first phase consisted of an exploratory literature review to identify the main measurement scales of constructs related to Subjective Well-Being (here called Happiness). The second phase consisted of a descriptive research, with primary data and carried out through the survey method, with the objective of testing and validating the Perceived Happiness Scale built by the author of this thesis.

3.4.2 Data collection instrument: construction, validation and pre-test.

For field research data collection, a structured questionnaire was used. This was composed of a total of 40 questions obtained through the literature review. From this total of questions, 26 questions make up the Perceived Happiness Scale (PHS); 6 questions are related to the variables creativity and career success (used in predictive studies) and 8 questions make up the respondents' sociodemographic data. More details about the questions can be seen in Appendix B and in subchapters 3.2 and 4.2 of Chapter VI.

3.4.2.1 Construction of the Perceived Happiness Scale (PHS).

The constructs that make up the proposed scale are as follows:

Happiness Construct - In preparing this research, the structure of questions proposed in the OECD's International Manual for Measuring Subjective Well-Being, included in the World

Happiness Report (OECD, 2013) was adopted. Although the original questionnaire was constructed to measure happiness across countries (international level), it adequately serves the purpose of individual level measurements (WHR, 2013).

The formation of the Perceived Happiness Index (PHI) is based on what is considered fundamental in the analysis of Subjective Well-Being: a cognitive assessment of life; an assessment of the emotional state and an assessment of the respondents' meaning and purpose in life (Diener et. al, 2010).

These three dimensions are described below:

a) **Cognitive assessment of life:** consists of a supposedly rational assessment that the individual makes of his/her life and the satisfaction he/she has with it. For this dimension, a question that assesses general satisfaction with life was used, originated from the World Values Survey (WVS), but with the response scale adapted to a scale from 0 to 10 by the OECD consultants. Other versions of this method have been used in the European Social Survey, the German Socio-Economic Panel, the British Household Panel Study, the Canadian General Social Survey and, more recently, the INSEE [French Institute for Statistics and Economic Studies] and the ONS [Office for National Statistics - UK]. This assessment is also composed of five questions that make up the Satisfaction with Life Scale - SWLS. The SWLS is one of the most tested and most reliable multi-item scales in terms of life assessment. It has greater reliability than single-item measures and is more robust to interpersonal differences in scale interpretation than a single-item measure. Pavot and Diener (1993) suggest that the analysis of the answers to these questions is made by the sum of each answer and then the degree obtained is classified into:

- ✓ 5 to 9 - Extremely dissatisfied;
- ✓ 10 to 14 - Dissatisfied;
- ✓ 15 to 19 - slightly dissatisfied;
- ✓ 20 - neutral - neither dissatisfied nor satisfied;
- ✓ 21 to 25 - slightly satisfied;
- ✓ 26 to 30 - satisfied;
- ✓ 31 to 35 - extremely satisfied.

In the elaboration of the perceived happiness index (IPH), the average of the questions was used to define the individual's life satisfaction.

b) **Emotional assessment:** consisting of 10 questions that seek to identify the feelings experienced by respondents in the present moment. The objective is to obtain information about the positive and negative emotional state of the respondents, analyzed individually or in a composite index. These questions originate from the Positive and Negative Experience Scale (Diener et. al, 2010) and were used in the Gallup World Poll and the European Social Survey (ESS). The configuration of four questions that assess positive emotions and six questions that assess negative emotions was used in the World Happiness Report (WHR) and is the result of psychometric tests that attest to a more adequate configuration for effective measurement of the emotional state of the participants (OECD, 2013). A composite measure can be calculated by subtracting the positive and negative states for each respondent through the average of all respondents, which will result in a value between -10 and +10 (Kahneman and Kruger, 2006). The states of balance or emotional balance can indicate the predominance of recent feelings in the interviewees or in a certain group of them.

c) **Assessment of the purpose and meanings of life:** composed of questions that describe how they behave when faced with situations in their lives and how they react to them. They also assess whether everything you've done in life has been worth it. It is intended to measure different concepts that are sometimes described as “eudaimonia” or as an Aristotelian notion of well-being (Huppert et. al., 2009; Senik, 2011; Deci and Ryan, 2008). These questions cover a range of different mental attributes and functions that are relatively diverse and constitute a mental flourishing. One of the questions that measure eudaimonia (Aristotelian view of happiness) in general, originates from the question developed by the ONS (Dolan, Layard and Metcalfe, 2011) in their experimental studies on subjective well-being and used in the “Annual Population Survey” from April 2011 to March 2012. The other questions measure attributes related to how the individual positions himself in life (positivity, autonomy, optimism, self-fulfillment, etc...) This question module originated from elements of the European Social Survey and the Flourishing Scale proposed by Diener et al. (2010). It is recommended that the questions contained in this module be analyzed independently in order to investigate the different aspects of well-being related to eudaimonia. In the composition of the perceived happiness index (PHI) the average of the questions was calculated.

3.4.2.3 Content validation and pre-test questionnaire

Once constructed, the questionnaire was submitted to content validation carried out by 4 research professors. Before starting data collection with the total sample, the questionnaire was pre-tested with 20 respondents and the necessary adjustments were made for the correct understanding of the respondents. As the research was carried out with Portuguese and Brazilians, care was taken to carry out the pre-test and content validation with the natives of each country.

3.4.3 Data collection procedures

The survey had the participation of a total of 604 respondents, 222 Portuguese and 382 Brazilian (only valid responses). The survey was applied through an online form available on the Qualtrics platform and made available to students through an internet access link. The links were sent to participants via Facebook's social networks and by email. The sampling technique used was snowball, where each participant is encouraged to invite other respondents to participate in the research (Cooper, 2003; Hair Jr. et al., 2005; Malhotra, 2018).

3.4.4 Data analysis methods and techniques

Questionnaire responses were measured on 11-point Likert scales (from 0 to 10). Multivariate data analysis techniques were used, processed through SPSS and AMOS software. To verify the quality of the proposed scale, the following statistical procedures were adopted: a) internal consistency (Cronbach's alpha; composite reliability (CR); b) construct validity (CVA); c) exploratory factor analysis (EFA) and d) confirmatory factor analysis (CFA). Structural equation modeling was used as a multivariate data analysis (SEM) technique.

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CHAPTER IV - HAPPINESS AND EDUCATION: A BIBLIOMETRIC ANALYSIS IN THE AREA OF BUSINESS AND EDUCATION, FROM 1945 TO 2021

Abstract

Never, in the recent history of mankind, have we been faced with the need to take a closer look at our lives and our relationships with other beings on planet Earth. The COVID-19 pandemic is making people think more about what is valuable in their lives and what makes them happy or unhappy. Our education, our values, attitudes and life purposes are being tested. Talking popularly about happiness is part of people's daily lives, but what about scientific knowledge: is science giving due attention to happiness? To answer this question, it was decided to carry out a bibliometric study of the publications of scientific articles on happiness, especially those related to education. For that, the bibliometric analysis technique was used on a database obtained through the Web of Science platform. The main results demonstrated: a) the growing and continuous increase in publications on happiness; b) the emergence of new research and researchers dedicated to understanding happiness in the school environment; c) in addition to the leadership of organizations and journals in the USA and the United Kingdom, the presence of other countries and universities in this scenario; d) the existence of some gaps, such as the lack of research on eudaimonia (purpose and meaning of life), and e) scarcity of studies on happiness with young people of school age. Finally, we suggest some trends for future research.

Keywords: happiness; subjective well-being; education; bibliometric studies; life satisfaction; higher education.

1 Introduction

Even though it has been a theme that has deserved the attention of mankind for many centuries, happiness continues to arouse the interest of popular literature and science. In the past, happiness was studied empirically and often associated with philosophical or religious reflection. Currently, scientific investigations on the subject are interdisciplinary, with research in different areas, including psychology, economics, sociology, philosophy, gerontology, kinesiology and health sciences (Diener, Lucas, and Oishi, 2018; Dominko and Verbic, 2019).

Since the beginning of the 21st century, we have seen an increasing number of scientific publications. In a more comprehensive review carried out in 1999, it was estimated that 170,000 articles had been published on Subjective Well-Being / Happiness (Diener, Suh, Lucas, and Smith, 1999).

Diener, Inglehart, and Tay (2013) estimate that the number of new scientific articles on the topic has grown from around 130 articles per year in 1980 to more than 1000 articles per month. Stiglitz et al. (2009) attribute this increased interest in happiness to the growing gap found between the information on well-being contained in aggregated data and people's own assessment of it.

More recent scientific publications have addressed the relationship of happiness with the most diverse areas of knowledge and subjects: sexuality and sexual identity (Perry, 2020; Suppes, Napier, and Van Der Toorn, 2019); the use of technology and social media (Phu and Gow, 2019; Twenge, 2019); pollution and climate (Fanning and O'Neill, 2019; Shahbaz and Sinha, 2019); family and married life (Daniels, 2019; Grover and Helliwell, 2019); and health (Calderon, Pupanead, Prachakul, and Kim; Pengpid and Peltzer, 2019). In the context of business and education, happiness has been related to higher education and students (Bieda et al., 2019; Dean and Gibbs, 2015; Elwick and Cannizzaro, 2017; King and Datu, 2017); career success (Joo and Lee, 2017; Lent, Brown, Sheu, Liu, and Li, 2017; Walsh, Boehm, and Lyubomirsky, 2018); and creativity (Dias Semedo, Matos Coelho, and Pereira Ribeiro, 2017; Tan et al., 2019; Van de Vliert and Van Lange, 2019), among other subjects.

It is observed that this multidisciplinary way of looking at happiness, on the one hand, increases the complexity of the theme, while on the other hand it makes its understanding more complete. Therefore, as the field of knowledge about happiness expands, it becomes increasingly difficult to keep up with the various empirical and theoretical developments that emerge (Diener et al., 2018). In the business context, there is growing concern about the effects marketing policies, strategies and practices have on happiness and well-being. This involves considerations about the effects of food and beverage ads on the well-being of children (Zambrano et al., 2021), as well as on the subjective financial well-being of consumers (Nanda; Baneerj, 2021); or the alignment of consumer happiness with brand personalization (Braxton and Lau-Gesk, 2020). The growing commercialization generated by the interest of large corporations in the education sector, which previously devoted itself almost exclusively to pedagogical studies aimed at teaching and generating knowledge, assumes strategic importance. Managers and educational institutions need to understand all stakeholders (students, teachers and administrative staff) to define their management and education strategies. Higher Education Institutions (HEIs) now

need to generate results, not only educational, but also financial, and for this, they need to better understand all audiences, their needs, desires and everything that impacts their well-being (Howell and Buro, 2015). However, according to Elwick and Cannizzaro (2017), higher education is, in fact, still far from this understanding. The authors cite, for example, that studies that investigate student happiness are scarce, evaluating only student satisfaction. It is clear that HEIs need to investigate the happiness of students, teachers and administrative professionals beyond the school environment, understanding them more completely, in other areas of their lives. This attention to happiness in education is reinforced by Ryff's study (2016, p. 41), which states that "high levels of education are associated with high levels of well-being", demonstrating that HEIs have a responsibility that goes beyond professional training, educating their students to happiness (Seligman, Ernst, Gillham, Reivich and Linkins, 2009; Joseph, Murphy and Holford, 2020).

Therefore, there are gaps to be filled, both in the literature on student happiness and in the practice of Education Institutions that need to recognize the mechanisms for stimulating and developing this student happiness. Therefore, in order to fill this gap generated by the need for knowledge renewal, the objective of this study was to carry out a wide bibliographic review of publications on Happiness, especially related to the area of education, identifying and suggesting gaps and investigation opportunities in this field. To do so, we seek to identify the current dynamics of the investigation on happiness in relation to its role on HIES, combining bibliometric analysis and systematic literature review.

The bibliometric analysis technique was used to provide an overview of the research that would allow the identification of the most important articles, authors, journals, organizations, and countries that research these themes. The database was extracted from the Web of Science, from 1945 to April 2021.

The justification for choosing these themes is based on:

- a) the growing interest of societies (Jain, Sharma, and Mahendru, 2019) and governments for happiness (Cummins, Lau, Mellor, and Stokes, 2009);
- b) the finding in some countries that the basis for building public policies is to identify what makes people feel happy and satisfied with their lives (Helliwell, Layard and Sachs, 2015);
- c) the need to identify people's well-being mechanisms as a way to improve physical, mental and psychological health (Thoits, 2011);

- d) the interest of organizations, especially those working in higher education, in ‘deciphering’ the mechanisms of motivation, assessment and opinion formation of students (Perelygina et al., 2020) and
- e) the modern relationship between education and business, where technology and online education must be combined with happiness and well-being (Harrison, 2021; Sole Blanch, 2020)

The rest of the article is organized as follows. Section 2 presents the brief literature review. Section 3 presents the data and methods used to analyze happiness and education in higher education. Section 4 presents the results and discussion of our analysis, while section 5 presents the conclusion of the research.

2 Literature review

Although it is a secular concept, it is almost common sense in academic literature that happiness is not just contentment, joy and pleasure. It is much more than that; it involves not only subjective evaluations of life, but also emotional aspects and a sense or purpose of life. The concept of Diener et al. (2006) adopted by the OECD in the World Happiness Report (2013, p. 10) defines happiness as being: “Good mental state, including all the various evaluations, positive and negative, that people make of their lives and the emotional reactions of people to their experiences.” Many scholars on the topic present concepts and definitions about what happiness is and what makes people happy (Lyubomirsky and Ross, 1997; Oishi, 2012; Oishi et al., 2013; McMahon, 2006; among others). There is no consensus on this, as each specialist (philosophers, psychologists, sociologists, anthropologists, biologists, neuroscientists, etc.) interprets and defines happiness according to their specialty and is influenced by its context and time period. Larsen and Diener (1987) distinguish between two types of happiness: a) “relaxed happiness”, represented by the feeling of peace of mind, serenity, harmony and that everything is happening according to our expectations and life purposes; or b) an “excited happiness” represented by the sensation of success, surprise and joy”. It seems to us that, in a postmodern society, the second type of happiness cited by Larsen and Diener is the one sought by most people.

The hectic pace of life at the end of the 20th century seems to put happiness in a liquid state (Bauman, s.d., *apud* McKenzie, 2019), which is always sought after and not always found. As Bertrand Russell states in his classic work: *The Conquest of Happiness* (1930), the excessive search for happiness leads to unhappiness, due to the anxiety generated in those who seek it. Today, perhaps more than ever, the Covid19 pandemic moment seems to be giving new meaning to people's perception of happiness. In several parts of the world, research has been done to assess the effects of the pandemic on people's well-being: China (Yang and Ma, 2020); Iran (Khodabakhsh and Somaye, 2020); Croatia (Vilovic et. al, 2021); India (Datta and Tripathi, 2021); UK (Gilleen et al., 2021) among others. A comparative study of the effects on the pressure suffered, the resilience and exhaustion of frontline workers in combating the pandemic was carried out in the United Kingdom and Ireland. It was found that the reaction time and the measures adopted by each of the countries resulted in different impacts on the well-being of workers (Sumner and Kinsella, 2021). Like this one, several other studies have tried to follow the changes in society and in what leads people to a happy life.

On the other hand, education has, in recent decades, been more focused on the professional training of people, preparing them for the world of work (Seligman et al., 2009; Gibbs, 2015). There are critics who claim that it moved away from ethical and moral aspects in order to turn to technical preparation. However, it seems to us that, in this century, when happiness is increasingly talked about (and researched), these concepts have been addressed more frequently (Gibbs, 2015). One of these forms of approximation is through positive education (Seligman et al., 2009). Seligman et al. (2009) define positive education as education for the development of traditional skills and also for happiness. Using the principles of Positive Psychology, they argue that the teaching of happiness should be taught in schools for three reasons: "as an antidote to depression, as a vehicle for increasing life satisfaction and as an aid for better learning and more creative thinking" (2009, p. 295). In addition, they claim that it probably produces increases in learning.

Other studies have sought to explain the relationship between happiness and education: Lee (2008) investigated the relationship between education and happiness from the perspectives of the West and the East, especially Buddhism and Christianity, as well as the great classical thinkers of Greece and China. Another study carried out by Elwick and Cannizzaro (2017, p. 204) investigated the existing literature on happiness and higher education, and found that "[...] there is a real shortage of literature related to profound happiness in higher education: much of the literature using the terms happiness and satisfaction indistinctly as if one were equivalent to the other [...]" (p.204). Many articles and documents have sought to investigate this

relationship. Following our bibliometric study, we will present those that we consider most relevant and/or current.

3 Data and Methodology

Our study was based on data obtained through the Web of Science (WoS). Many of the bibliometric works used this database (Kullenberg and Nelhans, 2015; Dominko and Verbic, 2019). The Web of Science has one of the largest collections of academic publications, which allows it to analyze and filter information essential to the scientific mapping of publications, authors and citations, as well as the countries and organizations that publish the most. According to Dzikowski (2018, p. 283), “WoS provides an exclusive resource for counting citations, which allows to qualify the relative importance of articles from a large group through the use of an objective measure of influence.”

We chose bibliometric analysis, as it is an adequate technique to analyze and classify a large volume of information (Pritchard, 1969). VosViewer was used as a cluster visualization and analysis software. The data generated in the Web of Science was imported into Excel for Windows software and organized in tables and graphs. Data collection on the Web of Science took place in early April 2021 and included publications from 1945 to April 19, 2021.

For the search in the WoS about happiness, the keywords recommended by Kullenberg and Nelhans (2015) were used: “happiness” OR “subjective well-being”; OR “satisfaction with life”; OR “positive affect”, adding OR “eudaimonic happiness”; OR “satisfaction with life”; OR “negative affect” OR “affective balance”. The latter were included because they give a more complete meaning to what we call perceived happiness (see Pavot and Diener, 1985; Layard and Helliwell, 2012: 2015; and others). To search for education, the keywords were added: "education" AND "higher education".

In the initial search, 50,013 publications were found, the majority referring to articles in the field of psychology and its subareas. As our interest was academic-scientific publications in the area of business and education, we only filtered by type of document the “articles”, “proceeding paper” and “early access”. We only chose articles from the following Web of Science categories: "education educational research"; "education special"; "Education scientific disciplines"; "management"; "economics"; "business"; "business finance"; "public administration"; "hospitality leisure sport tourism"; "ethics"; "multidisciplinary sciences"; "interdisciplinary social sciences"; "behavioral sciences"; "sociology"; "philosophy";

"neurosciences"; "psychology"; "applied psychology"; "multidisciplinary psychology"; "educational psychology"; "social psychology". These categories were chosen because they are directly or indirectly related to business and education (result: 2,112 articles).

These 2,112 publications were exported from the Web of Science platform and processed in the VOSviewer and Excel software. Initially, a qualitative analysis was performed to exclude articles that did not meet the research objective.

4 Results and Discussion

The results will be presented in subsections containing: a) the evolution of publications on Happiness and Education; b) the authors with the largest number of published articles; c) journals with the largest number of published articles; d) organizations with the largest number of publications; e) the countries with the highest number of publications on happiness and education; f) the most important terms or keywords contained in articles on happiness and education. Finally, we present a qualitative analysis of the 20 most recently published articles. When importing the results from the WoS database into VOSviewer, we follow the steps recommended by Zupic and Cater (2015).

4.1 Bibliometric analysis of Happiness and Education

4.1.1 Evolution of publications on Happiness and Education

A first analysis of our database showed the evolution of publications on happiness associated with the area of business and education (see Table 1).

Table 1 - Total articles published per year.

Year	N°	Year	N° articles	Year	N° articles	Year	N° articles
1966	1	1995	9	2004	15	2013	102
1976	1	1996	5	2005	12	2014	125
1978	1	1997	8	2006	15	2015	165
1985	1	1998	12	2007	18	2016	181
1987	1	1999	9	2008	36	2017	188
1990	1	2000	7	2009	51	2018	235
1992	6	2001	8	2010	73	2019	236
1993	3	2002	13	2011	71	2020	292
1994	7	2003	12	2012	97	2021	95

Source: Elaborated by the author (2021)

There has been a growth in publications, especially since 2012. In 2020, even with the “pandemic effect”, we still had a high number of publications.

4.1.2 Authors with the largest number of published articles

Analyzing the authors with the largest number of articles published on the topic, we initially located 5,501 authors. After clearing the names of the authors (thesaurus) and adopting the minimum limit of 3 articles per author, we obtained 100 authors and co-authors. Tables 2 and 2.1 show two classifications of publications on happiness and education: 1) by number of articles published and 2) by number of citations.

Table 2 - Top 15 authors with most published articles on *Happiness and Education*.

Ranking	Author	Articles
1	Cerda Suarez, Luis Manuel	13
2	Salmela-Aro, Katariina	9
3	Huebner, E. Scott	8
4	Lent, Robert W.	7
5	Gonzalvez, C.	6
6	Datu, Jesus Alfonso D.	6
7	Nikolaev, Boris	6
8	Suldo, Shannon M.	6
9	San Martin, Ricardo	5
10	Vicente, Maria	5
11	Vallerand, Robert J.	5
12	Marcionetti, Jenny	5
13	Taveira, Maria do Ceu	5
14	Becchetti, Leonardo	5
15	Casas, Ferran	5

Source: Elaborated by the author (2021)

According to Table 2, the author with the largest number of articles published on happiness and education was Luís Manuel Cerdá Suárez. Cerdá Suárez is a Spanish professor and researcher who has published articles aimed at investigating happiness in the school environment. It is observed that his publications are recent (post-2016) with emphasis on the effects of the virtual environment and innovation on the happiness of students and teachers. Its publication with the highest number of citations is: “Happiness in teaching: positive emotions for evaluating the relationship between leadership style and performance of the professor in the classroom” (Cerdá Suárez, 2016). The second author on our list with the largest number of published articles is Katariina Salmela-Aro, a Finnish professor and researcher working in the field of education and psychology. We highlight two of her articles: “School burnout and engagement in the context of demands-resources model” (Salmela-Aro, Katja, 2014) and “Achievement goal orientations and subjective well-being: A person-centered analysis” (Tuominen-Soini, Salmela-Aro, Niemivirta, 2008). With eight articles published, professor and researcher Huebner, E. Scott from the Department of Psychology at the University of South

Carolina in the USA appears. In our list, in most of the articles, Hubner is co-author and researcher on the behavior of adolescents in the educational environment. Robert W. Lent is fourth in table 2. Lent is a professor and researcher in the psychology program and stands out for his studies in career and vocational development. One of his articles that deserves to be highlighted is: “Integrating person and situation perspectives on work satisfaction: A social-cognitive view” (Lent and Brown, 2006). The other authors listed in table 2 published five or six articles on happiness and education from 1945 to 2021 (up to April).

Table 2.1 - The 20 authors with the highest number of citations.

Ranking	Author	Citations	Ranking	Author	Citations
1	Deci, E. L	14070	11	Leonard, M.	826
2	Ryan, R.M	14070	12	Mageau, G. A	826
3	Kahneman, Daniel	1024	13	Marsolais, J.	826
4	Koestner, Richard	1021	14	Lykken, D.	742
5	Deaton, Angus	919	15	Tellegen, A.	742
6	Keyes, C.L.M	884	16	Seligman, Martin E. P.	653
7	Ratelle, C. F	877	17	Helliwell, J.F.	566
8	Vallerand, R. J	877	18	Ernst, Randal M.	547
9	Blanchard, C.	826	19	Gillham, Jane	547
10	Gagne, M.	826	20	Linkins, Mark	547

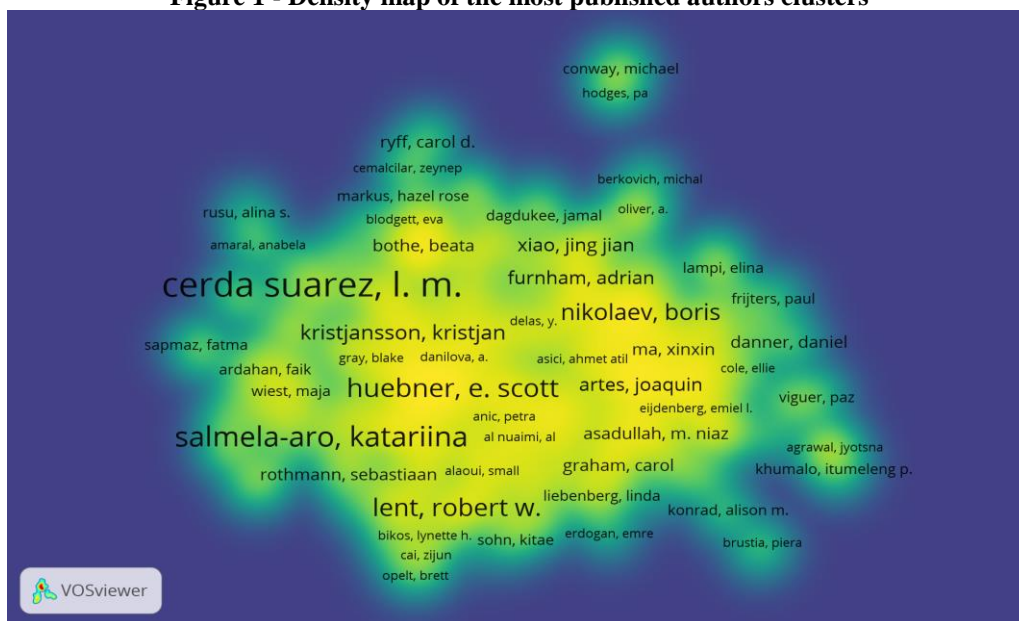
Source: Elaborated by the author (2021)

Table 2.1 analyzed the authors with articles with the highest number of citations. The authors who stood out were the professors and psychologists Edward L. Deci and Richard M. Ryan. The article with the highest number of citations (14,070 at the time of research on the Web of Science) was “Theory of self-determination and the facilitation of intrinsic motivation, social development and well-being” (Deci and Ryan, 2000). The article deals with factors that increase or impair intrinsic motivation, self-regulation and well-being. Their results have led to three innate psychological needs – competence, autonomy, and relationship – that, when satisfied, increase self-motivation and mental health and, when contradicted, lead to decreased motivation and well-being. The article also addressed the importance of these needs and psychological processes in areas such as health, education, work, sport, religion and psychotherapy. Although written in 2000, this article was heavily cited. Another researcher with a large number of citations is Daniel Kahneman. Kahneman is an Israeli psychologist and

economist who stands out for his studies in behavioral economics and psychology in decision making. The article “High income improves the assessment of life, but not the emotional well-being”, written with the Scottish economist Angus Deaton (Kahneman and Deaton, 2010), is one of those that deserves to be highlighted in our table 2.1. The article argues that increasing the income of individuals improves the assessment of their lives, but it does not increase their emotional well-being. Another author who stands out in our table 2.1 is Richard Koestner, co-author of the articles: “Les passions de l'Ame: On obsessive and harmonious passion” (Vallerand, Blanchard, Mageau; Koestner, Ratelle, Leonard, Gagne, and Marsolais, 2003) and “The differential effects of intrinsic and identified motivation on well-being and performance: prospective, experimental and implicit approaches to the theory of self-determination” (Burton, Lydon, D'Alessandro and Koestner, 2006).

All the authors (5462) and their relationships can be checked on the following density map:

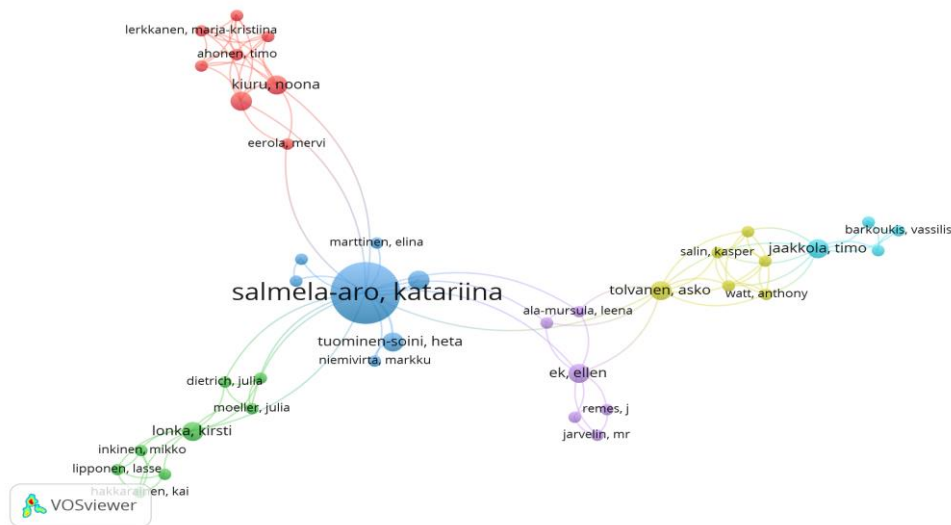
Figure 1 - Density map of the most published authors clusters



Source: Elaborated by the author

It can be seen in Figure 1 that the authors with the largest number of published articles have the caption of their name in a larger font. The layout analysis parameters used in this map followed what Van Eck and Waltman (2020, p. 21) recommend for the analysis of co-authors and authors (attraction 2; repulsion -1). In figure 1.1, we opted for a superimposed visualization that allows us to see the influence authors with the highest number of citations have on the others.

Figure 1.1 - Overlay visualization of the clusters of authors who published the most articles.



Source: Elaborated by the author

For analysis purposes, we checked if there were clusters between the authors who published on the topic. This search resulted in the map contained in figure 1.1. From the total of 5462 authors that make up our search results, the VOSviewer software extracted only 39 authors with a strong connection to each other, forming six clusters.

From this, we can infer that the other authors did not show any behavior in the production of articles that allows the software to identify them as a cluster.

We went further, and carried out a qualitative analysis of the authors that make up these clusters. From this we realized that, in all clusters, there are authors linked to Finnish universities and that the authors of each cluster are usually co-authors of articles published jointly.

For a better understanding of figure 1.1, authors with greater binding strength have a larger label. It can be seen that the author Katariina Salmela-Aro, from the Department of Education at the University of Helsinki (cluster 3) is the one with the highest number of links (17) with other authors who publish on the topic. It was also observed that authors who published more recently on the topic are in cluster 6. Comparing with figure 1, there is an increase in publications on happiness, especially in education, in Finnish universities.

Of the 2112 articles selected in our search, Table 3 shows the ten most-cited articles on happiness and education.

Table 3
The 10 most-cited articles on Happiness and Education.

Article	Year of publication	Total citations
1 - Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being	2000	14070
2 - High income improves evaluation of life but not emotional well-being	2010	914
3 - Social well-being	1998	884
4 - Les passions de l'Ame: On obsessive and harmonious passion	2003	826
5 - Happiness is a stochastic phenomenon	1996	742
6 - How's life? Combining individual and national variables to explain subjective well-being	2003	566
7 - Positive education: positive psychology and classroom interventions	2009	547
8 - A test of self-determination theory in school physical education	2005	492
9 - A short form of the Positive and Negative Affect Schedule: evaluation of factorial validity and invariance across demographic variables in a community sample	1999	398
10 - Social inequalities in happiness in the United States, 1972 to 2004: An age-period-cohort analysis	2008	312

Source: Elaborated by the author

As seen in Table 3, the article with the highest number of citations is, notably, “Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being” (Deci and Ryan, 2000). The article addresses the factors that increase or impair intrinsic motivation, self-regulation and well-being. Their results have led to three innate psychological needs – competence, autonomy and relationship – that, when satisfied, increase self-motivation and mental health and, when contradicted, lead to decreased motivation and well-being. The article also addressed the importance of these needs and psychological processes in areas such as health, education, work, sport, religion and psychotherapy. Although written in the year 2000, this article is still one of the most cited on the topic. The second article is “High income improves evaluation of life but not emotional well-being” (Kahneman and Deaton, 2010). The article concludes that increasing individuals' income improves their assessment of their lives, but does not increase their emotional well-being. The third article is “Social Well-Being” (Keyes, 1998). The article proposes and validates five dimensions of Social Welfare: social integration; social contribution; social coherence; social updating and social acceptance. The fourth article “Les passions de l'Ame: On obsessive and harmonious passion” (Vallerand, Blanchard, Mageau; Koestner, Ratelle, Leonard, Gagne, and Marsolais, 2003) addresses and

proposes two concepts of passion: one obsessive and the other harmonious. The result of three studies underlies these two concepts.

In the fifth article: “Happiness is a stochastic phenomenon” (Lykken and Tellegen, 1996), from a sample of thousands of middle-aged twins, the variance of several factors (socioeconomic; education, family income, marital status, religion) on happiness or subjective well-being is tested. The results showed that the genetic variation (heritability) is responsible for about 44% to 52% of the variance in the levels of happiness. The sixth article: “How's life? Combining individual and national variables to explain subjective well-being” (Helliwell, 2003) investigates international trends and differences in subjective well-being in the last two decades of the twentieth century. The seventh article: “Positive education: positive psychology and classroom interventions” (Seligman, Ernst, Gillham, Reivich and Linkins, 2009) addresses the importance of positive education, that is, one that prepares young people for both traditional skills and for happiness. The authors claim that positive education will form the basis for a “new prosperity” where both wealth and well-being are valued. The eighth article: “A test of self-determination theory in school physical education” tested Ryan and Deci's (1985; 1991) theory of self-determination in a sample of British high school students and attested to its male and female invariance. The ninth article: “A short form of the Positive and Negative Affect Schedule: evaluation of factorial validity and invariance across demographic variables in a community sample” (Mackinnon, Jorm, Christensen, Korten, Jacomb and Rodgers, 1999), deals with invariance the evaluation and validation of the use of the PANAS scale through demographic variables. And finally, the tenth article among the most cited is the article: “Social inequalities in happiness in the United States, 1972 to 2004: An age-period-cohort analysis” (Yang, Yang 2008). This article shows the changing trends in the levels of happiness throughout the lives of Americans. The research found evidence that the effects of age are strong and indicate an increase in happiness throughout life.

4.1.3 Journals with the largest number of published articles

Initially, the VOSviewer identified 779 journals with the publications about happiness and education in our search. Only journals with more than 5 published articles were considered. It resulted in 70 journals and of these, the table below shows the 20 journals with the highest number of publications and citations.

Table 4 - Top 20 journals with the highest number of published articles and number of citations.

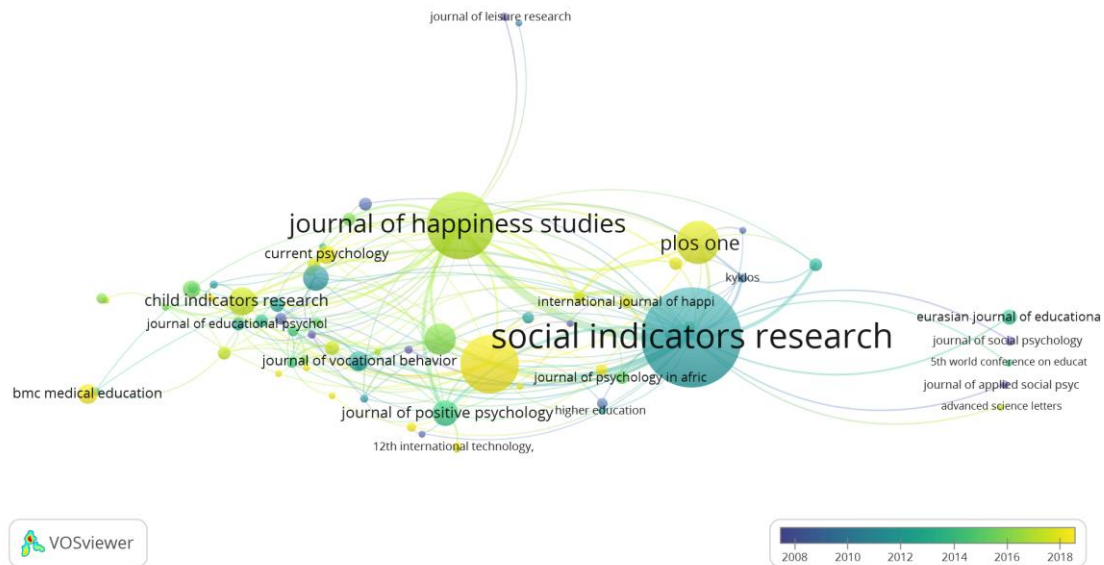
Source	Number of		
	articles	R	Number of citations
<i>Social Indicators Research</i>	164	1	4131
<i>Journal of Happiness Studies</i>	96	2	1446
<i>Frontiers in Psychology</i>	78	3	632
<i>Plos One</i>	53	4	755
<i>Applied Research in Quality of Life</i>	34	5	167
<i>Child Indicators Research</i>	30	6	379
<i>Journal of Positive Psychology</i>	26	7	795
<i>Personality and Individual Differences</i>	26	8	858
<i>Journal of Vocational Behavior</i>	18	9	854
<i>BMC Medical Education</i>	18	10	216
<i>Current Psychology</i>	17	11	21
<i>Educational Philosophy and Theory</i>	15	12	45
<i>Eurasian Journal of Educational Research</i>	13	13	40
<i>Psychology in the Schools</i>	12	14	303
<i>Learning and Individual Differences</i>	12	15	214
<i>International Journal of Happiness and Development</i>	11	16	8
<i>Spanish Journal of Psychology</i>	11	17	160
<i>Asia-Pacific Education Researcher</i>	11	18	75
<i>Journal of Education Psychology</i>	11	19	523
<i>Journal of Psychology in Africa</i>	11	20	53

Note: R = ranking of articles in our research.

Source: Elaborated by the author

Social Indicators Research is a journal dedicated to publications related to measuring all aspects of quality of life. It has devoted special attention to studies on topics such as sustainability of quality of life, sustainable development and the relationship between quality of life and sustainability. In this sense, the subject of happiness and subjective well-being has been given special attention. The other journal that deserves special attention in table 4 is the *Journal of Happiness Studies*. This journal was created in 2000 and is dedicated to theoretical and applied advances in all areas of wellness research.

Figure 2 - Visualization map of the connection between journals with more publications.



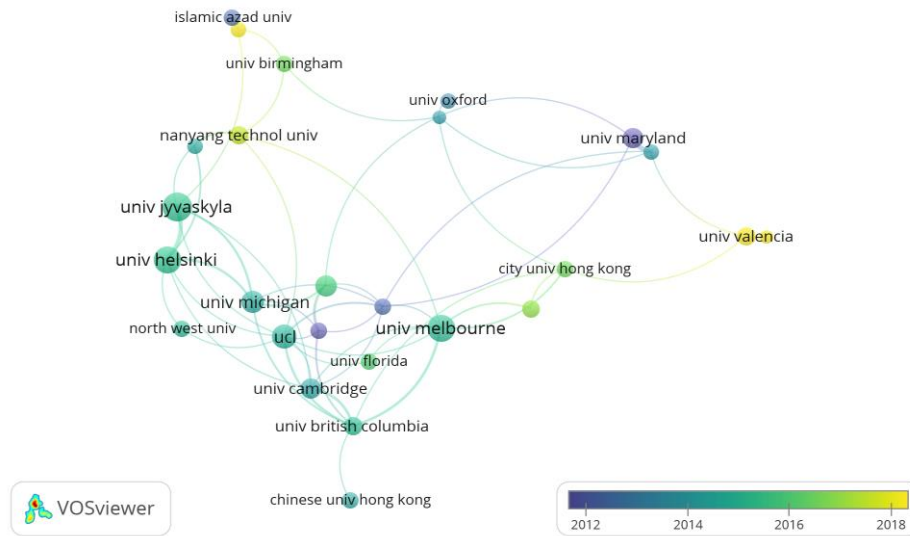
Source: Elaborated by the author

We can see, in our search, the distribution of journals in 15 clusters, which shows little convergence between the sources. This map shows that the more recent publications are found in journals whose circles tend to be yellow, such as: *Frontiers in Psychology*; *Plos One*; and *Current Psychology*, among others. Also noteworthy is the influence of *Social Indicators Research*, the *Journal of happiness Studies* and *Frontiers in Psychology* in their clusters.

4.1.4 Organizations with the largest number of publications

Vosviewer identified 2010 Organizations and, of these, only those with more than 10 publications were considered, which left us with 26, shown in the following figures:

Figure 3 - Overlay visualization map of the connection between organizations with publications.



Source: Elaborated by the author

The 6 clusters of the Organizations are distributed as follows:

Table 5 - Connection clusters between organizations

Cluster 1 (7)	Cluster 2 (5)	Cluster 3 (5)	Cluster 4 (4)	Cluster 5 (3)	Cluster 6 (2)
Islamic Azad	North West	City University	Michigan State	Chinese Univ.	University
University	University	Hong Kong	University	Hong Kong	Maryland
Monash	Univ. College	Hong Kong	Univ. Hong	Univ. British	
University	London - UCL	Polytech Univ.	Kong	Columbia	Univ. do Minho
Nanyang Tech.			University	University	
Univ.	Univ. Florida	Univ. Alicante	Illinois	Cambridge	
Stanford		University of			
University	Univ. Helsinki	Melbourne	Univ. Michigan		
Univ. Int. La					
Rioja	Univ. Jyvaskyla	Univ. Valencia			
Birmingham					
University					
University					
Oxford					

Source: Elaborated by the author

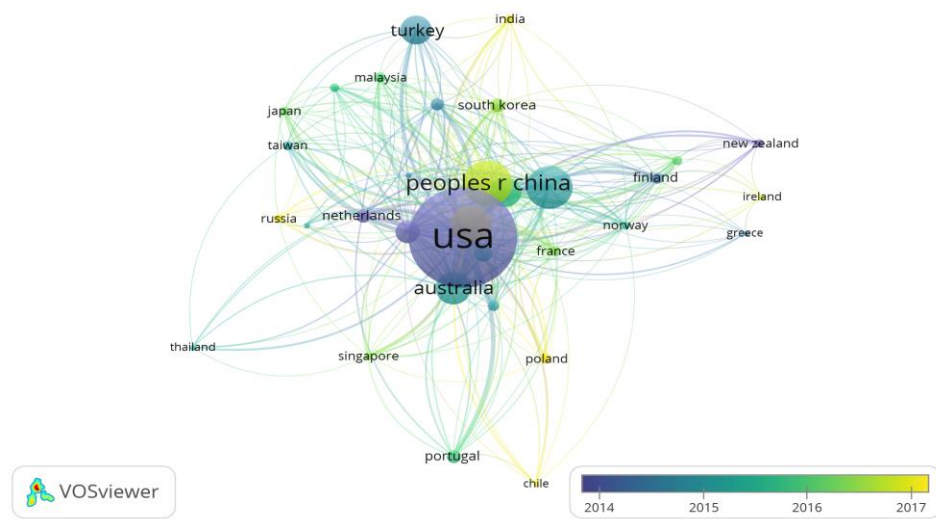
When analyzing the Organizations that make up each cluster, we note:

- a) There is a marked participation of Finnish universities (University of Jyvaskyla and University of Helsinki) and Australian universities (for example: Monash University and University of Melbourne) in the production of articles in the area of the researched topic;
- b) Clusters 2 and 1 are the ones that produced the most articles in the researched period;
- c) There is a prominent participation of Chinese universities (City University of Hong Kong; University of Hong Kong; Chinese University Hong Kong; Hong Kong Polytechnic University);
- d) The University of Valencia and the International University of La Rioja in Spain, have the most recent production on our research topic;
- e) Michigan State University and University British Columbia stand out for the number of connections established with other universities in the production of articles in this area of research.

4.1.5 Countries of origin of happiness publications

The strength of the relationship between countries was calculated from the published documents and their citations. A threshold of 10 articles and 100 citations per country was considered. Of the 98 countries contained in the database, there were 33 countries with a strong relationship with other countries. See in the following figures:

Figure 4 - Overlay visualization map of the connection between countries with more publications.



Source: Elaborated by the author

The USA is the country with the highest number of links with other countries, having the largest number of publications and concentrating the greatest influence on publications on this researched topic. As you can see, its publications are older. Countries like China, Russia, India, Poland and South Korea, which appear in yellow on the map, are the countries with the most recent publications, which shows us a “nascent” interest in the theme in these countries. It is noteworthy that the publications from China have been more recent and evidence an increasing number of articles published on happiness and education.

Figure 4 highlights the United States of America (USA) as the country with the largest number of published articles and having a strong relationship with England (98^{1*}), China (*69), Australia (*63) and Canada (*61).

¹ * link strength between countries

Table 6 - Connection clusters between countries

Cluster 1 (8)	Cluster 2 (7)	Cluster 3 (6)	Cluster 4 (6)	Cluster 5 (4)	Cluster 6 (2)
England	Belgium	Australia	Italy	France	People's R. China
Finland	India	Canada	Japan	Israel	South Korea
Germany	Malaysia	Chile	Netherlands	Poland	
Greece	South Africa	Portugal	Russia	Singapore	
Ireland	Spain	Thailand	Scotland		
New Zealand	Taiwan	USA	Sweden		
Norway	Turkey				
Switzerland					

Source: Elaborated by the author

From Table 6, it can be seen that the composition of the clusters involves countries from different continents, which demonstrates that the theme has been investigated in various locations around the world. Most of the countries that make up Cluster 1, with the exception of New Zealand, are from the European continent, which demonstrates a strong intra-bloc influence.

Table 7 - The top twenty countries with the largest number of published articles and quotes on happiness and education.

Country	Articles number	R	Citations
USA	492	1	27569
People's R. China	201	2	1370
England	189	3	3712
Spain	162	4	1171
Australia	140	5	2790
Germany	124	6	2339
Turkey	120	7	706
Canada	89	8	3635
Italy	67	9	837
South Korea	54	10	413
Netherlands	52	11	1310
Portugal	51	12	440
South Africa	46	13	410
Finland	42	14	827
France	38	15	708
Malaysia	38	16	305
Poland	38	17	112
Israel	37	18	637
Switzerland	35	19	547
Taiwan	35	20	277

Note: R= ranking in our research

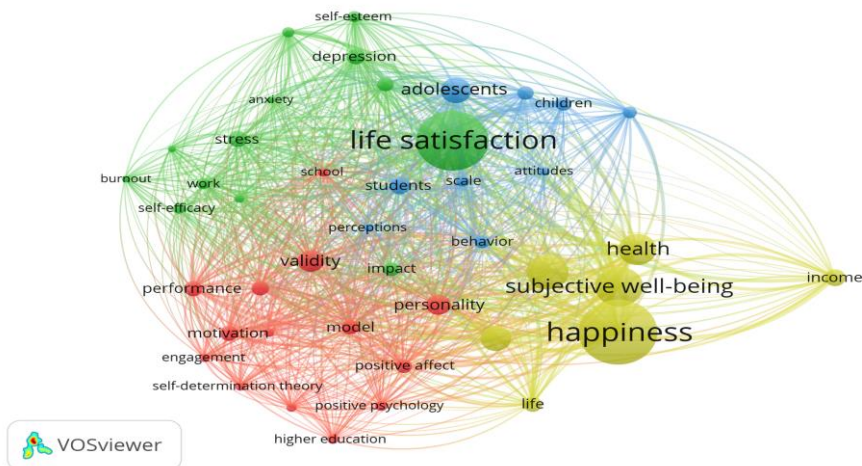
Source: Elaborated by the author

Looking at the production of articles by country, shown in table 7, in addition to the leadership of the United States of America in the number of articles and citations, the number of citations in publications from Canada, England, Australia and Germany stands out.

4.1.6 Most important keywords contained in articles on happiness and education.

For this analysis, the VOSviewer co-occurrence analysis was used. Initially, 7,080 words were obtained and, after excluding synonyms and filtering only words with a minimum limit of 50 occurrences, 43 terms remained.

Figure 5 - Network map of the connection between keywords.

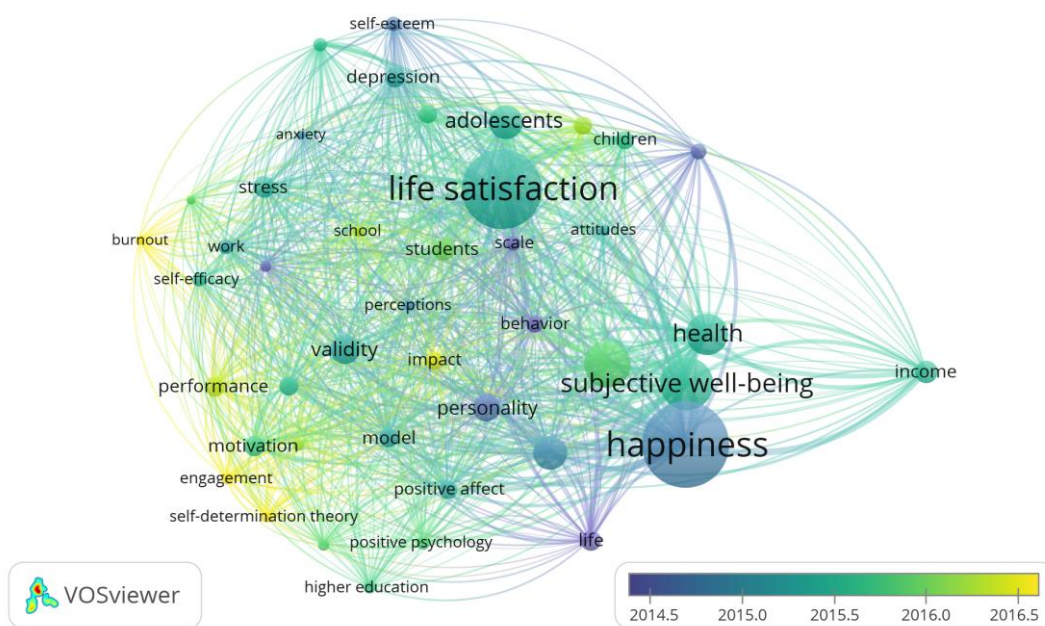


Source: Elaborated by the author

The clusters in figure 5 are identified by colors (Cluster 1 red; Cluster 2: green; Cluster 3: blue and Cluster 4: yellow). We notice that in cluster 2, the term with the highest occurrence is satisfaction with life. This term, in addition to being related to those in its cluster, has greater strength in relation to the terms: happiness (143 *), subjective well-being (118 *), health (88 *) and education (69 *). In general, the term with the highest occurrence and which relates to the greatest number of other terms is happiness.

Note: * is the strength of the connection between one term and another. It is calculated by VOS viewer.

Figure 6 - Overlay visualization map of the connection between keywords.



Source: Elaborated by the author

As can be seen in figure 6, the most recently published terms address issues related to the educational environment, such as: students; school; performance; impact, engagement and gender. Older publications focused on contextual aspects, such as: life; predictors; scale; behavior, quality of life and personality, among others.

Therefore, there is a tendency to focus study on the educational environment and on the factors associated with happiness and well-being in the school environment.

The following table shows the word distribution in 4 clusters:

Table 8 - Connection clusters between keywords

Cluster 1 (14)	Cluster 2 (13)	Cluster 3 (9)	Cluster 4 (7)
Achievement	Anxiety	adolescents	education
Emotions	Burnout	attitudes	happiness
Engagement	Depression	behavior	health
higher education	Impact	children	income
Model	job-satisfaction	Gender	life
Motivation	life satisfaction	perceptions	satisfaction
negative affect	mental-health	quality-of-life	subjective well-being
Performance	predictors	Scale	
Personality	self-efficacy	students	
positive affect	self-esteem		
positive psychology	social support		
Scholl	stress		
self-determination theory	work		
Validity			

Source: Elaborated by the author

From the clusters shown in Table 8, the following can be seen.

- Cluster 2 presents factors that impact people's well-being or malaise in the work environment and in their personal life. Note that terms such as: self-efficacy; self-esteem; satisfaction with life and job satisfaction are related to the assessment of well-being. While terms such as: anxiety; stress; exhaustion; depression; they are related to people's malaise, in life or at work.
- Cluster 1 groups terms that represent a relationship between school and teaching (for example: school and higher education) with the personal goals of individuals (for example: engagement; motivation; performance and achievement) and with related factors for happiness (positive affects; negative affects; positive psychology).

- In Cluster 3, the terms that stand out are those related to youth (for example: adolescents; children and students), to behavior (for example: behavior; attitudes; perceptions) and evaluation (for example: quality of life; scale).
- Finally, in Cluster 4, terms directly related to happiness, education (for example, subjective well-being; happiness; education) and their influencing factors (health; income; life and satisfaction) are present.

4.2 Discussion of the most relevant and current articles

Following Wolfswinkel, Furtmueller and Wilderom (2013), after performing the bibliometric analysis, we complemented it with a systematic review of the articles published in 2020 and 2021. The systematic analysis had as its research dimension the two main constructs: Happiness and Education. The articles were analyzed according to the criteria: topic addressed, main results and suggestions for future research contained in them. The selected articles are presented in table 9, below:

Table 9 - Most relevant and current articles on happiness and education.

Article Title	Publication Year
Academic entrepreneurship in China: individual human capital and institutional context in higher education organisations	2020
Exploring the impact of different factors on brand equity and intention to take up online courses from e-Learning platforms	2021
A virtual market in your pocket: How does mobile augmented reality (MAR) influence consumer decision making?	2021
Impacts of Universities in Different Stages of Economic Development	2021
Social participation and self-reported health in China: evidence from Chinese middle-aged and elderly adults	2021
Does mandatory air quality information disclosure raise happiness? Evidence from China	2021
Minimalism in consumption: A typology and brand engagement strategies	2021
Career patterns in self-employment and career success	2021
Effects of COVID-19 on business and research	2020
The impact of COVID-19 on student experiences and expectations: Evidence from a survey	2020
The impact of collective brand personification on happiness and brand loyalty	2020
Self-employment and eudaimonic well-being: Energized by meaning, enabled by societal legitimacy	2020
City image, city brand personality and generation Z residents' life satisfaction under economic crisis: Predictors of city-related social media engagement	2020
Assessing the research efficiency of Canadian scholars in the management field: Evidence from the DEA and fsQCA	2020
Can't help falling in love? How brand luxury generates positive consumer affect in social media	2020
University-centred entrepreneurial ecosystems in resource-constrained contexts	2020
Coronavirus (Covid-19) and the entrepreneurship education community	2020
Poverty and the varieties of entrepreneurship in the pursuit of prosperity	2020
Dispositional optimism, entrepreneurial success and exit intentions: The mediating effects of life satisfaction	2020
Exploring loneliness and social networking: Recipes for hedonic well-being on Facebook	2020

Source: Elaborated by the author²

² Search for articles published in 2020 and 2021 on the Web of Sciences (2021)

The general analysis of the most recent articles presented in Table 9, allows us to observe and highlight some aspects. We will call these aspects “highlights”.

The first highlight is the emphasis on research on entrepreneurship and its relationship with education. In this sense, the article “Academic entrepreneurship in China: individual human capital and institutional context in higher education organisations” by Wang, Cai and Munir (2020) sought to understand how the casual configurations of human capital of academics and the institutional context lead these professionals to academic entrepreneurship. The results revealed that isolated individual and institutional determinants were not necessary to produce high academic entrepreneurial intention, but several configurations of these determinants together contributed to increase the academic entrepreneurial intention. The authors suggest further research that: a) uses other determinant variables present in the literature and not tested in this study, such as interdisciplinarity, regional context, psychological factors and individual cognitions; b) uses other regression techniques to compare the results found in this study and c) replicates this study in other countries with a context other than Chinese. Another article that explores the relationship between education and entrepreneurship is the article “Impacts of Universities in Different Stages of Economic Development” (Marozau, Guerrero and Urbano, 2021). This article analyzed the role of universities in generating innovation and contributing to economic development, based on knowledge about the countries and regions where they operate. It is worth mentioning the results found that indicated that: (i) the human capital generated by universities is the most important predictor of economic development in all phases; (ii) university research activity is evidenced only in stages oriented towards efficiency and innovation; and (iii) the result of the business mission of universities is only positively related to the gross domestic product (GDP) when it occurs in innovation-oriented economies. The article suggests that future research explore the capacity of universities to convert knowledge and technology into effective economic development. Seen here is what is perhaps the main role of education in higher education: transforming knowledge into a solution to society's problems and promoting development. Another article that addresses the same theme is “University-centred entrepreneurial ecosystems in resource-constrained contexts” (Bedo, Erdos and Pittaway, 2020). In this article the entrepreneurs show how a university and its programs can fill the gaps in a local ecosystem and how it can bring positive change to the community. The article contributes new perspectives for researchers in entrepreneurship education.

In this same spotlight, the article “Coronavirus (Covid-19) and the entrepreneurship education community” written by Ratten (2000) brings us a very current approach concerned with “how” the academic community and entrepreneurial education can deal with the Covid-19 pandemic. The article reviews the current literature on Covid-19 and entrepreneurship education, highlighting the need to incorporate a community approach. This allows for a better understanding of how communities of educational stakeholders, including teachers, students and institutions, can facilitate a more proactive and positive attitude. Ratten (2020) states that, as the Covid-19 crisis is a recent and ongoing event, there are many opportunities for future research on entrepreneurship education. The author suggests that future research be undertaken to: a) better understand what entrepreneurship educators are doing to deal with uncertainty and the rapid shift to online learning; b) identify the teaching and learning innovations that resulted from the Covid-19 crisis; c) focus on the different ways in which entrepreneurship educators have promoted an inclusive learning environment, providing different teaching tools; d) detail the positive and negative experiences of entrepreneurship educators when implementing teaching methods in the new context; e) conduct studies in different geographic contexts to verify whether there is a correlation between a country's Covid-19 level and its emphasis on entrepreneurship in education. Furthermore, the author states that more longitudinal studies are needed, especially in the pre- and post-Covid environment, to verify what has changed in entrepreneurship education. This would allow for a better understanding of how communities of entrepreneurship educators have come together to promote better learning and teaching practices (Ratten, 2020). Analyzing this "highlight" it is clear that there are many research opportunities involving entrepreneurial education as a factor of economic and social development.

A second highlight, consistent with the current moment the world is going through, is that of research involving the subject 'Covid-19 pandemic'. As an example, Donthu and Gustafson (2020) in their article: “Effects of COVID-19 on business and research”, evaluated some consequences of the Covid-19 pandemic through a literature review involving 13 articles. These authors found that the pandemic has brought about major changes in the way companies act and how consumers behave. Another example is that of the authors Aucejo, French, Araya and Zafar (2020), whose article "The impact of COVID-19 on student experiences and expectations: Evidence from a survey" sought to understand the impact of the COVID-19 pandemic in higher education at one of the largest public institutions in the United States. One of the main results of this research showed that the economic and health-related impacts

resulting from the pandemic had negative effects on students' expectations and the current situation. Aucejo et al. (2020) found that 13% of students delayed graduation due to COVID-19 and that the effects of the pandemic are highly heterogeneous, most affecting low-income students who are 55% more likely to delay graduation compared to their high-income peers.

A third highlight observed in our qualitative analysis of the most recent articles is the increased frequency of investigations carried out with the Chinese public, mainly in investigations related to the well-being of Chinese citizens, which were previously infrequent. As an example, the articles that address the social participation and health of Chinese citizens (Xinxin, 2021) and their opinion on aspects such as the dissemination of air quality (Wang, Wang, Sun and Chen, 2021) stand out.

A fourth highlight encompasses studies on consumer behavior, especially those related to their adaptation to the means and mechanisms of interaction in the virtual environment. In this regard, we have as an example the article "Exploring the impact of different factors on brand equity and intention to take online courses on e-Learning platforms" (Ray et al., 2021), which aims to assess the various dimensions and constructs that affect the brand value and the user's willingness to take e-learning courses. In this article the authors suggest further research with respondents who have some knowledge of e-learning services but have not yet used them. They also suggest that further studies be carried out with residents of rural areas to see if these users value e-learning services. The article points to the need for institutions that work with online courses to be aware of the management of their brands and the relationship with users of their services. Another article is "A virtual market in your pocket: How does mobile augmented reality (MAR) influence consumer decision making?" (Qin, Peak and Prybutok, 2021), which examines the effects of hedonic or utilitarian gratification on consumer perception and its outcome in terms of emotions.

A fifth highlight refers to studies on online consumer behavior, relating it to components of subjective happiness/well-being. As an example, the article "Exploring loneliness and social networking: Recipes for hedonic well-being on Facebook" (Berezan, Krishen, Agarwal and Kachroo, 2020) addresses hedonic aspects (affective component) of happiness and examines the relationship between relationship needs (belonging, emotional connection) and competence (interactivity) of the theory of self-determination, with the hedonic well-being that can arise from the use of social media networks for users with high versus low perceived levels of

loneliness. In turn, the article “Can't help falling in love? How brand luxury generates positive consumer affect in social media” (Mandler, Johnen and Grave, 2020) seeks to identify the characteristics of the luxury brands' communication content that trigger a positive effect on the consumer, a determining factor for strong consumer relationships with the brands. Another article, also related to the study of consumer behavior, but considering life satisfaction (a cognitive component of happiness) investigates the relationship of residents of a Greek city with the media during the economic crisis. The survey involved Generation Z residents and, in addition to life satisfaction, it considered the city's brand image and personality (Priporas, Stylos and Kamenidou, 2020). The results of this study revealed the significant impact that the city's image and the city's brand personality has on the involvement of Generation Z residents with the city's social networks. The results also demonstrate a negative link between residents' overall satisfaction and their involvement with the city's social networks. The authors suggest new research studies a) that address other cities and those of different sizes in the country; b) in other countries that also faced crises; c) that involve other generational cohorts, for example, generations X and Y; d) that use constructs such as: place branding and urban regeneration, as mediators or moderators; e) that use the concepts of online immersion and flow to further address interactions between residents and social media and potentially advance the current model (see Priporas, Stylos and Kamenidou, 2020, p.460).

A sixth highlight focuses on studies that address the eudaimonic component of happiness (purpose and meaning of life). As an example, we have the articles: “Poverty and the varieties of entrepreneurship in the pursuit of prosperity” (Kimmitt, Munoz and Newbery, 2020), which investigates the relationship between entrepreneurship and poverty from a eudaimonic perspective; and the article “Autonomous work and eudaimonic well-being: Energized by meaning, enabled by social legitimacy” (Stephan et al., 2020), which investigates “why and where” self-employment is related to higher levels of eudaimonic well-being. Stephan et. al, state that self-employment, in relation to salaried work, is a more self-determined and volitional career choice, which increases the experience of meanings at work and perceptions of autonomy at work. These findings broaden the understanding of eudaimonic well-being, the work of entrepreneurs, and the role of context in research on entrepreneurship and well-being. This article complements existing research on the hedonic well-being of entrepreneurs and expands on the sparse literature on eudaimonic well-being. For future research, the authors suggest: a) the use of longer multifaceted measures of subjective vitality; b) research that explores how vitality and importance are relevant to the long-term success of entrepreneurs

and the survival of their companies; c) the use of direct measures of entrepreneurial motivation, such as those that differentiate motivations for challenges and purposes from those related to eudaimonic well-being; d) research that combines the different models of eudaimonic well-being; e) investigation of the long-term consequences of high subjective vitality for entrepreneurs.

A seventh highlight observed relates to articles involving happiness and career (see Stephan et al., 2020; Koch, Park and Zahra, 2021); minimalist consumption behavior and brand engagement strategies (Pangarkar, Shukla and Taylor, 2021); the relationship between customer happiness and the collective personification of the brand (Braxton and Lau-Gesk, 2020) and the mediating effects of life satisfaction in the relationship between dispositional optimism and business success (Lindblom, Lindblom and Wechtler, 2020) .

Here we have tried to present a brief qualitative analysis, in a succinct and non-exhaustive way, to present some of the most recent articles on the topic of happiness and education. Our intention is to offer other researchers new research opportunities.

5 Conclusion

There are several conclusions we reached, based on the main objective of this article, which is to make a bibliometric study ('overview') of the publications on happiness, especially those that occurred in the business and education categories of the Web of Sciences.

Our initial objective was to understand the evolution of publications and citations, related to the terms associated with happiness and education (see section 4.1.1) and allowed us to perceive a 'geometric' growth in publications about happiness that occurred during this century, mainly since the year of 2012. In absolute numbers, this growth was interrupted in 2020, but even so, the total number of publications in 2020 was the "second largest" since the beginning of the historical series of the Web of Sciences database. This observation leads us to ask whether, after the pandemic period, happiness publications will still be on the rise. Or, are there other focuses of attention on happiness? These questions can serve as indications for future research.

The findings of Kullenberg and Nelhans (2015) or even Dominko and Verbic (2019) indicate that studies involving happiness have been growing, especially since the global

economic crisis of 2008. Our study also observed that there was a 100% increase in the number of articles published from 2007 to 2008, however, it appears that from 2012 there was a continuous and marked growth in the publication of articles on happiness and education (see table 1).

Another finding of our research is the emergence of new researchers on happiness and education (see table 2), carrying out investigations in everyday situations and environments, as is the case with education in virtual environments and the effect on the well-being and happiness of students and teachers. This demonstrates a renewal of researchers interested in following the legacy left by the long-time researchers on the subject (see table 2.1).

As for the subjects or themes of the most-cited articles, the individual and social behavior of happiness stands out. An “apparent curiosity” that we discovered in the qualitative analysis of the ten most-cited articles is that it takes, on average, 5 years to reach a total of 100 citations. Apparently, the articles go through a period of "maturation" or acceptance by the scientific community before being included in their references. The “champion of citations” in our research, the article: “Theory of self-determination and the facilitation of intrinsic motivation, social development and well-being” (Deci and Ryan, 2000), for example, reached a total of one hundred citations just 3 years after its publication. This article, since 2015, has already exceeded the level of 1000 publications/year and, in 2020, it was close to reaching two thousand citations/year (1951).

In regard to the sources of publications, we note the major participation of *Social Indicators Research*, leader in publications on measurement and indicators of quality of life, and of the *Journal of Happiness Studies*, an international journal with peer review dedicated to the publication of advances, theoretical and applied, in all areas of well-being research (see table 4). Another highlight is the participation of journals such as *Frontiers in Psychology*; *Plos One* and *Current Psychology*, with more recent publications on the topic.

As for the organizations that most publish and cite articles on the subject, in addition to the traditional participation of American and British universities, the participation of Finnish, Australian and Chinese universities stands out, as well as recent publications in Spanish universities (see section 4.1.4). As for the countries of origin of these publications, the presence of the USA – with the greatest number of links with other countries, the greatest number of publications and the greatest influence on publications on the researched topic – stands out. It is observed that countries like China, Russia, India, Poland and South Korea have more recent

publications (see figure 4), which demonstrates a “nascent” interest in the theme in these countries. In addition to the leadership in the number of articles and citations in the United States of America, the number of citations in publications from Canada, England, Australia and Germany stands out (see table 7).

In the analysis of the terms most present in the titles, summary and keywords of our research, we found:

- a) a tendency to study the educational environment and the factors associated with happiness and well-being in that environment;
- b) a greater emphasis on the study of factors that lead to well-being and happiness and less attention to factors that cause malaise and unhappiness;
- c) a growing number of studies that analyze the impact of the work or school environment on people;
- d) an increasing number of studies involving young people.

From the terms found in the published articles and, analyzing them together, it can be inferred that there is a strong relationship between the happiness and health of individuals. In the past, much research on human well-being has been related to disease prevention (Seligman and Csikszentmihalyi, 2000; Diener, Suh, Lucas and Smith, 1999) and this appears to have changed in this 21st century. It seems to us that now the focus of the investigation is no longer the disease, but the factors that lead us to understand happiness, as observed in other studies (Diener, Lucas and Oishi, 2018; Elwick and Cannizaro, 2017).

5.1 Future research and gaps

Our bibliometric analysis identified some gaps and, based on them, themes for future research are suggested:

Gap 1 - There is evidence of the growth of positive education as a research topic. Although there are some published articles (Seligman et. al, 2009; Waters et. al, 2017; White, 2016), there is a gap in research on happiness and youth, especially with young people of school age. It is at this age that personality formation takes place and, if we wish, through education to stimulate the formation of the values of a society of the Common Good, this may be the

moment. Therefore, it is suggested that new research explore factors such as: the perception of happiness of children from an early age; personal values and students' perception of value and happiness;

Gap 2 - Considering that happiness is conceptualized as a “state of physical, mental and psychological well-being, measured through the assessment of life satisfaction, positive emotions and the meaning and purpose of life” (OECD, 2013), the scarcity of articles on eudaimonia or eudaimonic happiness (Stephan et al., 2020; Kashdan, Biswas-Diener and King) was noted in our study. There are several publications on satisfaction with life and also on emotions, but few that investigate the meaning and purpose of life.

Gap 3 - Although we have not included the concept of flourishing or flow (see Csikszentmihalyi, 1990) in our search terms, we realize that these concepts are often associated with psychological well-being and happiness (broader concept). We realized, through a qualitative analysis of the selected articles, that there is a shortage of publications that address these concepts in the context of happiness and education.

As we said at the beginning, it is important that new research is done to analyze the patterns, determinants and consequences of the happiness of individuals after the pandemic period of COVID-19. We understand that the way we live, our values and attitudes will change after we overcome this serious threat to the survival of the human species.

5.2 Contributions

We understand that some contributions may result from our bibliometric study. The first is that our study presents evidence of a strong role for schools in the well-being of society, for example, through positive education. The growing number of publications on happiness in the school environment demonstrates the positive role of education in the formation of citizens. As a managerial contribution, our study can mainly help Higher Education Institutions to realize that the current moment is conducive to investments in understanding and managing the relationship with their stakeholders. Acting not only in technical and professional training, but as the protagonist of a more humanized society that transforms the global reality. This growing

interest in the happiness and well-being of society may be an indication for companies that a more collaborative and less competitive attitude is expected.

5.3 Limitations

In search of scientific truth, every document produced involves decisions by the researcher that, by themselves, would already represent the exclusion of other aspects or factors that, in theory, may be relevant to the precise understanding of the research object. In this sense, we understand that our study has some limitations. The first one refers to the happiness construct. As it is a multidisciplinary construct, when we decide to choose subject categories from the Web of Sciences, we may be excluding other categories that would provide important results. Another decision that may represent a limitation was the choice of a single data collection base. Although the Web of Sciences is a comprehensive collection and one of the most used in the 'scientific world' (Dzikowski, 2018; Kullenberg and Nelhans, 2015), using multiple databases could make it possible to compare sources and documents. A third limitation was choosing only one document type. Considering that the consultation of articles would give us more timeliness and relevance, we limited our search to "articles", "proceeding paper" and "early access" and, therefore, we did not consider books and other more traditional data sources that could also add to the results obtained in our study. In addition, the use of bibliometric analysis and systematic literature review has a certain limitation, as it cannot capture behavioral nuances behind each quote or researcher's intention (Cavalcante, Coelho and Bairrada, 2021). Therefore, limitations invariably represent opportunities for future research.

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CHAPTER V – IS BEING AT THE UNIVERSITY “PAYING OFF”? A STUDY ON THE STUDENT’S PERCEPTION OF VALUE AND HIS SATISFACTION WITH THE ACADEMIC EXPERIENCE.

Abstract

This research investigates the relationship between the perception of value, on its different dimensions, and the satisfaction of students with their academic experience, and explores its effects on career success expectations and word of mouth, among HEI students. Data collection was based on a structured questionnaire, applied to 383 business students in an HEI from South Brazil. This investigation uses SEM to test the proposed hypotheses. Overall, students consider most of the emotional and epistemic value dimensions as determinants of their satisfaction. Therefore, satisfaction with academic experience seems to be a good predictor of WOM and career success expectations, while reputation might consolidate the proposed relationships. According to our results, school management should reinforce actions to foster the perception of student benefits, improve the experience and contact of each student with the University environment, reinforce the image and reputation of the institutional brand and boost a spirit of pride and belonging. Although studies on student satisfaction are abundant in the past scientific literature, this research introduces the effects of the different dimensions of value on the student’s satisfaction with their academic experience and looks into the effects on career success expectations and advocacy and shows how reputation moderates these relationships.

Keywords: Value perception, students, business school, higher education, satisfaction, academic experience, career success, word of mouth.

1 Introduction

Constant changes in markets, competition and consumer behavior affect the survival and growth of organizations (Osievskyy and Dewald, 2018). From here the following question arises: How will companies react to a change in a competitive environment that threatens their survival? Although this issue has challenged decision makers and scholars for decades, the level of interest has intensified recently. Markets have become globally competitive and face disruptive technological advances, innovative business models and even changes in the

regulatory environment (Osiyevskyy and Dewald, 2018; Sarkar and Osiyevskyy, 2018). All of this caused the attitude of management in organizations to change. In recent years, this concern has increased for managers of higher education institutions, especially business school managers (Poole, Levin and Elam, 2017; Sharma, Rao and Popli, 2013). The highly competitive environment in which Higher Education Institutions (HEIs) operate and the commercialization of higher education creates an urgent need for universities to differentiate themselves (Kalafatis and Ledden, 2013).

This new reality revived the emphasis on research to understand the attitudes, values and behaviors of the public at HEIs, especially students (Carvalho and de Oliveira Mota, 2010; Moosmayer and Siems, 2012). In the last decades this attention has focused especially on satisfaction and quality of the services offered (Oliver, 1996; Parasuraman and Grewal, 2000; Serban, Gruiescu, and Mitrut, 2013; Borghi, Mainardes, and Silva, 2016; El-Hilali, Al-Jaber, and Hussein, 2015; Goh, Goh, and Ramayah, 2017). In addition to several influencing factors or determinants of satisfaction with higher education, quality studies have frequently looked at the perception of value (Jeyaraj, Sugumar, Thandavamoorthy, and Joseph Xavier, 2014; Santini, Ladeira, Araújo, and Finkler, 2015; Williams, Ashill, and Thirkell, 2016; Y. Yang, Liu, Jing, and Li, 2014); institutional image (Ali, Zhou, Hussain, Nair, and Ragavan, 2016; Brown and Mazzarol, 2009); perception of return on investment in education (Heckman and Montalto, 2018; Sequeira, Spinnewijn, and Xu, 2016; Tavares, 2017); co-creation of value in Higher Education (Blau and Shamir-Inbal, 2017; Damacena and do Nascimento, 2016; Thatcher, Alao, Brown, and Choudhary, 2016); satisfaction with the academic experience (Santos, Zanon and Ilha, 2019). Classical inputs by authors, such as Parasuraman, Zeithaml and Berry (1985; 1991), are still important for understanding and evaluating the quality of service. It seems evident that, among the stakeholders of higher education institutions, students deserved special attention (Moosmayer and Siems, 2012), as they are users and evaluators of the educational experience (Ng and Forbes, 2009) . They are also opinion makers and influencers of other people's behavior (McClung and Werner, 2008). However, there are some gaps in the literature that deserve to be filled in, they are:

- a) Shortage of studies on the academic experience of students and the perception of value in Brazil. Although they are widely researched in the world (Borghi et al., 2016; Li, González-Gallarza Granizo, and Fayos Gardó, 2016; Moosmayer and Siems, 2012; Severiens, Meeuwisse, and Born, 2015; Trahar, 2014), in Brazil the number of research papers on

these topics is still small (Campos, Santos, and Castro, 2017; Carvalho and de Oliveira Mota, 2010; Santini, Ladeira, et al., 2015; Wilmot, Rushton, and Zandona Hofmann, 2016).

- b) Lack of studies on perceived value in higher education institutions, mainly in the private educational sector (Khoo et. al, 2017);
- c) Although the concept of value is important and old, some authors have recognized a certain lack of interest in understanding and measuring the perception of value (Jeyaraj et al., 2014; Khoo, Ha, and McGregor, 2017; Kilburn et al., 2016; Li et al., 2016; Silva, de Moraes, Makiya, and Cesar, 2017; H.-L. Yang and Lin, 2017; Y. Yang et al., 2014).
- d) The relationship between perceptions of quality and satisfaction and career expectations and success shows a lack of research (Espinoza, González, McGinn, Castillo, and Sandoval, 2019).

To fill in these gaps, the current paper addresses the multivariate relationship between student perception of value and their satisfaction with academic experience, with the possible consequences for the expectation of career success and positive word of mouth. The study was carried out in a private higher education institution (HEI) in South Brazil, based on a sample of 383 HEI students.

2. Literature Review and Hypothesis Development

2.1 Satisfaction with academic experience

Satisfaction is the "feeling of pleasure or disappointment that results from the comparison between the perceived performance (or outcome) of a product and the buyer's expectations" (Tsiros, Mittal, and Ross, 2004). This assessment of expectations against the level of service experienced is called Paradigm of Disconfirmation (Parasuraman, Zeithaml and Berry, 1988). If performance does not meet expectations, the customer will be dissatisfied. If it catches up with them, he will be satisfied. If performance exceeds expectations, the customer will be satisfied or 'delighted' (Fournier and Mick, 1999). In the context of the delivery of educational services, satisfaction can be understood as how students assess their academic experience. There is concern in a multi-layered sociological understanding of student identities that brings together social and academic aspects for understanding academic experience as the students' feelings about the subject, the peer group and the university as a whole (Reay, Crozier, and

Clayton, 2010). To understand student satisfaction, one must first understand what value and perceived value is to the student.

2.2 The role of Value and Perceived Value

Value has been conceptualized in different ways in literature. One of the first concepts of value is related to human behavior and is based on the individual belief that certain forms of conduct are preferable to others (Schwartz, 1992). This concept is broad, but can be identified as the 'roots' of our choices and assessments in life situations (Oliver, 1996). Zeithaml (1988), in a view applied to the relationship with the consumer, defines value as a "general assessment of the perceived utility of a product or service to a consumer". Value is still related to quality and has earned the attention of great gurus in service quality (Oliver, R.L; Berry, L.L; Parasuraman, A.; Zeithaml, V.; Grönroos, C.; and others).

In the last two or three decades, several authors acknowledged that consumer behavior is best understood through the analysis of perceived value (Ali et al., 2016; Kilburn, Kilburn, and Davis, 2016; Lai, To, Lung, and Lai, 2012). Dias and Monteiro (2020) understand value as a multidimensional construction, considered as one of the most significant concepts for understanding consumer satisfaction. Zeithaml (1998) states that the value of perception is the result of a cognitive trade-off between benefits and sacrifices in the two-dimensional relationship: Get and Give. The 'Get' dimension included intrinsic aspects, such as utilitarian benefits (e.g. durability) and extrinsic aspects related to the purchase, ownership or consumption and use of products or services such as prestige or happiness (Ledden, Kalafatis, and Samouel, 2007). The 'give' dimension refers to the sacrifices that are needed to obtain the products or services. This includes money and other costs, such as time, effort and risk (Cronin, Brady, Brand, Hightower, and Shemwell, 1997).

The following is a brief description of the dimensions of the perceived value.

a) Perceived value – Dimension 'Get' (perceived benefits)

The model shown by Sheth, Newman and Gross (1991) is composed of five consumption values: functional value (FV); social value (SV); epistemic value (EPV); emotional value (EMV) and conditional value (CV). A brief explanation of these components follows.

- **Functional value** is defined by Sheth, Newman, and Gross (1991, p.160) as: "The perceived utility acquired from an alternative capacity for functional, utilitarian, or physical performance. An alternative acquires functional value through the possession of salient functional, utilitarian, or physical attributes. Functional value is measured on a profile of choice attributes". In the educational context, functional value amounts to the expectation that the choice of studies or academic experience will make it possible to obtain employment or achieve career advancement (Stafford, 1994; Leblanc and Nguyen, 1999; Kalafatis and Ledden, 2013; Ledden et al., 2007; Ng and Forbes, 2009; Bruce and Edginton, 2008; McClung and Werner, 2008). According to Santos, Zanon and Ilha (2019) identifying students' expectations and working to meet them is essential for achieving satisfaction in the academic experience. Therefore, the following hypothesis is proposed:

H1 – There is a positive relationship between perceived functional value and satisfaction with academic experience (SWC).

- **Epistemic value** refers to the capacity to perceive utility from an alternative, to arouse curiosity, provide novelty, and/or satisfy a desire for knowledge. An alternative acquires epistemic value by satisfying the curiosity for novelty and generating knowledge (Leblanc and Nguyen, 1999; Sheth et al., 1991). From Stafford's (1994) point of view, this dimension is particularly relevant to the educational context, in which the primary benefit is the acquisition of knowledge (Ledden et al., 2007). Wang et al. (2018) state that knowledge, the basis for the existence of epistemic value, is present and influences all phases of the decision-making process. Lai et al. (2012), in their studies involving Chinese students, found a relationship between epistemic value and satisfaction with academic experience. Therefore, the following hypothesis is proposed:

H2 - There is a positive relationship between perceived epistemic value and satisfaction with academic experience.

- **Social value** is defined by Sheth, Newman and Gross (1991, p. 161) as: "[...] the perceived utility acquired by associating an alternative to one or more specific social groups". In the educational context, it represents the benefits derived from interpersonal or group

interactions, which students receive when making friends with colleagues (Leblanc and Nguyen, 1999).

• **Emotional value** is defined as: "The perceived utility acquired from an alternative capacity to arouse feelings or affective states. An alternative acquires emotional value when associated with specific feelings or when precipitating or perpetuating those feelings. Emotional value is measured on a profile of feelings associated with the alternative" (Sheth et al., 1991, p. 161). In this sense, Leblanc and Nguyen (1999) state that the emotional value is assessed through the students' feeling of joy and self-realization at the end of the course. Mohd (2013) reinforces that students obtain social benefits by expanding the circle of friends and professional networks, and emotional benefits by getting the best out of themselves. Therefore, the following hypothesis is proposed:

H3 - There is a positive relationship between perceived social value and satisfaction with academic experience, and

H4 - There is a positive relationship between perceived emotional value and satisfaction with academic experience.

• **Conditional value** is defined by Sheth et al. (1991, p. 162) as "The perceived utility acquired by an alternative as a result of the specific situation or set of circumstances faced by the decision maker". In the educational context, the curriculum is related to the value perceived by students in terms of didactic material, such as textbooks, in addition to consulting the university structure. The conditional value is described by LeBlanc and Nguyen (1999, p. 189) "as the set of situations that the client faces when making a choice. [...]. For example, the size of a business school and the vision of parents in relation to their programs are situational variables that have the potential to influence the value of the educational experience". Trullas et Al. (2018) tested the influence of perceived institutional support and its influence on student satisfaction and confirmed that there is a positive relationship between these two variables. Therefore, the following hypothesis is proposed:

H5 - There is a positive relationship between perceived conditional value and satisfaction with academic experience.

b) Perceived value – Dimension ‘Give’ (perceived sacrifices)

In this study, these sacrifices were considered in two respects: monetary sacrifices and non-monetary sacrifices.

- **Non-monetary sacrifices** involve issues concerning the time restrictions for living with friends and family (Ledden et al., 2007) and having to "give up" other activities, such as leisure or work in order to attend the undergraduate course. Gallarza, Seric, and Cuadrado (2017) add that, when it comes to foreign students, other non-monetary sacrifices arise, such as the difficulty of adapting to the local culture and the administrative bureaucracy that influence one's choice to study abroad. Therefore, non-monetary sacrifices, such as time, opportunity and displacement, tend to influence the satisfaction students get from their academic experience. Consequently:

H6 - There is a relationship between perceived non-monetary sacrifices (NMS) and satisfaction with academic experience.

- **Monetary sacrifices** are "the obvious costs related to the acquisition of any product or service" (Samara and Morsch, 2005, p. 209). In addition to the financial costs related to the choice of a higher education course or even the chosen university (Gallarza et al., 2017), there are also the monetary sacrifices resulting from the cost of living, housing, transportation, food, among others (Singh and Srivastava, 2018). All of these costs result in monetary sacrifices that impact the assessment of satisfaction with the choice made. Another factor related to monetary sacrifice, is price. This influences the perception of quality and, consequently, satisfaction with a product or service (Clemes et. al., 2008). In other words, it is intended to verify that:

H7 - There is a relationship between perceived monetary sacrifices and satisfaction with course.

2.3 Outcomes of satisfaction with academic experience

- **Word of Mouth (WOM)**

In the view of Parsa and Sadegh (2015, p. 1249), the WOM is "[...] the level that a customer makes its friends, colleagues, and relatives aware of a product, which created a particular satisfaction level". Therefore, positive comments from students about their satisfaction help to strengthen the brand, encourage other higher education students and candidates to decide to join and try the services offered by universities, thus helping to attract new students (Le,

Robinson, and Dobebe, 2020; H. P. Yang, Yen, and Balmer, 2020). In addition to enjoying greater credibility than traditional advertisements, “word-of-mouth communication or ‘buzz marketing’ has become one of the most important tools of communication in the modern world” (Özdemir, Tozlu, Şen, and Ateşoğlu, 2016). There are a number of studies that address WOM as an effective way of attracting, capturing and retaining consumers as well as generating sales (Chevalier and Mayzlin, 2006; Godes and Mayzlin, 2004; Stephen and Galak, 2012; Stephen and Lehmann, 2016). According to them, the relationship between satisfaction and WOM can vary, in form and type, according to the level of satisfaction. Therefore, satisfaction and WOM are closely linked, consequently:

H8 - Student satisfaction has a positive relationship with the possibility of positive word of mouth.

- **Satisfaction with academic experience and career success expectations**

The decision to pursue undergraduate /postgraduate studies was almost always associated with choosing a profession that the individual would have for life (H. P. Yang et al., 2020). In the last century, in particular, the vision was as follows: a single profession would, in general, occupy a whole professional life. The engagement in years of study and dedication reinforced the great relevance and importance that this choice had and still has for some people. Lee and Lee (2006) classify in four general categories the choice of course: 1) personal factors - for example, personal interest, perceived personal skills and aptitudes; 2) expected professional success - involves the current availability and future job opportunities in the profession, salary offered, safety, work environment; 3) institutional preference - such as the image and reputation of the institution and 4) others - as the influence of family, friends and teachers.

Liao and Ji, 2015, in studies with Asian students, concluded that when they choose a major course that is aligned with their personal interests and have a high expectation of future career, they also tend to be more satisfied with their chosen course, “[...] they strive to learn, feel competent for the achievement of academic goals, and more useful for their future careers, thereby increasing their level of commitment to the course and institution” (p.165). Beggs, Bantham, and Taylor (2008), when studying the influencing factors in the choice of course, also reached similar results, confirming the correspondence between personal interests and the purpose of the course as the factor that had the greatest influence on decision of the students of a public university in the USA. In another study, seeking to understand the future representation

of young people, Castiglione, Licciardello, and Rampullo (2015) find that they have a positive view of their future and believe they cope well with complex problems when they are satisfied with their studies. Based on the various studies pointed out in the literature review, we propose:

H9 - There is a positive relationship between satisfaction with academic experience and career success expectation (EXC).

- **Career success expectation and possibility of positive word of mouth.**

When young students are admitted to higher education institutions, they bring with them dreams and expectations of success in their chosen career. For some, this positive representation of the future itself is related to the search for a satisfactory job (Castiglione et al., 2015; Guilbault, 2018), for others, the expectation of success is related to the awakening of an entrepreneurial mentality, that is, the ability to create ideas and put them into practice through their own business (Ishiguro, 2015). These dreams are being built throughout higher education and, when they perceive their progress in the development of their knowledge, students tend to speak well of this experience to other people (Tsai, Lin, Ma, and Wang, 2015). The studies evidence that an expectation of career success is positively related to word of mouth. Therefore, one may assume that:

H10 - There is a positive relationship between career success expectation and the Word of Mouth.

2.4 Corporate reputation: moderator variable

When we refer to the result of the institution's relationship with society in general, two concepts stand out: corporate image and corporate reputation. According to Gray and Balmer (1998), the corporate image is the immediate mental image that the public has of an organization, and the corporate reputation, on the other hand, indicates a value judgment of the Organization's attributes. According to the authors, corporate reputation generally evolves over time as a result of consistent performance, reinforced by effective communication, while corporate images can be modeled more quickly through well-designed communication programs. HEIs tend to direct their efforts to project a positive image for their stakeholders and thus generate a favorable reputation in the minds of current and future students (Nguyen and Leblanc, 2001).

A good reputation tends to boost students' assessments of their experience (Mourad, Meshreki, and Sarofim, 2020), to increase their expectations (Khoshtaria, Datuashvili, and Matin, 2020) and to disseminate positive word of mouth about the features of their HEI and about themselves, because they are part of it (Bennett and Ali-Choudhury, 2009). Corporate reputation is expected to create a positive halo that might influence future students' decisions and influence current students' satisfaction with their choice. Therefore, corporate reputation might moderate the proposed relationships so the following hypotheses are proposed:

H11a – Corporate reputation moderates the relationship between the perception of value and satisfaction with academic experience.

H11b - Corporate reputation moderates the relationship between satisfaction with academic experience and positive Word of Mouth.

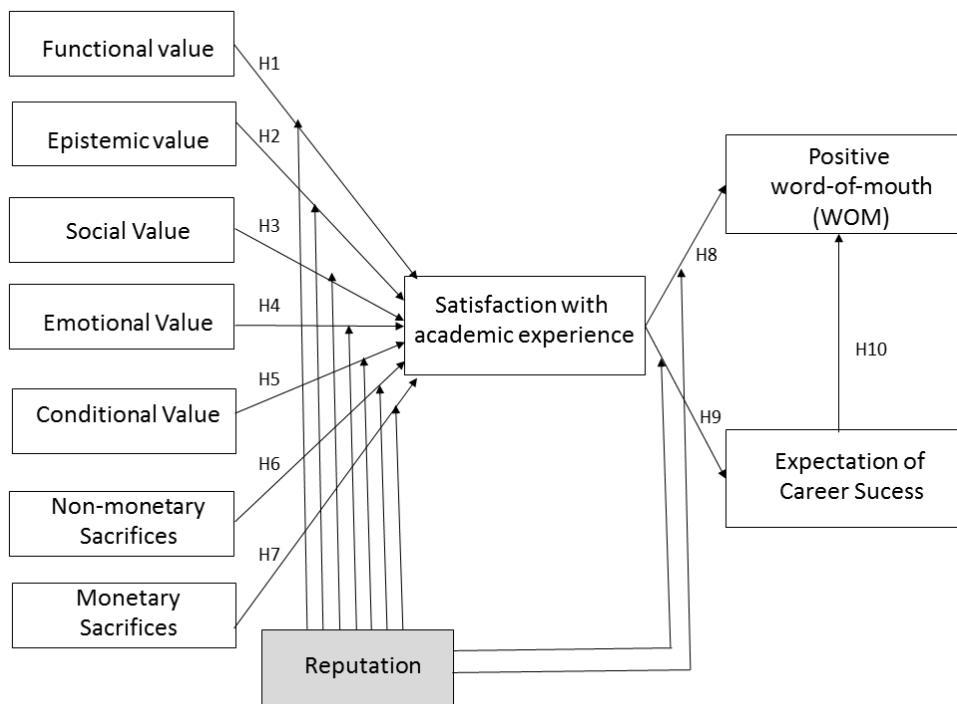
H11c - Corporate reputation moderates the relationship between satisfaction with academic experience and expectation of career success.

3 Research Methodology

3.1 Conceptual model

This study analyzed the possible relationship between the students' perception of value and their level of satisfaction with the academic experience at a Business School. It also assessed whether there was a relationship between their level of satisfaction and the positive WOM and the professional success that these undergraduate students from a business school expect to achieve. The conceptual model of this article can be seen in Figure 1.

Figure 1 – Conceptual model



Source: Elaborated by the author

3.2 Sample

This study was carried out at a Business School of a renowned university in the South of Brazil. The target population of the research was all university students at that school. At the time of data collection, 2,659 students were enrolled. The students volunteered to participate in the research, after the purpose of the research was disclosed in the academic communication system. The study had a total of 383 valid answers, 194 of which from male respondents (50.7%) and 189 from female respondents (49.3%); The largest proportion of monthly household income ranged from R \$ 3,720.01 to R \$ 8,800.00 (33.7%) and R \$ 8,800.01 to R \$ 17,600.00 (26.4%). The average age was approximately 25 years old. Respondents (students) were distributed over several semesters of the course.

3.3 Measures

The measures used in this study were based on scales tested previously and validated internationally, which are suitable for use in the academic environment.

Construct on value perception – This construct aims to measure students' perception of value regarding the educational services enjoyed and experienced at the Business School. The questionnaire had 29 questions, presented in two dimensions. The "Get" value dimension follows the model of Theory of Consumption Values proposed for Sheth, Newman and Gross (1991) and adapted by LeBlanc and Nguyen (1999), which is composed of the following variables: functional value; social value; epistemic value; emotional value; conditional value and organizational image. The value dimension to "give" is composed of non-monetary sacrifices and monetary sacrifices.

Construct on satisfaction with educational services – This construct measures the satisfaction perceived by the student while enjoying the educational experience. The four questions that compose the module were based on the model used by Halstead et al. (1994).

Construct on possibility of word of mouth - This module is composed of four questions that evaluate the student's willingness to 'speak well' or positively propagate to other people the experience they had with the course, college and the University.

Construct on career success expectation – This module is composed of three questions adapted from the Turban and Dougherty (1994) scale used to measure career success. The adaptation of the questions is justified, because many of the students are still starting their professional careers and others have not yet started.

3.4 Validity

The original research model 1 adjusted revealed a satisfactory adjustment ($X^2 / df = 2.790$; CFI = 0.906; IFI = 0.906; TLI = 0.890; RMSEA = 0.068). Discriminant validity is evidenced by the fact that all correlations between the constructs are significantly smaller than 1 and the squared correlations calculated for each pair of constructs is always smaller than the variance extracted for corresponding constructs, thereby confirming the discriminant validity (table 1).

Table 1 - Correlations, Cronbach's Alpha, Composite Reliabilities and Average Variances Extracted.

Constructs	SWC	FV	EpV	SV	EV	CV	NMS	MS	EXS	WOM	CR	AVE
Satisfaction with course (SWC)	0,936										0,995	0,814
Functional Value (FV)	0,392	0,824									0,977	0,647
Epistemic Value (EpV)	0,537	0,402	0,852								0,979	0,601
Social Value (SV)	0,267	0,575	0,507	0,891							0,893	0,626
Emotional Value (EV)	0,615	0,454	0,575	0,584	0,765						0,941	0,586
Conditional Value (CV)	0,415	0,307	0,719	0,493	0,486	0,895					0,896	0,743
Non-monetary sacrifices (NMS)	0,036	0,002	0,001	0,009	0,014	0,001	0,776				0,952	0,597
Monetary sacrifices (MS)	0,352	0,198	0,246	0,16	0,231	0,32	0,042	0,883			0,992	0,793
Career Success Expectation (EXS)	0,309	0,315	0,21	0,188	0,323	0,145	0,001	0,195	0,823		0,974	0,607
Word of Mouth (WOM)	0,581	0,295	0,428	0,244	0,388	0,407	0,038	0,28	0,243	0,9	0,984	0,688

Source: Elaborated by the author

4. Results

The hypotheses of this study were tested using structural equation modeling. The adjustment of the model tested the influence of the moderating variable (corporate reputation) in these relationships. The moderating variable was constructed from the median, categorized as low reputation ($n = 198$; below 6.00) and high reputation ($n = 185$; above 6.00). The results obtained from the hypothesis tests, as can be observed in Table 2, show that hypotheses H1, H3 and H5 were not supported by the model, i.e. there is no evidence supported by the model that the perception of functional (H1), social (H3) and conditional (H5) values are positively related to course satisfaction. All other hypotheses were supported. Therefore, there is evidence that the perception of epistemic (H2) and emotional (H4) value and satisfaction with higher education

are positively correlated. It is also verified that the correlation between perception of non-monetary (H6) and monetary (H7) sacrifices and student satisfaction is negative. The results also indicate that there is a positive correlation between satisfaction with the course and the possibility of positive word of mouth (H8), as well as the expectation of career success (H9). The hypothesis that there is a positive relationship between the expectation of career success and the possibility of positive word of mouth (H10) was also supported.

Table 2 - Performance and test hypothesis with moderator variable - Corporate Reputation

Hypothesis	Construct	Global Model			Low reputation			High reputation		
		SRW	CR	P-value	SRW	CR	P-value	SRW	CR	P-value
H1	SWC <--- VF	0,056	0,725	0,2345	0,025	0,274	0,392	0,148	0,971	0,166
H2	SWC <--- Vep	0,411	3,529	***	0,341	2,527	0,0055	0,342	1,73	0,042
H3	SWC <--- VS	- 0,137	-1,167	0,1215	-0,154	-1,11	0,134	-0,24	-0,95	0,172
H4	SWC <--- VE	0,457	5,562	***	0,619	5,766	***	0,182	1,329	0,092
H5	SWC <--- VC	- 0,082	-0,632	0,2635	-0,053	-0,46	0,3235	0,172	0,616	0,269
H6	SWC <--- SnM	0,095	2,438	0,0075	0,052	0,978	0,164	0,135	1,89	0,0295
H7	SWC <--- SM	0,244	4,478	***	0,185	2,865	0,002	0,285	2,514	0,006
H8	WOM <---SWC	0,741	12,364	***	0,769	8,75	***	0,675	7,253	***
H9	EXS <--- SWC	0,549	9,417	***	0,531	7,493	***	0,386	3,878	***
H10	WOM <--- EXS	0,099	1,893	0,029	0,105	1,631	0,0515	-0,02	-0,28	0,391

Source: Elaborated by the author

Comparing with the global model, the results show that hypotheses H6 and H10 are not supported when we use corporate reputation as a moderator variable. It can be seen that students who rate the university's reputation as low do not consider non-monetary sacrifices as related to course satisfaction (H6), while students who rate the university's reputation as high consider their impact on satisfaction. In hypothesis H10, students who rate corporate reputation high do not find that the expectation of career success reflects the possibility of WOM. While those who rate the university's reputation low support the hypothesis that the expectation of career success is related to the possibility of positive WOM. It can be inferred that when individuals see a high corporate reputation, they tend to consider that the quality of the brand, product or service is already recognized, therefore, it is not necessary to talk about it.

5. Discussion

The perceived value and the satisfaction with the course (H1 at H7)

Tables 1 and 2 underscore that the effects of some of the value perception dimensions were not supported by the results obtained. For example, the functional value, traditionally reported in other studies (Lai et al., 2012; Santini, Ladeira, Araujo, and da Rosa Finkler, 2015) as a strong influence on satisfaction, was not supported. Some reasons may help explain the rejection of this hypothesis. The first is possibly related to the questions adapted by LeBlanc and Nguyen (1999) in the educational context. These refer to perceiving value in aspects such as salary improvement, promotion in employment or even the development of a professional career. And, as has been observed in some studies (Jiyoung and Griffiths, 2017), young people, like the respondents in this survey, are from a generation that traditionally does not feel attracted to these career features. The way young millennials look at jobs and careers and regard is different. As Matthewman (2012, p. 38) puts it, "they look at the work and treat it differently, partly because they were created differently. Their parents [...] told them that they were special and capable of everything - and they were raised by the significant wealthy parenting". It can be inferred from the results obtained that factors such as salary improvement, search for professional promotion, as well as professional career and personal development, were not perceived by students as determinants of satisfaction with university experience. However, these students perceive epistemic and emotional value as significant determinants of satisfaction with the educational experience (Dziewanowska, 2017; Leblanc and Nguyen, 1999). It is understood that they perceive confidence in the quality of the educational offer received and that this, besides expanding their knowledge, provides high professional value (epistemic value). In addition, the pride in having this experience and the resulting self-confidence (emotional value) have been shown in this study to be determinants of satisfaction with the course and academic experience (Brown and Mazzarol, 2009; Leblanc and Nguyen, 1999).

Students did not perceive social value as being related to their satisfaction with the university experience (Lai et al., 2012). It can be inferred that the answers demonstrate a certain 'independence' of the students in choosing the course and that the opinion of others is not determinant of their choice of university course, or that at least they consciously do not see it as decisive for their satisfaction. Contrary to Mohd (2013) that suggests that students might get

social benefits by expanding the circle of friends and professional networks at school, our results do not support the latter.

Regarding the perception of conditional value, the results did not present a significant relationship between this perception of value and student satisfaction with the academic experience. The rejection of the hypothesis (H5) is not surprising since studies by Sheth, Newman and Gross (1991), and supported by Sweeney and Soutar (2001), already considered the conditional value as derived from the perception of functional and social value, both also rejected in this research. Therefore, the rejection of this hypothesis is fully consistent with the rejection of the variables that give rise to it.

The satisfaction with academic experience and WOM (H8)

Hypothesis H8 was supported. Confirming what was evidenced by other studies (Özdemir et al., 2016), satisfaction and word of mouth are positively correlated. The results show that students satisfied with the academic experience tend to speak well of this satisfaction to the people closest to them. It therefore reinforces the importance that HEI must place on student satisfaction, not only to improve the reputation of the organization, but also to attract new students and foster loyalty.

The satisfaction with academic experience and career success expectation (H9)

Studies by Castiglione et al., (2015) and Liao and Ji, (2015), among others, support the hypothesis that students who are satisfied with their choice of studies nurture greater expectations for the success of their professional careers. Implicitly, this result may suggest that, besides being an indicator of the quality of the HEI, student satisfaction is a factor of student confidence in a successful professional career.

Expectations for career success and positive WOM (H10)

The results presented in the global model support the hypothesis of a relationship between the expectation for professional success and positive word of mouth. These results are consistent with other studies (Dahling and Lauricella, 2016; Patel and Dahling, 2019). However, it can be seen in Table 2 that, when the corporate reputation is high, the results are not significant. It can be inferred that, knowing that the reputation of the HEI is high, the expectation of career

success is a natural and expected consequence. Therefore, there is no need to generate positive word of mouth (Saenger, Thomas Veronica, and Bock Dora, 2020).

Corporate reputation: moderator variable (H11)

According to Baron and Kenny (1986), a moderating variable, is the one that, when present, affects the direction and/or strength of the relationship between the independent variable and the dependent variable. When examining the moderating effect of Corporate Reputation (H11; H11a and H11b), it appears that this proved to be a moderating variable in the relationship between the perception of value and satisfaction with the academic experience (SWC), as well as the relationship between SWC and EXS and WOM, as it changed the strength of the relationship between variables. It is noteworthy that, when the reputation is high, the relationship between the Conditional Value and satisfaction is modified by the moderator, strengthening the relationship. Which demonstrates that, students who perceive a high reputation of the HEI, also have a positive view of the impact of the HEI infrastructure on their satisfaction with the academic experience. However, the low reputation group shows higher impact on the relationship between satisfaction with the academic experience and WOM and career expectations. Apparently, when the perception of reputation is lower, the students tend to reinforce their enthusiasm, somehow to compensate and overcome this lack of image and reputation.

6. Contributions, limitations and recommendations for future research

6.1 Academic contributions

This research presents 3 main contributions. First, the theory of consumption values provides the theoretical framework to determine the potential effect of each consumption value on higher education student satisfaction with the academic experience. Khoo et al. (2017) mentioned that research conducting in depth assessment of the perception of value in higher education institutions in the private sector is scarce. In this sense, our research contributes to a better understanding of each of these aspects related to the perception of value and its influence on student satisfaction. Second, the results reinforce the importance of considering the student as a co-creator of service value, and not just as a consumer of a service. Second, we introduced

the relationship between student satisfaction and career success expectations, which provides new insight into the impact of quality and satisfaction management on HEIs. Third, we introduced the moderation impact of reputation which creates a kind of halo, under which these relationships take place.

6.2 Contributions for management

Regarding the managerial contributions of this study, here are some suggestions that may be useful for Business School managers: 1) to reinforce actions that aim to foster the perception of student benefits; 2) to create marketing communication actions aimed at raising student awareness about the quality of the educational offer that has been received; 3) to build marketing plans that reinforce the high reputation of the institutional brand and that take into account the experience and contact of each student with the University environment; 4) to develop relationship marketing actions that create and sustain an emotional environment of student closeness to faculty, managers and other members of the academic community; and 5) to develop a spirit of pride and belonging.

6.3 Limitations

One of the study's limitations, albeit an opportunity for future research, is the fact that it was carried out at one go. The fact that it is a cross-sectional study did not allow the analysis of carry-over effects pointed out by some authors (Kalafatis and Ledden, 2013). Taking advantage of this limitation and seeking to minimize it, another model is being prepared to analyze changes in the perception of value, using as moderator-mediator variable the level of experience and time that the student has in the Business School.

6.4 Recommendations for future research

As a suggestion of new studies, we recommend the development of longitudinal studies that accompany the evolution of personal values and students' perception of value in their

experience, as well as satisfaction with the services offered by the Business School. Furthermore, we are developing studies involving other variables such as student happiness and personal values, aiming at obtaining a more complete view of student behavior and the mechanisms of perception and satisfaction.

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CHAPTER VI – BE HAPPY = MORE CREATIVITY + MORE SUCCESS CAREER? TESTING A PERCEIVED HAPPINESS SCALE

Abstract

People have always sought happiness. However, they have had less time to think and reflect about their way of life. This article aims to propose and test the validity of an integrated scale for measuring perceived happiness that considers aspects of subjective and psychological well-being, testing its predictability through creativity and professional success. The data were collected in two samples, one Portuguese and the other Brazilian respondents. The data were validated and analyzed using Exploratory Factor Analysis, Confirmatory Factor Analysis and Structural Equation Modeling. The perceived happiness scale has high reliability coefficients and good predictive capacity, based on its impact on creativity and the perception of career success. The scale measures the hedonic and eudaimonic components of happiness in an integrated way, which demonstrates greater realism to it. The perceived happiness scale has proven to be an efficient instrument for measuring the components of happiness and is stable in different countries.

Keywords: happiness; subjective wellbeing; scale; eudaimonia; life satisfaction; affect; positive emotion; negative emotion.

1 Introduction

Although happiness has been studied for many centuries, and in various parts of the world, in the contemporary world, the theme of happiness has gained considerable space in society and academia. Since 2012, the United Nations has published the World Happiness Report (WHR). This is a longitudinal study carried out in 156 countries, which is a scientific survey with a world database, which accompanies the changes in the perception of happiness of the population. The first report published in 2012 described the progress that Subjective Well-being measures have had over the past 30 years, especially in Psychology. Happiness has been studied more intensively in these last years (Diener, Oishi, and Tay, 2018; Jebb et al., 2018;

Lyubomirsky and Lepper, 1999; Mourao et al., 2019; Seligman and Csikszentmihalyi, 2000; Seligman et al., 2013).

The development and validation of the scales of measurement of subjective and psychological well-being (SWB and PWB) accompany the growing number of scientific articles on the subject (Diener et al., 2013; “World happiness report”, 2015). Several surveys are conducted with large samples and intended to monitor behaviors, habits and values among other factors present in people's lives. Examples include the Gallup/Healthways Daily Survey (which is private) and the Behavioral Risk Factor Surveillance System (public) of the US National Institutes of Health. Each of these surveys involves collections of 1000 participations per day and obtain evaluative and experimental data (“World happiness report”, 2015, p.14). These include the European Social Survey (ESS) and other national or regional surveys, such as Canada, the United Kingdom and Europe, through the EU-SILC (Income Statistics and Living Conditions). All of these large surveys have been useful to show similarities and differences between the various methodologies of measurement of subjective well-being and to cross it with other sociodemographic indicators. It is noted, however, that in specific contexts and in small groups subjective assessments of well-being still need to be better developed.

There are important scales for measurement of subjective well-being, for example: satisfaction with life scale (Diener et al., 1985); subjective happiness scale (Lyubomirsky and Lepper, 1999); personal wellbeing index (International Wellbeing Group, 2006; Tomyň et al., 2013); positive and negative affect schedule (Watson et al., 1988); positive and negative affect scale – expanded (Watson et al., 1988); Warwick-Edinburgh mental well-being scale (Tennant et al., 2007); flourishing scale (Diener and Biswas-Diener, 2009; Biswas-Diener et al., 2009); Mental Health Continuum (Keyes, 2007); Pemberton Happiness Index (Hervás and Vázquez, 2013), among others. It has been found, however, that all scales measure different aspects of subjective well-being, but do provide overall assessment of the various constructs of happiness (Kashdan et al., 2008; Moeinaddini et al., 2020; Waterman, 2008).

To fill this gap, this study proposes the creation of a unified scale of measurement of subjective well-being and psychological well-being, including the constructs of life satisfaction, positive and negative affect, hedonic happiness and eudaimonia. The proposed perceived happiness scale differs from other scales mentioned in the literature, because it: (a) uses the main components of measuring subjective wellbeing in an integrated and comprehensive manner, resulting in a representative index of all individual wellbeing constructs; (b) allows the analysis of each construct separately or through a synthetic index; (c) enables comparison of the perceived happiness index in each of the participants' life domains;

(d) is a simple instrument and (e) allows the use of its results to improve the work environment, enabling the improvement of the organizational climate. In addition, one of the differentials of this scale in relation to other metrics is that it considers negative emotions in the formation of the perceived happiness index. This results in greater realism and accuracy in the assessment of individual happiness. Therefore, it might be considered an effective contribution to the measurement of subjective well-being. The following is a brief review of the literature on the main concepts of happiness and their constructs. Two studies have been developed with 222 Portuguese and 382 Brazilian respondents to support the psychometric qualities of the scale, its predictability and stability across countries and cultures.

2 Literature Review

In spite of the conceptual differences between subjective (broader) well-being and happiness in literature, the latter became more well-known and popularly understood (Helliwell et al., 2013). According to these authors, it happens because the strength that the word happiness transmits makes it preferred and culturally easier to understand.

2.1 Eudaimonic Happiness and Hedonic Happiness

Eudaimonia or eudaimonic happiness, portrayed by the Greek philosophers, especially Aristotle, always related to a life that does not exist just to enjoy the momentary pleasures, but to be lived in a balanced and harmonious way in the pursuit of the evolution of mind, body and spirit. Aristotle defines well the purpose of the Human Being by saying that "wealth is obviously not the good that we are seeking, because it serves only as a means, i.e. for getting something else." (Annet, 2016, p.39). A happy life is a life with a sense of being and, for those who perceive it as such, it is living with a purpose. A happy man is one who lives in balance with himself and with others.

Eudaimonic happiness is perceived by the sense of balance, justice and ethics that leads to life. According to Deci and Ryan (2008) eudaimonia focuses on living in accord with what is intrinsically worthwhile for human beings - purpose, meaningful relationships, good health, and contribution to community. Nussbaum (2004, p.39) defines eudaimonia as "kind of living that is active, inclusive of all that has intrinsic value and complete meaning, lacking in nothing that would make it richer or better." Annet (2016) summarizes that individuals seek personal fulfillment through a life with meaning of social relationship.

Hedonism or hedonic well-being is generally associated with pleasure and, perhaps erroneously, with momentary and impulsive characteristics. It is important to note that the most recent conceptions about happiness are closely related to the feeling of well-being or discomfort by individuals as well as their emotional state (Larsen and Diener, 1985). Larsen and Diener (1985) believe that types of happiness are related to what they call pleasant affective states associated with low and high level of autonomic excitement, i.e. two types of happiness: one excited (with feelings of success, surprise, joy) and a relaxed one (peace of mind, serenity, satiety). Diener (2000) notes that happier people report positive affect more often, but not more intensely. Therefore, he says that seeking feelings of ecstasy related to new events (for example, career or love affairs) leads much more to disappointment than happiness. From a broader perspective, hedonic and eudaimonia can be considered complementary visions of "forms" of well-being. Ryan and Deci (2001, p. 144) state that "In fact, the predominant view among hedonic psychologists is that well-being consists of subjective happiness and concerns the experience of pleasure versus displeasure, and includes all judgments about the good / bad moments of life. Hedonic happiness has been associated with experienced, short-lived pleasures (Ryan and Deci, 2001). Kahneman et al. (2003) consider that well-being and hedonism are the same.

2.2 Satisfaction with Life

Satisfaction with life is a process by which people judge the quality of their own lives, relying only on their own evaluation criteria (Pavot and Diener, 1993). This demonstrates the cognitive and conscious judgment of how a person evaluates one's own life. Therefore, regardless of the subjectivity of this evaluation, it represents the objective manifestation of the individual

himself. Although this overall assessment is influenced by assessments in specific domains of our lives, such as the level of satisfaction with health and work; Diener et al. (1985) argue it is necessary to have this global judgment of an individual about his or her life. There is evidence that it is important to evaluate cognitive aspects separately from emotional or affective aspects (Stiglitz et al., 2009). This is because, when assessing emotional aspects, people can ignore or deny negative emotions, or be influenced by context at the time of evaluation.

When we evaluate cognitive aspects, these are reflexes of an objective and, presumably, conscious evaluation. In short: the evaluation of satisfaction with life is a reflection, even if momentary for some and profound for others, about what has happened in our lives so far. It is a general balance of pros and cons. This assessment is more objective and aware of the circumstances in your life, as well as your values and goals. Therefore, it is understood that in order to have a more complete assessment of an individual's life, it is necessary to complement cognitive and emotional aspects, resulting in a more comprehensive assessment of subjective well-being or happiness.

2.3 Positive and Negative Affect

Emotions are intrinsically related to our ability to measure subjective well-being, which we call happiness. In the view of Stiglitz et al. (2009, p.216) "Subjective well-being encompasses three different aspects: cognitive assessments of one's life, positive emotions (joy, pride) and negative emotions (pain, anger, worry)" and must be measured separately to obtain a measure of people's quality of life and to enable a better understanding of their determinants.

In Gallup World Poll and the OECD survey (2012: 2016) the emotions considered were happiness; smile or laughter; pleasure; sense of security at night; feelings of rest and feeling of interest, such as positive emotions and, anger, concern, sadness, depression, stress and pain as negative emotions. This relationship between emotions and happiness is perceived mainly when we realize that although we have many definitions of happiness "[...] most of them mention a positive emotional state, with feelings of well-being and pleasure." (Ferraz et al., 2007, p.236). In the view of Ferraz et al. (2007, p. 236) "various states and experiences can produce happiness. Some examples are love, joy, health, satiety, sexual pleasure, contentment,

security and serenity. Emotions such as sadness, fear, anger and disgust, as well as affective states such as anxiety, anguish, pain and suffering, tend to decrease happiness."

Huppert and Whittington (2003) identified an independence between the emotions that generate positive well-being and emotions leading to negative well-being. The authors state that the individual may be in a "neutral state, not feeling particularly well-being or malaise, as well as experiencing positive and negative emotions concomitantly." These authors say that morbidity and mortality are most strongly associated with absence of positive emotions than with the presence of negative emotions (p. 289). Reinforcing this observation, the authors of the World Happiness Report of 2013 cite that "the existence of positive emotions is much more important than the absence of negative [...]. It can first be inferred that positive emotions play an important role, second that the greatest impact on positive emotions is given by the variables liberty and generosity. [...]" These findings reinforce what positive psychology proposes.

2.4 Measurement issues

The variables presented and their measurements that might be seen as PH dimensions are still currently used to measure happiness in some countries (Caner, 2016; Kiseleva and Strielkowski, 2016). Life satisfaction has been used in several studies (Lopez-Ramos et al., 2018; Rich et al., 2017; Schnettler et al., 2017) as well as positive and negative affect (Bajaj and Pande, 2016; Diener, Diener, Choi, and Oishi, 2018; Paiva et al., 2016) and eudaimonia (Di Fabio et al., 2017; Duan and Xie, 2019; Elwick and Cannizzaro, 2017; Knoesen and Naude, 2018).

The satisfaction with life scale (Diener et al., 1985) was originally measured on a 7-point Likert scale and analyzed by summing the points of the five questions totaling 35 points. The authors suggested classifying the score in different categories: from extremely dissatisfied (5 to 9 points) to extremely satisfied (31 to 35 points) (Pavot and Diener, 1993). The positive and negative affect scale (Huppert et al., 2009) originates from the scale of positive and negative experience (SPANE) (Diener and Biswas-Diener, 2009a). The version by Huppert et al. (2009) is measured according to 10 questions on a scale of 0 to 10 points. The flourishing scale (Diener et al., 2010) used to measure eudaimonic happiness is originally composed of two blocks and measured by a Likert scale from 0 to 10 points.

However, it appears that all scales are measured individually and, therefore, become limited in the ability to assess individual well-being (happiness) (Moeinaddini et al., 2020). Our proposal is to integrate them and achieve a more complete view of the individual's perception of their well-being. Further details on the use of these measures in the perceived happiness scale are presented in section 3.

3. Research Methodology

The objective of this research is to test and evaluate the psychometric properties of a unified measurement of the perception of happiness. To test the proposed scale, two studies were conducted, one in Portugal and the other in Brazil, for assessing the stability of the concept across countries. The Portuguese study is based on a sample of 222 Portuguese respondents and the Brazilian sample of 382 respondents. A summary of the sociodemographic characteristics is shown in figure 1.

Data collection was based on a structured questionnaire with 26 questions, answered on an 11-point Likert scale. (See Table 1). The proposed scale includes metrics for assessing life satisfaction, positive and negative emotions, and eudaimonia. After defining the theoretical model, the questions were translated from English to Portuguese and vice versa by the back-translation method. The data collection instrument was submitted to an interpretative evaluation of the content conducted by four research teachers. The questionnaire was built on the Qualtrics platform and pre-tested with 20 people (10 Brazilians and 10 Portuguese participants) before being made public.

Data was gathered mostly on line through a link provided by email and *facebook*, using a snowball approach (Cooper, 2003; Hair Junior, 2005; Malhotra, 2008, 2018). To verify the quality of the proposed scale, the following statistical procedures were adopted: a) internal consistency (Cronbach's alpha; composite reliability (CR)); b) construct validity (CVA); c) exploratory factor analysis (EFA) and d) confirmatory factor analysis (CFA). Structural equation modeling was used as a technique for multivariate data analysis (SEM).

Table 1 - Description of Socialdemographic variables

Socialdemographic variables	Brazilians		Portuguese		
	Frequency	%	Frequency	%	
Nationality	382	63,2%	222	36,8%	
Gender					
Male	145	38,0%	73	32,9%	
Female	237	62,0%	149	67,1%	
Age					
from 18 to 24 years old (Generation Z)	30	7,9%	122	55,0%	
from 25to 38 years old (Generation Y)	119	31,2%	40	18,0%	
from 39to 58 years old (Generation X)	172	45,0%	50	22,5%	
from59to 79 yearsold (Baby boomers)	61	16,0%	10	4,5%	
Schooling					
High school	21	5,5%	22	9,9%	
Higher education	151	39,5%	147	66,2%	
Postgraduate studies Master' and PhD	210	55,0%	53	23,9%	
Marital status					
Married	210	55,0%	45	20,3%	
Not married (all types)	172	45,0%	177	79,7%	
Monthly family income in R\$ (Reais)		Monthly household income in Euros (€ \$)			
Up to R\$ 1,760.00 per month	23	6,0%	Less than € 1,000	40	18,0%
From R\$ 1,760.01 to R\$ 8,800.00	167	43,7%	From € 1,001 - € 5,000	130	58,6%
More than R\$ 8,800.00	176	46,1%	More than €5,000	45	20,3%
Omitted	16	4,2%	Omitted	7	3,2%
Professional situation					
Work full time	151	39,5%	70	31,5%	
Part time work	26	6,8%	12	5,4%	
Unemployed + Retired+ Student	108	28,3%	128	57,7%	
Businessman or self employed	97	25,4%	12	5,4%	

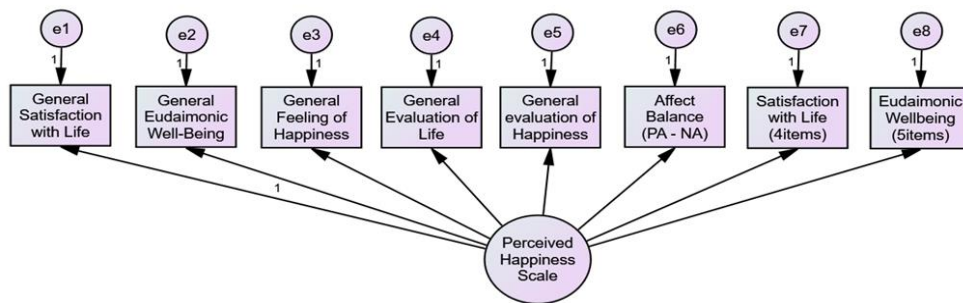
Source: Elaborated by the author

3.1 Scale Development

The structure and issues that make up the perceived happiness scale were drawn from the proposed OECD Guidelines on Measuring Subjective Well-being, included in the World

Happiness Report (WHR). Although it aims to serve as a reference for happiness at the international level, it adequately serves the purpose of measurement at the individual level (WHR, 2013). It should be noted that each construct component of the scale was obtained by averaging the items that compose it, as suggested in the OECD Guidelines on measuring subjective well-being. The conceptual model can be seen in Figure 1. The metrics used to build the scale and their sources are as follows:

Figure 1. Conceptual model of the Perceived Happiness Scale



Source: Elaborated by the author

3.2 Description of the perceived happiness scale

The first question was "Overall, how satisfied are you with life as a whole these days?" This is a question for assessing overall life satisfaction and serves the primary measure of subjective well-being. The question originated from that used to measure life satisfaction (SWLS) in the World Values Survey (WVS), with the scale of response ranging from 0 to 10. Zero means you feel "not at all satisfied" and 10 means you feel "completely satisfied". This question has been used in the European Social Survey (ESS), in the German Socio-Economic Panel, in the British Household Panel Study, in the Canadian General Social Survey and, by the INSEE and the ONS [Office for National Statistics].

The second question deals with the general assessment of life and uses the Cantril ladder scale (1961, as cited in Helliwell et al., 2013) on a scale where 0 (zero) represents the "worst possible life for you" and 10 (ten) the "best possible life for you". Questions three to seven of the life satisfaction scale (Pavot and Diener, 1993) were based on the 11-point Likert

scale. The eighth question is about eudaimonia: "Overall, to what extent do you feel the things you have done in your life are worthwhile?" On a scale of 0 to 10, zero means you feel the things you do in your life are "not at all worthwhile", and 10 means "completely worthwhile". This issue was based on a single measurement item developed by the ONS in its experimental studies on subjective well-being.

The ninth question asks, on a scale of 0 to 10, how happy you feel. Zero means you feel "not at all happy" and 10 means "completely happy". The tenth question seeks to assess happiness overall and asks: "Considering all the things in your life, how happy would you say you are?" This topic was addressed in the European Social Survey 2006/2007. The next ten questions measure positive affects and negative affects and are derived from those used in the Gallup World Survey and the European Social Survey (ESS). The mean of the positive affect minus the mean of the negative affect (PA - NA) form a second order variable that is called the affect balance.

The following six questions measure the meaning of life or life purpose and were extracted from the flourishing scale (Diener et al., 2010). All the questions described were answered on interval scales of "0 to 10". At the end of the questionnaire, we used qualification and social-demographic questions such as: gender; professional situation; level of schooling; nationality; marital status; family income; living alone or with someone.

Figure 2 – Constructs and items used in the perceived happiness scale (PHS)

Factor and items	Originated from Scale:	Publication
Overall Life Satisfaction 1. Overall, how satisfied are you with life as a whole these days?	Satisfaction With Life (SWLS) used in World Values Survey (WVS)	Björnskov, C. (2010). How comparable are the Gallup world poll life satisfaction data? <i>Journal of Happiness Studies</i> , 11, 41-60.
General Evaluation of Life 2. I actually think I have the best possible life I can have.	Cantril's Ladder of Life Scale (H. Cantril, 1961)	Gallup World Poll
Satisfaction with Life 3. In most ways my life is close to my ideal. 4. The conditions of my life are excellent. 5. I am satisfied with my life. 6. So far I have gotten the important things I want in life. 7. If I could live my life over, I would change almost nothing (R).	Satisfaction with Life Scale (SWLS)	Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. <i>Journal of Personality Assessment</i> , 49, 71-75.
General Eudaimonic Well-Being 8. Overall, to what extent do you feel the things you do in your life are worthwhile?	Used in the Annual Population Survey from April 2011 to March 2012.	Dolan, P., R. Layard and R. Metcalfe (2011), <i>Measuring Subjective Well-being for Public Policy</i> , Office for National Statistics.
General Evaluation of Happiness 9. Taking all things together, how happy would you say you are?	Question used in European Social Survey (2006-7) (adapted)	
General Feeling of Happiness 10. I have a feeling I'm happy these days.	Affect question used here are derived from the Gallup World Poll and the European Social Survey	
Positive and Negative Affect 11. I have been feeling enjoyment. 12. I have been feeling calm. 13. I have been worried. 14. I have been feeling sad. 15. I have been feeling happy. 16. I have been feeling depression. 17. I have been feeling anger. 18. I have been feeling stress. 19. I have been tired. 20. I have been smiling or a lot lately.	The affect questions used here are derived from the Gallup World Poll and the European Social Survey. Derived of the Scale of Positive and Negative Experience (SPANE) Diener & Biswas-Diener	Huppert FA, Marks N, Clark A, Siegrist J, Stutzer A, Vitterso J, Wahrendorf M (2008). 'Measuring Wellbeing Across Europe: Description of the ESS Well-being Module and Preliminary Findings' <i>Social Indicators Research</i> , 91, 301-315.
Eudaimonic Well-Being 21. In general, I feel very positive about myself. 22. I am always very optimistic about my future. 23. I am free to decide for myself how to live my life. 24. I generally feel that what I do in my life is worthwhile. 25. Most days I get a sense of accomplishment from what I do. 26. When things go wrong in my life it generally takes me a long time to get back to normal.	Flourishing Scale	Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D., Oishi, S., & Biswas-Diener, R. (2010). New measures of well-being: Flourishing and positive and negative feelings. <i>Social Indicators Research</i> , 39, 247-266.

Source: Elaborated by the author

3.3 Construct validity – Internal consistency

The manifest variables that make up the perceived happiness scale (PHS) had their internal consistency verified through Cronbach's alpha tests and composite reliability coefficients (see Table 1). The result was $\alpha = 0.934$ in the Portuguese sample and $\alpha = 0.938$ in the Brazilian sample. According to Murphy and Davidsholder (1988, p. 89), it shows that the components of the perceived happiness scale have high reliability.

The high scores of both measurements show that the PHS components consistently and reproducibly measure the perceived happiness construct in both samples. This reinforces the importance of using the proposed scale.

The items that make up the perceived happiness scale (PHS) were submitted to an EFA using the principal component analysis (PCA) with the varimax rotation method. It is worth remembering that each of the scale's constructs was obtained by averaging the replies (items), as suggested in the OECD guidelines on the measurement of subjective well-being.

Table 2 - Exploratory Factorial Analysis (EFA) scores

	Brazilians Sample					Portuguese Sample				
	Loads	Cronbach's Alpha	KMO Test	Bartlett Test	Total Variance	Loads	Cronbach's Alpha	KMO Test	Bartlett Test	Total Variance
PHS		0,938	0,926	0	73,69%		0,934	0,914	0	72,16%
X1	0,923					0,905				
X2	0,922					0,931				
X3	0,867					0,731				
X4	0,857					0,897				
X5	0,855					0,833				
X6	0,851					0,845				
X7	0,832					0,866				
X8	0,747					0,767				

Source: Elaborated by the author³

The PCA result demonstrates that the manifest components of the scale are explained by only one factor represented by the latent perceived happiness variable. This shows that the

³ Notes: PHS= Perceived Happiness Scale; X1= Feeling of happiness; X2=Satisfaction with Life (4); X3=Overall Life Satisfaction; X4= Overall happiness; X5= Eudaimon; X6= Eudaimon (5); X7= Life assessment; X8= Affect balance.

factor structure can explain the correlations between the variables used in the scale (Hair et al., 2019; Peterson, 1994).

To verify the occurrence of common method bias and, consequently, the underestimation or overestimation of structural coefficients or of the relationships between latent variables, the Hartman single factor test was used. The results obtained from the two samples (Portuguese = 3 factors extracted and 1st factor with explained variation of 39.9%; Brazilians = 3 factors extracted and 1st factor with explained variation of 38.9%) did not detect any common bias.

3.4 Confirmatory Factor Analysis (CFA)

The composite reliability (CR) and the mean extracted variance (AVE) for each scale component factor were evaluated as recommended by Fornell and Larcker (1981). The existence of outliers was evaluated by the Mahalanobis Distance (D^2) and the Normality of the variables by the univariate and multivariate asymmetry (Sk) and kurtosis (Ku) coefficients.

Table 3 - Confirmatory Factor Analysis (CFA) scores

Model Fit (PHS^a)	Brazilians (n=382)	Portuguese (n=222)
X ² (CMIN/DF)	1,243	1,259
CFI	0,999	0,998
GFI	0,989	0,982
IFI	0,999	0,998
RMSEA	0,025	0,034
P(rmsea<=0,005)	0,863	0,667
MECVI	0,166	0,291

Source: Elaborated by the author⁴

The indices in Table 3 show that the perceived happiness scale (PHS) had a very good fit. The value of the chi-square test resulted in small values ($X^2 / df < 2$), which demonstrates a

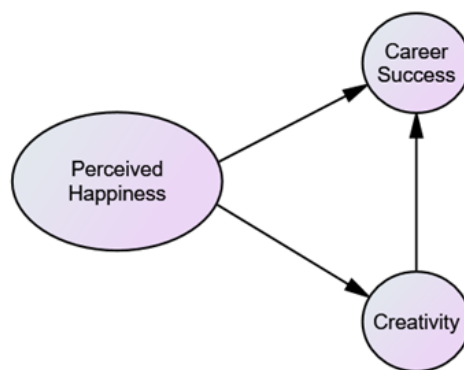
⁴ a PHS= Perceived Happiness Scale.

good fit of the model (Arbuckle, 2008, p. 589), as well as the goodness fit index (GFI) above 0.95. The comparative fit index (CFI) provides also good values, as does the root mean square error of approximation (RMSEA) found in the two samples (RMSEA <0.05) (Arbuckle, 2008).

4. Predictive studies

To test the predictive ability of the perceived happiness scale (PHS), two studies were developed using the same theoretical model and they were tested in two different groups. We used the relationship with the constructs “career success” and “creativity”. The same hypothesis model was used in both studies.

Figure 3. Hypothesis model predictive studies with PHS



Source: Elaborated by the author

4.1 Perceived happiness, creativity and career success.

4.1.1 Career success

Career success can be defined as: “[...] a lens through which we can see the relationship between positive experiences and careers. A useful distinction can be made between objective and subjective career success [...] (Robertson, 2018, p. 243)”. In this sense, a successful career

is an assessment that individuals make of their professional accomplishments (good salary, recognition, status, etc.) compared to other people or colleagues. It also includes the feeling of personal fulfillment with oneself.

According to Boehm and Lyubomirsky (2008, p. 101) “evidence suggests that happiness is not only correlated with workplace success, but that happiness often precedes measures of success and that induction of positive affect leads to improved workplace outcomes”. Recently, studies replicated after a decade confirm a strong link between happiness with personal and professional development (Boehm and Lyubomirsky, 2008; Walsh et al., 2018). Therefore, the following hypothesis is proposed:

Hypothesis 1 - There is a positive relationship between happiness and career success.

4.1.2 Creativity

Creativity is usually defined as the generation of ideas, insight, or problem solutions that are original (i.e., new) and meant to be useful (Ritter and Ferguson, 2017). However, the exact field of understanding of the cognitive or neural processes that involve creativity is still complex (Dietrich, 2019). Some studies look into the relationship between creativity and happiness as a mediator of the relationship between leadership and creativity (Semedo et al., 2017) or to verify the relationship between happiness, creativity and subjective well-being (Ahumada-Tello, 2019), and as the facilitator of personal and social development and student performance (Caballero Garcia et al., 2018).

In the relationship between happiness and career success this also occurred. Recently, studies replicated after a decade confirm a tight link between happiness and personal and professional development (Boehm and Lyubomirsky, 2008; Walsh et al., 2018). In their studies Amabile et al. (2005) found evidence that suggests a linear and positive relationship between positive mood and creativity. Ceci and Kumar (2016) also found a positive relationship with positive mood, and a weak relationship with negative mood. According to Semedo et al (2017) and Ahumada-Tello (2019), happiness might predict creativity. Therefore, there is evidence that allows us to suggest:

Hypothesis 2 - There is a positive relationship between happiness and creativity.

4.1.3 Creativity and career success

Literature provides evidence that creativity is a determining factor for the success of people and businesses. It has been found that creative behavior is responsible for altering results in an innovative way that would not otherwise be achieved. Some studies address creativity and its relationship with career development and success in various contexts (Chen et al., 2018; Chen et al., 2015; Shin et al., 2018; Zagonari, 2019).

Chen et al. (2018) studies with Chinese entrepreneurs confirm the positive effects of individual creativity and firm creativity on the perceived happiness of creative entrepreneurs and for success in their careers. Therefore, the following hypothesis is proposed:

Hypothesis 3 - There is a positive relationship between creativity and career success.

4.2 Method

To measure career success, the three main questions of perceived career success (Turban and Dougherty, 1994) were used. To maintain the standard of measurement adopted in the original questionnaire, the 7-point scale was transformed into a 11-point scale, where 0 (zero) means "very unsuccessful" and 10 (ten) "very successful".

Creativity was measured by three self-report questions, tested and validated by Hoffman et al. (2010) ("1- I consider myself a creative person. 2- Creative endeavors are important for me, in my life. 3- My best friends considered me a creative person."). These questions were measured on a 11-point Likert scale. FCA and structural equation analysis (SEM) was used to test the adequacy of the theoretical model and the predictive capacity of PHS on Creativity and Career Success.

Table 4 - Confirmatory Factor Analysis of the model of Predictive Studies

Model Fit (PHS ^a)	Brazilians	
	(n=382)	Portuguese (n=222)
X ² (CMIN/DF)	1,571	1,450
CFI	0,993	0,990
GFI	0,966	0,944
IFI	0,993	0,990
RMSEA	0,039	0,045
P(rmsea<=0,005)	0,898	0,642
MECVI	0,492	0,812

Source: Elaborated by the author

Tables 5 and 6 show that the composite reliability and Cronbach's alpha coefficient were high in all factors (CR and Alpha > 0.9) and in both samples. AVE is always above 0.5 and the squared correlation between each pair of variables is always lower than the respective AVE, therefore, supporting the convergent and discriminant validity assumption.

Table 5 - Correlations, Cronbach's alpha, C.R. and AVE – Portuguese sample

	PHS	Career	Crea	CR	AVE
Perceived Happiness Scale (PHS)	0.934			0.944	0.681
Career Success Perception	0.606	0.936		0.925	0.806
Creativity (Crea)	0.242	0.363	0.933	0.934	0.825

Source: Elaborated by the author⁵

Table 6 - Correlations, Cronbach's alpha, C.R. and AVE – Brazilian sample

	PHS	Career	Crea	CR	AVE
Perceived Happiness Scale (PHS)	0.938			0.948	0.697
Career Success Perception	0.686	0.924		0.921	0.796
Creativity (Crea)	0.390	0.483	0.902	0.903	0.756

Source: Elaborated by the author⁶

⁵ Diagonal entries are Cronbach's Alpha Coefficients; CR= Composite Reliability; AVE= Average Variances Extracted.

⁶ Diagonal entries are Cronbach's Alpha Coefficients; CR= Composite Reliability; AVE= Average Variances Extracted.

4.3 Results

Table 7 shows the results of the hypotheses test, comparing the results from both samples.

Table 7 - Hypothesis test

Hypothesis	Construct	Brazilians Sample				Portuguese Sample			
		SRW	CR	P-value**	Check*	SRW	CR	P-value**	Check*
H1	Career Success <-- - PHS	0,586	12,48	***	S	0,55	8,822	***	S
H2	Creativity <--- PHS	0,390	7,29	***	S	0,242	3,448	***	S
H3	Career Success <- -- Creativity	0,255	5,7	***	S	0,23	3,89	***	S

Source: Elaborated by the author⁷

Table 8 - Confirmatory Factor Analysis of the model of Predictive Studies

Model Fit (PHS)	Brazilians (n=382)	Portuguese (n=222)
X ² (CMIN/DF)	1,571	1,450
CFI	0,993	0,990
GFI	0,966	0,944
IFI	0,993	0,990
RMSEA	0,039	0,045

Source: Elaborated by the author⁸

Table 7 shows that the three hypotheses were supported in both studies. The results found in both samples (Portuguese and Brazilian) are very similar in direction and content. This research shows similar results to past research (Boehm and Lyubomirsky, 2008; Lent and Brown, 2008; Walsh et al., 2018), using other scales. In addition to the model adjustment quality indexes and the reliability and validity indicators of the PHS construct, presented in other sections of this article, the overall results show that the PHS has a good predictive capacity, it is easy to measure and shows a high stability in studies across countries.

⁷ * not support = NS; support = S; ** p-value divided by 2, two-tailed.

⁸ a PHS= Perceived Happiness Scale

4.4 Discussion

The results highlight the relationship between happiness and career success, supporting H1. Several studies suggest that happy individuals are relatively more successful in their careers (Boehm and Lyubomirsky, 2008; George, 1991; Iverson et al., 1998). Likewise, the studies by Lyubomirsky et al. (2005), by Wright et al. (2007) and more recently by Walsh et al. (2018) found a positive relationship between happiness and career success.

There is a relationship between happiness and creativity, therefore supporting H2. The results achieved are consistent with previous studies (Amabile et al., 2005; Baas et al. 2008, Runco, 2007). According to Semedo et al. (2017), happiness is a state that might trigger a neural state and reinforces one's openness to finding new ideas and solutions and to discovering ways to be original (Ritter and Ferguson, 2017).

The results also show that there is a relationship between career success and creativity, supporting hypothesis 3. Our results converge with the studies by Chen et al. (2015), who state that a happy individual is more motivated to seek alternatives for his career, becomes more empowered and, consequently, can achieve better professional outcomes than an individual who is not happy. According to Chen et al. (2015), the level of creativity, whether on a personal or business level, influences entrepreneurial behavior and career success goals. Therefore, since the three hypotheses are supported, the predictive capacity of the perceived happiness scale is supported as well, showing high stability across countries and cultures.

5 Contributions, limitations and recommendations for future research

The main contribution of the perceived happiness scale (PHS) is to measure in an integrated way the elements considered in the literature as components of subjective and psychological well-being (both called happiness herein). The perceived happiness scale is the only one that synthetically considers emotional, cognitive aspects, meaning and purpose of life. It seeks to consider what the literature defines as subjective (or hedonic) well-being and psychological (or eudaimonic) well-being on one scale, as proposed by Lent and Brown (2008). From the

elements that integrate it, it provides a fundamental instrument for measuring happiness at the individual level.

Although it is a cognitive and subjective perception metric of happiness and life satisfaction, it can and should be used in research in specific domains of life by researchers and marketing managers. By using the synthetic index obtained by the scale, it is possible to identify areas of potential impact on people's lives. In the business environment, identifying the level of perceived happiness will allow the development of internal marketing and relationship marketing actions, which implies improving the organizational climate and strengthening the culture of stakeholder relationship.

5.1 Limitations

There are, however, some limitations to be noted. Online data collection, in non-probabilistic sampling, does not allow for generalization, because it does not include part of the Portuguese and Brazilian population that does not have access to mobile phones or computers. Therefore, it is recommended that, in future research, the scale be replicated to other social groups and under the influence of adverse behavioral conditions. Comparative studies with other subjective and psychological well-being measurement scales are also suggested, which will allow the potential refinement of the research instrument.

6 Final remarks

At the current moment of humanity, with constant changes and shifting paradigms, we notice the growing attention of the scientific community to aspects that allow us to get to know the human being better. In this sense, research has expanded to various areas of knowledge on subjective well-being called happiness (Diener et al., 2013). Aligned with this worldwide trend, this paper has submitted, tested and validated the perceived happiness scale (PHS). Although further studies are needed to validate and consolidate the scale in other countries and regions

with diverse cultural backgrounds, the perceived happiness scale is considered to serve the purpose of effectively measuring happiness (SWB and PWB) at the individual level.

The structural model based on theory was adequate for the collected data. As can be seen from the quality of adjustment, the model is quite suitable for measuring, at the present moment, the perception of individual happiness. Therefore, the perceived happiness scale fills a gap among the measurement instruments available today: the measure of happiness integrating cognitive and emotional aspects and meaning of life. It is hoped that the study can be replicated in various other contexts and that suggestions for scale improvements are offered to us.

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CHAPTER VII - GENERAL CONCLUSIONS, CONTRIBUTIONS, MANAGEMENT IMPLICATIONS AND FUTURE RESEARCH

1 General conclusions

This thesis had as its initial purpose to contribute to the "deepening of scientific knowledge already developed about happiness, in order to deliver more value to society, inviting people to reflect on their lives and what makes them happy and, with that, contribute to building a happier society". At the end of this work, we understand that this purpose has been achieved. Next, we will briefly review the objectives and results achieved in each of the stages that constituted this thesis.

The first stage consisted of a bibliometric study and systematic literature review, and aimed to:

Objective 1: Check the evolution of the publication of articles on happiness and education.

Findings: It was found that there is a significant increase in the number of publications related to happiness, especially from 2012 onwards. The growth in the number of articles has occurred annually. It was noted that even in the year 2020 when the pandemic began, there were many publications.

Objective 2 - Identify the organizations, countries, journals that most publish scientific articles on happiness and education.

Findings: A strong participation of Finnish (University of Jyväskylä and University of Helsinki) and Australian (for example: Monash University and University of Melbourne) universities was identified in the production of articles in the researched topic area. The participation of Chinese universities was also identified (City University of Hong Kong; University of Hong Kong; Chinese University Hong Kong; Hong Kong Polytechnic University). It was also found that the Spanish universities (University of Valencia and International University of La Rioja) have the most recent production on our research topic. The marked influence of Michigan State University and University British Columbia was verified in the number of connections established with other universities in the production of articles in this area of research. As for the sources of publications, the Social Indicators Research and the Journal of Happiness Studies stood out. Another highlight is the participation

of journals such as *Frontiers in Psychology*; *Plos One* and *Current Psychology*, with the most recent publications on the subject. With regard to the countries of origin of these publications, the presence of the USA stands out, with a greater number of links with other countries, with a greater number of publications and with greater influence on publications on the researched topic. There is a “growing” participation from countries like China, Russia, India, Poland and South Korea that have more recent publications on the subject.

Objective 3 - Identify and analyze the authors who publish the most on these topics and in the areas of education and business;

Findings: The authors with the highest number of publications on the subject were: the Spanish professor and researcher Luís Manuel Cerdá Suárez; Finnish researcher and professor Katariina Salmela-Aro; American professor and researcher E. Scott Huebner and American Robert W. Lent. Cerdá Suárez mainly investigates the school environment, with an emphasis on the effects of the virtual environment and innovation on the happiness of students and teachers. Katariina Salmela-Aro, works in education and psychology. E. Scott Huebner, Department of Psychology, University of South Carolina, USA, investigates the behavior of adolescents in the educational setting. Robert W. Lent stands out for his career studies and professional development. It was also verified the emergence of new researchers on happiness and education investigating everyday situations and environments, as is the case of education in virtual environments and the effects on the well-being and happiness of students and teachers. This demonstrates a renewal of researchers interested in following the legacy left by the most long-lasting researchers on the subject.

Objective 4 - Identify and analyze the most cited authors;

Findings: The authors with the highest number of citations, as seen in chapter IV, were Edward L. Deci and Richard M. Ryan. Next came authors Daniel Kahneman and Richard Koestner.

Objective 5 - Analyze the articles with the highest number of citations;

Findings: The “champion of citations” in our research, the article: “Theory of self-determination and the facilitation of intrinsic motivation, social development and well-being” (Deci and Ryan, 2000). This article already had more than 14 thousand citations at the time of our research.

Objective 6 - View the clusters formed by authors, organizations, countries and journals.

Findings: Maps and figures can be seen in chapter IV.

Objective 7 - Analyze the most recently published articles and their research gaps, as well as the suggestions for future research contained therein.

Findings: Our qualitative analysis of the most recent articles noted:

- emphasis on research on entrepreneurship and its relationship to education;
- increase in research involving the topic 'Covid-19 pandemic';
- increased frequency of welfare investigations carried out with Chinese citizens;
- studies on consumer behaviour, especially those related to their adaptation to the means and mechanisms of interaction in the virtual environment.
- studies on online consumer behavior relating it to the components of happiness / subjective well-being.
- studies that address the eudaimonic component of happiness (purpose and meaning of life).
- articles involving happiness in personal and business development contexts (career; minimalist consumption; brand engagement; optimism and business success).

Objective 8 - Analyze the most common terms throughout the survey.

Findings: By analyzing the most present terms in the titles, abstract and keywords of our research, we found:

- a) tendency to study the educational environment and factors associated with happiness and well-being in that environment;
- b) greater emphasis on the study of factors that lead to well-being and happiness and less attention to factors that cause discomfort and unhappiness;
- c) growing number of studies that analyze the impact of the work or school environment on people;
- d) increase in the number of studies with young people.

In this sense, it can be inferred that there is a strong relationship between individuals' happiness and health, contrary to what happened in the past, where research on human well-being was related to disease prevention. It seems to us that now the focus of research is no longer the disease, but the factors that lead us to understand happiness, as observed in other studies.

The second stage consisted of a survey in the higher education environment and involved the students' perception of value. Its objectives were:

Objective 9 - Analyze the factors that contribute to the perception of value of students with their academic experience;

Findings: Using the Shett, Newman and Gross model, adapted to the context of education by Le Blanc and Nguyen (1999), we found an adequate framework to measure the perception of “Get” value of students in higher education. We chose the model by Cronin et al. (1997) to measure the student's perception of “Give” value.

Objective 10 - Analyze the relationship of these values with student satisfaction;

Findings: It was found that, from the tested hypotheses, there was sufficient evidence to state that the perception of epistemic and emotional value is positively related to student satisfaction with their academic experience.

Objective 11 - Check if, from this satisfaction, students would be more willing to disclose to other people (Word of mouth);

Findings: this hypothesis was confirmed, that is, there is sufficient evidence to affirm that there is a positive relationship between the students' satisfaction with their academic experience and the possibility of carrying out 'word of mouth'.

Objective 12 - Verify if student satisfaction results in a greater perception of success in their career.

Findings: There is enough evidence to state that there is a positive relationship between student satisfaction and the expectation of career success.

Objective 13 - Test the moderating effect of Corporate Reputation on these relationships.

Findings: It was found that corporate reputation proved to be a moderating variable in the relationship between the perception of value and satisfaction with academic experience (SWC), as well as in the relationship between satisfaction and the expectation of career success (EXS) and the positive word of mouth (WOM).

The third step consisted of creating an integrated Perceived Happiness scale. To consolidate and validate this scale, an international survey was carried out involving Portuguese and Brazilians. This step had the following objectives:

Objective 14 - Check the psychometric qualities of the scale.

Findings: The Perceived Happiness Scale (PHS) had adequate construct and discriminant validity, with excellent adequacy of the proposed model.

Objective 15 - Test the predictive ability of the scale.

Findings: The test results with the scale demonstrate good predictive ability in both samples. All tested hypotheses were confirmed.

2 Academic and managerial contributions

In the development of the thesis, several lessons were learned, both from an academic and scientific point of view, as well as in business management. Below, we will describe the main contributions.

2.1 Management contributions

From the point of view of the contribution to the management of organizations, in particular to the management of Higher Education Institutions, it appears that the current moment is ripe for investments in understanding and managing the relationship with its stakeholders. It appears that HEIs must act not only in technical and professional training, but as protagonists of a more humanized society, which transforms the global reality. Our study presents evidence that demonstrates the importance of considering the student as a co-creator of the value of the service, and not just as a consumer of a service. In addition, the results of research carried out at the university level contribute to the managers of the Business School being able to: 1) reinforce actions that promote the perception of benefits to students; 2) create marketing communication actions aimed at making students aware of the quality of the training offer received; 3) build marketing plans that reinforce the high reputation of the institutional brand and that take into account each student's experience and contact with the university environment; 4) develop relationship marketing actions that create and sustain an emotional environment of proximity between the student and the faculty, managers and other members of the academic community; and 5) develop a spirit of pride and belonging to the Business School. Furthermore, the growing interest in society's happiness and well-being may be an indication for companies that a more collaborative and less competitive attitude is expected of them.

2.2 Academic contributions

From the point of view of academic-scientific contributions, it appears that the growing number of publications on happiness and the school environment demonstrates the important role of education in the formation of citizens and in the well-being of society. Our study also contributes to science by demonstrating which factors constitute a Business School's students' perception of value and how each of these factors affects student satisfaction. Another important contribution is the creation and validation of the Perceived Happiness Scale. This metric was, until a few years ago, the only one that measured the emotional, the cognitive and the meaning and purpose of life in an integrated way. Another contribution is given by the synthetic index of perceived happiness, with which it is possible to identify areas of potential impact on people's lives.

These, therefore, are the contributions that the three studies that make up this thesis bring to the scientific community and the business world.

3 Limitations

Every scientific study involves decisions by the researcher who, when taking them, already excludes other paths to obtain the scientific "truth". When reflecting on the choices made in the research that comprise this thesis, we consider the following limitations:

- 1) In our bibliometric study on happiness and education, due to the scope of the themes, we chose to include only articles published or submitted for review. With this, we do not consider other sources of documents. Another limitation was the option for a single data collection base. Furthermore, we can consider that the choice of bibliometric study and systematic literature review limits us only to written records, not capturing behavioral nuances behind each citation or intention of the researcher.
- 2) In our research on student value perception, we considered as limiting factors:

a) the large number of variables initially involved in the questionnaire allowed for a more comprehensive analysis, but few were actually used in the article produced. This generated a waste of time and energy for the researcher, limiting the results presented;

b) the transformation of the initial research model, due to the quality of fit of the measurement and structural model, resulted in the removal of the happiness construct. Although it is a natural consequence of data processing, the happiness construct was represented by the student satisfaction construct, even if in a very limited way to represent it.

3) In the survey that originated the perceived happiness scale, the choice of online data collection limited the scope of the survey. This type of source of respondents' participation, although it has broad coverage, excludes respondents who do not have access to a computer and/or cell phone. Reducing the possibility of generalizability of results.

4 Suggestions for future research

The main indications we make for future research, already reported in the studies that make up this thesis, are:

a) the development of research on happiness with young people at the beginning of schooling;

b) focus on research on eudaimonic happiness (meaning and purpose of life);

c) investigations that deepen the relationship between the concept of flourishing or flow and its role in happiness and education;

d) investigations to analyze the patterns, determinants and consequences of individuals' happiness after the COVID-19 pandemic period;

e) with regard to the study of the student's perception of value with higher education, we recommend the development of longitudinal studies that monitor the evolution of personal values and the students' perception of value in their experience, as well as satisfaction with the services offered by the Business School;

f) regarding the perceived happiness scale, the use and validation of this metric in other contexts and social groups is recommended. Comparative studies of this scale with other metrics are also suggested.



APPENDIX A – DATA COLLECTION INSTRUMENT

Dear interviewees, this questionnaire is part of a survey that aims to understand the student's perception of value with their academic experience in a Business School. This study is part of a Doctoral Thesis in Business Management at the Faculty of Economics of the University of Coimbra, Portugal and its results will be used only for academic-scientific purposes. This is a confidential survey and your personal data will not be revealed. By starting the survey, you agree to the terms of free and consented participation.

We appreciate the collaboration and sincerity in your answers, it is fundamental for the success of this investigation.

Sincerely,

Elvisnei Camargo Conceição, PhD Student

Block 1 - Questions about the perception of value for the student

The following questions are about what you consider **BENEFITS** related to your degree, course, or university as a whole. Use a scale from 1 to 7, where 1 represents "Strongly Disagree" and 7 represents "Strongly Agree".

1. My graduation will allow me to earn a good salary or better.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. My graduation will allow me to realized my career goals

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. My graduation will lead to promotion in my current or future job

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Taking my course contributed to my personal development.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. My course content keeps me interested
1 2 3 4 5 6 7
6. I learn new things in my course
1 2 3 4 5 6 7
7. The course content contributes to a high value of my education.
1 2 3 4 5 6 7
8. The academic guidance I receive from my professors reinforces the value of my degree.
1 2 3 4 5 6 7
9. People who matter to me think my course is a good thing to do.
1 2 3 4 5 6 7
10. People who influence what I do think my course is a good idea.
1 2 3 4 5 6 7
11. My current or future employer will see me better when I finish my course.
1 2 3 4 5 6 7
12. My family and friends will see me better when I finish my degree.
1 2 3 4 5 6 7
13. The support of my family and friends has been an important help during my course.
1 2 3 4 5 6 7
14. I'm proud of what I'm doing on my course.
1 2 3 4 5 6 7
15. Taking my course increased my self-confidence.
1 2 3 4 5 6 7



16. I took this course for a personal challenge.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. The support materials provided in my course (eg copies, texts, etc.) have helped my learning.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. Group study work has been very beneficial in my course.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. The university campus and its facilities contributed to the value of my course.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

20. The university's reputation influences the value of my course.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

21. The image projected by the university influences the value of my graduation.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. I believe employers have positive things to say about my university.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. I heard positive things about my university.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. I believe my university has a good reputation.

1	2	3	4	5	6	7
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The following questions are related to the sacrifices or costs that a student has to carry out their university education.

25. I had to give up other things of interest to take my course.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

26. My studies reduce the time I spend with my family

1 2 3 4 5 6 7

27. My studies reduce the time I spend with my friends.

1 2 3 4 5 6 7

28. The price I pay for my course is reasonable when I consider what I can get out of it.

1 2 3 4 5 6 7

29. When I consider the monetary price of my course, I believe the quality is good.

1 2 3 4 5 6 7

Block 2 – Questions about Satisfaction with experience academic.

The following questions are related to satisfaction in relation to what is provided by the graduation, course or university as a whole.

30. Despite everything, so far I'm satisfied with my course.

1 2 3 4 5 6 7

31. In general, so far, I am satisfied with the educational experience at my university.

1 2 3 4 5 6 7

32. It was a wise decision to take this course.

1 2 3 4 5 6 7

33. If I had to do it again, I would still choose my course.

1 2 3 4 5 6 7

Block 3 - Questions about the possibility of nomination (Word Of Mouth)

Using a scale from 1 to 7, where 1 means "totally disagree" and 7 means "totally agree", answer each statement:

34. "I would recommend my university to other people"

1 2 3 4 5 6 7

35. "I would recommend my Business School to other people"

1 2 3 4 5 6 7

36. "I would recommend my course to other people"

1 2 3 4 5 6 7

37. "Overall, it's very likely to speak well about my college experience to other people"

1 2 3 4 5 6 7

Block 4 – Questions about career success expectation

The following questions are about your perception of professional success (for those who already have a professional trajectory) or expectations of professional success (for those who are starting a career or have not yet started). Using a scale from 1 to 7 where 1 means you believe you are or believe you will be "Very unsuccessful" and 7 that you are or believe you will be "Very successful", answer considering the present and expected future.

38. How successful was your career?

1 2 3 4 5 6 7

39. Compared to your co-workers, how successful is your career?

1 2 3 4 5 6 7

40. What do other people think about your career success?

1 2 3 4 5 6 7

Block 5 – Qualification data of respondents.

41. Gender: Male (___) Female (___)

42. Course: _____

43. Semester on course: ___semester (approximate)

44. Age (in years): _____

45. Marital status: married / stable (___) widowed (___) divorced (___) separated (___) single (___)

46. Monthly family income (approximate): \$_____ (in monetary units).



APPENDIX B – DATA COLLECTION INSTRUMENT

Dear interviewees, this questionnaire is part of a survey that aims to test a scale to measure perceived happiness. This study is part of a Doctoral Thesis in Business Management by the Faculty of Economics of the University of Coimbra, Portugal and its results will be used only for academic-scientific purposes. This is a confidential survey and your personal data will not be revealed. By starting the survey, you agree to the terms of free and consented participation.

We appreciate the collaboration and sincerity in your answers, it is fundamental for the success of this investigation.

Sincerely,

Elvisnei Camargo Conceição, Doctoral Student

Block 1 - Question about general life satisfaction

The following question ask how satisfied you feel, on a scale from 0 to 10. Zero means you feel “not at all satisfied” and 10 means “completely satisfied”.

1. Overall, how satisfied are you with life as a whole these days?

0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Block 2 – Questions about life evaluation

Below you will find a series of affirmations related to your life. Using a scale from 0 to 10, where Zero means that you "strongly disagree" and 10 that you "strongly agree", check the option that you consider most suitable for each statement:

	Strongly Disagree 0	1	2	3	4	5	6	7	8	9	strongly agree 10
2. Currently I think I have the best possible life I can have.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. In most ways my life is close to my ideal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. The conditions of my life are excellent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I am satisfied with my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. So far I have gotten the important things I want in life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. If I could live my life over, I would change almost nothing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Overall, I feel that the things I've done in my life have been worthwhile.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Considering everything I've lived through, I can say I'm completely happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10.
Currently, I
have the
feeling that
I am happy.



Block 3 – Affect questions

The following questions are about how much you have been experiencing some feelings recently. On a scale of 0 to 10, where zero means you haven't experienced the emotion “at all” recently; and 10 means that you experienced the emotion “all the time or always”. Below is a list of emotions or feelings you may have felt recently.

	At all 0	1	2	3	4	5	6	7	8	9	All the time or always 10
11. I have felt pleasure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I have been feeling calm.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I have been worried.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I have been feeling sad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I have been feeling happiness.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I have been feeling depression.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. I have been feeling angry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I have been feeling stressed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. I have been feeling tired.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I have been laughing or smiling a lot lately.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Block 4 – Eudaimonic questions

I now want to ask you some questions about how you feel about yourself and your life. Please use a scale from 0 to 10 to indicate how you felt. Zero means you “disagree completely” and 10 means “agree completely”

	Disagree completely 0	1	2	3	4	5	6	7	8	9	Agree completely 10
21. In general, I feel very positive about myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I am always very optimistic about my future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. I'm free to decide for myself how to live my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. I generally feel that what I do in my life is worthwhile.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Most days I get a sense of accomplishment from what I do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. When things go wrong in my life, it generally takes me a long time to get back to normal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Block 5 – Creativity perception

Now tell us what your perception of creativity is like. Please use a scale from 0 to 10 to indicate how you felt. Zero means you “disagree completely” and 10 means “agree completely”

	Disagree completely 0	1	2	3	4	5	6	7	8	9	Agree completely 10
27. I consider myself a creative person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. Creativity is very important in my life..	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. I think my best friends consider me a creative person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Block 6 – Career success expectation

The following questions are about your perception of professional success (for those who already have a professional trajectory) or expectations of professional success (for those who are starting a career or have not yet started). Using a scale from 0 to 10 where Zero means that you believe you are or will be "Very unsuccessful" and 10 that you are or will be "Very successful". Respond considering the present or the expected future.

	Very unsuccessful 0	1	2	3	4	5	6	7	8	9	Very successful 10
30. How successful was your career?.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. Compared to your co-workers, how successful is your career?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. What do other people think about your career success?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Block 7 – Demographic and socioeconomic data.

33. Sex

- Male
- Female

34. Professional situation (if you are in more than one situation, mark the one that most characterizes your current situation)

- Works full time
- Works part-time
- Unemployed looking for work
- Unemployed without looking for work
- Retiree
- Student

- Businessman or Self-employed

35. Educational level: (Check the training with the highest degree)

- Incomplete high school
- Complete high school
- Incomplete Higher Education (Graduate/Licentiate or Technologist)
- Complete Higher Education (Graduate/Licentiate or Technologist)
- Postgraduate (specialization or MBA)
- Master degree
- Doctorate degree

36. Nationality:

- Brazilian
- Portuguese
- Other nationality

37. Age (just write your age in numbers)

38. Marital status

- Married (or stable union)
- Widower
- Divorced
- Separate
- Single
- Dating or fiance

Monthly Family income. If you live or have a family income in Brazil, answer this question. If you live or have an income in Portugal or in another European country, just answer the Income

alternatives in Euros.

39.1 Monthly family income (In R\$ - Brazilian Coin) (check in the options below, the approximate total earnings of all those who live and contribute to the support of the house where they live).

- Up to R\$ 1.760,00 monthly
- From R\$ 1.760,01 to R\$ 3.720,00
- From R\$ 3.720,01 to R\$ 8.800,00
- From R\$ 8.800,01 to R\$ 17.600,00
- Above R\$ 17.600,00

39.2 Monthly family income (in € - euros) (check in the options below, the approximate total earnings of all those who live and contribute to the support of the house where they live).

- Up to € 1.000
- From € 1.001 to € 1.500
- From € 1.501 to € 2.000
- From € 2.001 to € 2.500
- From € 2.501 to € 5.000
- From € 5.001 to € 10.000
- Above € 10.000 monthly

40. Way of life at home: Do you live alone or with others?

- I live by myself
- I live with other people

Thank you so much for participating!