

Università degli Studi di Cagliari

DOTTORATO DI RICERCA

IN

ECONOMIA E GESTIONE AZIENDALE

Ciclo XXVII

THE MULTIFACETED WORLD OF SUSTAINABILITY. AN ANALYSIS OF ABOUT 30 YEARS OF STUDIES

Settore scientifico disciplinare di afferenza

SECS-P/08

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Esame finale anno accademico 2013 – 2014

Abstract

The concept of sustainability has emerged as a response to the most stringent problems of humanity. Initially defined in the Brundtland report published by the World Commission on Environment and Development in 1987 as the "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, 1987:43), sustainable development constituted the main topic of the Conference on Environment and Development in Rio de Janeiro in 1992. The conference distinguished itself in the world of academia by establishing the principles of sustainable development and the indisputable relation between three fundamental pillars: environmental protection, social equity and economic development (Scrobota and Vosylius, 2013).

This dissertation is composed of three essays. Essay 1, "Sustainability: The State of the Art and Emerging Perspectives", analyzes the current academic literature on sustainability, first, with elaborative documentation and, second, using bibliometric analysis supported by the Science Mapping Analysis Software Tool (SciMat) open source software (Cobo, Lòpez-Herrera, Herrera and Herrera-Viedma, 2012b) to gain insight on this body of knowledge and to investigate which topics are associated with this subject and considered to be the most relevant.

Essay 2, "What Happens to Well-Being and Happiness by Combining with Sustainability?", originates from the results of Essay 1 and develops an analysis of the relationship between sustainability, well-being and happiness. Indeed, as outlined in Essay 1, a considerable amount of literature has focused on environmental and economic dimensions, but there is little systematic research on how sustainability can interact with these factors as new paradigms for individuals, communities, and organizations.

Essay 2 contributes to extending the existing theories on the three pillars of sustainability and identifies well-being and happiness as new driving factors.

Essay 3, "Sustainability as a Matrix of Experiential Marketing", examines the current role of sustainability as a matrix of experiential marketing to understand how a memorable, emotional and responsible connection between consumers and sustainable brand can generate customer loyalty and affect the purchase decision through a case study (Yin, 1984; Eisenhardt and Graebner, 2007; Siggelkow, 2007; Yin, 2009) that analyzes an ecological campaign called "The Fun Theory". This work contributes to strengthening this new theory, according to which "fun" is best for changing the bad habits of people in a responsible and sustainable manner.

Collectively, the three essays provide a general picture for a more holistic understanding of sustainability that creates new possibilities for more focused and effective sustainable development policies. A broader perspective on sustainability can maintain or improve the well-being and happiness of human beings. Reaching this objective is possible if the restrictions of individual freedoms, resource use and the ability to undergo experiences are compensated by improvements in the other determinants of wellness, and such improvements can be an effective motivator for sustainable behavior.

To Mauro and my family.

Acknowledgements

The completion of a PhD is a fitting moment to look back and be amazed at the impact other people have had on your life. These last three years were enriching, exciting and, often, funny.

Many people have made a side dish to my PhD, but only one plays a protagonist role in this journey.

Professor Ernestina Giudici has been my Super Advisor, on work and sometimes on life. I admire enormously how she coached me on research. Most importantly, I will never forget how she helped me through difficult times. She made me understand why this relationship is sometimes expressed in family terms. Thanks.

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Introduction

This dissertation examines the multifaceted world of sustainability with an analysis that covers approximately 30 years of studies.

It draws from research in the field of Management Studies (Rugman and Verbeke, 1998; Porter and Kramer, 2006), Sustainability Sciences (Dovers and Handmer, 1992; Gladwin, Krause and Kennelly, 1995; Ayres, 1996; De Young, 1996; Basiago, 1999; Kaivo-Oja, 1999; Schultz, 2001; Kates, Leiserowitz and Parris, 2006; Ekins, Dresner and Dahlstrom, 2008), Psychology (Argyle, 1987; Buunk and Schaufeli, 1999; Cacioppo, Gardner and Berntson, 1999; Kahneman, 1999; Oskamp, 2000; Bonnes and Bonaiuto, 2002; Haviland-Jones, Rosario, Wilson and McGuire, 2005; Napier and Jost, 2008; Kasser, 2009; Bechtel and Corral-Verdugo, 2010; Robertson and Birch, 2010; Corral-Verdugo, Tapia, García, Varela, Cuen and Barrón, 2012), and Experiential Marketing (McCarthy and Perreault, 1984; Schmitt, 1999a; Schmitt, 1999b; Hoch, 2002; Caru and Cova, 2003; Kahneman, Krueger, Schkade, Schwarz and Stone, 2004a; Kahneman, Krueger, Schkade, Schwarz and Stone, 2004b; Wood and Masterman, 2007; Belz and Peattie, 2009) to provide a comprehensive analysis of the role that sustainability plays in the scientific research field.

This dissertation consists of three essays. Essay 1, "Sustainability: The State of the Art and Emerging Perspectives", develops a descriptive and bibliometric analysis of the scientific literature, recognizing conceptual subdomains and providing insights into the structure of the sustainability field.

Essay 2, "What Happens to Well-Being and Happiness by Combining with Sustainability?", proposes a narrative literature review and a co-words analysis of the relationship between sustainability, well-being and happiness that, as emerged from Essay 1, appears to be a topic that has

been scarcely explored in the academic literature. This essay contributes to extending the existing theories on the three pillars of sustainability and identifies well-being and happiness as new driving factors.

As noted above, Essay 1 and Essay 2 adopt bibliometric analysis using the Science Mapping Analysis Software Tool (SciMat) open source software (Cobo, Lòpez-Herrera, Herrera and Herrera-Viedma, 2012b) because this tool allows forecasting future trends by taking into account the evolution of the considered theme through a keywords analysis.

Essay 3, "Sustainability as a Matrix of Experiential Marketing", examines sustainability as a matrix of experiential marketing through a case study (Yin, 1984; Eisenhardt and Graebner, 2007; Siggelkow, 2007; Yin, 2009) that explores a new theory called "The Fun Theory". This theory, which combines sustainability, experience and brand, highlights the notion that "fun" can be the best way to change the bad habits of people in a responsible and sustainable manner.

Taken collectively, the three essays in this dissertation provide a new comprehensive analysis of sustainability. After having conducted the literature review on sustainability to understand how this concept has evolved over time, a more holistic view of sustainability has been developed that considers the concepts of sustainable well-being and experience.

The concept of sustainable well-being means that societies should aim to foster the well-being needs of the present generation without compromising the ability of future generations to meet their needs. Thus, sustainable development policies should build on a deep understanding of the various determinants of human wellness in the changing natural and socio-economic environment. Such policies require an intelligent balancing of the tradeoffs among the various determinants of well-being.

As a result, the traditional economic, social and environmental sustainability dimensions of sustainable development must be supplemented with the subjective well-being and responsibility of individuals because

sustainability cannot be reached without responsible behavioral changes.

Instead, the concept of experience is related to "The Fun Theory", which, through a series of videos showcasing social experiments, allows people to undergo experiences, specifically fun experiences.

The adopted marketing strategy based on fun experiences can be considered a method of educating people to be sustainable in a funny and experiential manner. The contributions presented in the three essays of this dissertation open interesting avenues for future research.

The present study does not exhaust the connection between these concepts because the research, especially the research on "The Fun Theory", is only now taking its first steps. A priority for future research is the indepth analysis of these specific topics in relation to firms.

Essay 1

Sustainability: The State of the Art and Emerging Perspectives

Abstract

A growing interest in sustainability and, more recently, studies regarding environmental management, social responsibility, industrial ecology, sustainable tourism, green economy, cleaner production, pollution control, eco-efficiency, and sustainable consumption (Glavic and Lukman, 2007) constitute a small example of the multiplicity of terms used. The approaches adopted depend on the field of application (engineering, economics, management, ecology, etc.), in which each scientific field tends to see only one aspect of the overall research question (Chichilnisky, 1996): the aspect that they share in common is the manner in which they all turn to sustainability. This study aims to analyze the current academic literature on sustainability in its various facets, first, with elaborative documentation and, second, using bibliometric analysis supported by the Science Mapping Analysis Software Tool (SciMat) open source software (Cobo, Lòpez-Herrera, Herrera and Herrera-Viedma, 2012b) to gain insight on this body of knowledge and to investigate which topics are associated with this subject and considered to be the most relevant. Specifically, the objectives are as follows: first, to conduct a descriptive analysis of the reviewed literature and, second, to recognize the conceptual subdomains and to provide insights on the structure of the sustainability field using a visualization tool to obtain an image of the distribution of the field in several subfields and to indicate the relationships between them. The study

shows the evolution of the field from 1987 to 2014. The final goal is to understand the current state of the art of sustainability research and to

create a foundation that allows forecasting further research on the issue.

Keywords: sustainability, bibliometric analysis, SciMat

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1.1 Introduction

This essay aims to examine the literature on the topic of sustainability from 1987 (the official birth of attention to this subject) to the present to understand the evolution affecting this field of study.

The core idea of sustainable development was defined by the World Commission on Environment and Development (WCED, 1987) as "development which meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987:43). In its broadest sense, this definition has been widely accepted and endorsed by thousands of governmental, corporate, and other organizations worldwide (Gladwin, Krause and Kennelly, 1995). The satisfaction of human needs and aspirations is the main objective of development that can be considered to be "sustainable": more specifically, sustainable development will satisfy the basic needs of all people now and in the future or extend the opportunity to achieve a better life to everyone (Gladwin, Krause and Kennelly, 1995). Many scholarly definitions (Viederman, 1993; Springett, 2003) have been suggested in recent years, resulting in different interpretations.

Kelly et al. support that sustainability is multidimensional, incorporating different aspects of society and seeking environmental protection and the maintenance of natural capital to achieve economic prosperity and equity for present and future generations (Kelly, Sirr and Ratcliffe, 2004). Tisdell (1988) considers sustainability to be the maintenance of essential ecological processes, the preservation of genetic diversity and the sustainable use of species and ecosystems; both Chichilnisky (1996) and Hove (2004) define sustainability as a process of change in which the exploitation of resources, the direction of investments, and the orientation of technological and institutional change are conducted

according to future needs and considering present needs.

Studies have led to what is now called sustainable development, which has evolved to become an integrating concept, an umbrella under which a set of inter-related issues can be gathered. Sustainable development is a variable process of change that seeks the ultimate goal of sustainability itself. Similarly, sustainability is the ability of human beings to resist or adapt to change (Dovers and Handmer, 1992), represented as a goal or an end point (Hove, 2004).

In summary, two main visions of sustainable development can be recognized: a wider view and a narrower view (Barbier, 1987). The wider view, shared by the WCED, includes both social and economic development, in addition to environmental issues. The more synthetic vision refers to aspects of environmental management and resources and exclusively considers the depletion of nature over time. What emerges from the various meanings of sustainable development is an increased focus on quality of life, the availability of resources, and the distribution of wealth (Osborne and Gaebler, 1992).

The present study aims to contribute to the existing academic studies, increasing and strengthening efforts to review the literature on sustainability by providing, first, a conceptual analysis and, second, a bibliometric study that is able not only to detect the conceptual subdomains of the research topic but also to show the relationships among them.

The main goal is to understand the current state of the art of sustainability research and to create a foundation that allows forecasting further research on the issue. In this study, both quantitative and qualitative measures are adopted to detect the main themes. More specifically, quantitative data are used to group highly related concepts (themes or clusters of topics), while qualitative indicators (such as those based on citations) are applied to measure the quality and impact of the identified themes.

The methodology, described in detail in the following section, is composed of a descriptive analysis that examines the distribution of papers across the period 1987-2014, the journals that published these articles, the dimensions of sustainability that were addressed in these papers, the emphasis of the articles, and the research methodologies. Subsequently, a bibliometric analysis conducted using SciMat (Cobo, Lòpez-Herrera, Herrera and Herrera-Viedma, 2012b), an open source software tool developed to perform science mapping analysis under a longitudinal framework, is presented. This software provides different modules that help the analyst to perform the steps of the science mapping workflow: a module dedicated to the management of the knowledge base and its entities, a module responsible for conducting the science mapping analysis, and a module to visualize the generated results and maps (Cobo, Lòpez-Herrera, Herrera and Herrera-Viedma, 2012b).

At the end of the analysis, the results of the study are presented, followed by a discussion of the findings. Lastly, final considerations and conclusions are drawn.

1.2 Literature Review Methodology

Fink (2010) defines a literature review as a systematic, explicit, and reproducible design for identifying, evaluating, and interpreting the existing body of recorded documents. Following this assumption, the aim of this review is twofold: first, to encase, consolidate and evaluate the framework of the literature on sustainability and, second, to develop a bibliometric analysis to conduct an in-depth study on the body of knowledge on sustainability (Meredith, 1993; Tranfield, Denyer and Smart, 2003).

The literature review includes the research published in articles from

1987 to 2014 in the Scopus database. The Scopus database was chosen for analysis because it is the largest citation database of peer-reviewed literature: scientific journals, books and conference proceedings. Delivering a comprehensive overview of the world's research output in the fields of science, technology, management, medicine, the social sciences, the arts and humanities, etc., it features smart tools to track, analyze and visualize research.

The following filtration criteria were adopted:

- 1. Documents were selected adopting the Scopus database, specifically the "advance search" option.
- 2. Only papers with the author keyword "Sustainability" were considered.
- 3. The document type included in the sample was exclusively "Articles" with the source type "Journals".
- 4. Only manuscripts written in the "English" language were selected.

With the awareness that an inappropriate selection would limit the quality of the results (Swanson and Ramiller, 1993; Webster and Watson, 2002; Fettke, 2006), a keyword-based search was used in this review for material collection because it is the most commonly used mechanism for acquiring relevant publications from library services and electronic databases (Seuring and Gold, 2012). The review was completed in the following three phases.

Phase I. A general search (all fields) using the term "Sustainability" in Scopus resulted in 90.774 documents, which shows that much has been written specifically on the concept of sustainability. Then, an advanced search was conducted in Scopus, limiting the word "Sustainability" to only the author keywords limiting the document type to journal articles in English; these criteria reduced the number to 10.614 documents. The author keyword "Sustainability" was chosen for this analysis because it contained the largest number of articles compared to the words "Sustainable" (8.329) and "Sustainable Development" (6.392). In addition, a further check was

made, and it was found that a good portion of the items containing the keywords "sustainable" and "sustainable development" were already included in the study sample. Having defined the total number of object documents of the analysis, a first test was performed in the Scopus database to highlight the evolution of studies on sustainability over the years and to assess whether and in what year the number of publications had significantly increased.

Subsequently, the analysis concerned the journals in which the articles were published and the dimension of sustainability (environmental, economic and social) that was most studied.

Phase II. In this phase, all papers were downloaded on SciMat (Cobo, Lòpez-Herrera, Herrera and Herrera-Viedma, 2012b) to conduct a detailed analysis of the sample. The perusal of abstracts allowed us to verify whether the sample contained repetitions of certain items, and two papers were eliminated because they did not included the year of publication, thus reducing the number of relevant articles to 10.612. In addition, the reading of abstracts allowed us to analyze emphasis – that is, the purpose of the article and research methodologies applied.

Phase III. Finally, a co-word analysis was conducted using SciMat (Cobo, Lòpez-Herrera, Herrera and Herrera-Viedma, 2012b). This software is able to perform science mapping analysis within a longitudinal framework. Different from other mapping software tools, SciMat is able to incorporate all the key elements that characterize a science mapping workflow, including: data retrieval, pre-processing network extraction, normalization mapping, analysis, visualization and interpretation. The final output of the co-word analysis was a set of visualization tools that show several results.

1.3 Descriptive Analysis

This section addresses the descriptive analysis of the reviewed literature. First, the entire sample (10.612 papers) was examined broadly and in detail to ascertain the following: (1) the distribution of papers across time from 1987 to 2014, (2) the journals that published these articles, (3) the dimensions of sustainability that were addressed in the papers, (4) the emphasis of the articles, and (5) the research methodologies.

Second, we discuss the co-word analysis, which, on one hand, aimed to analyze the evolution of this research field through measuring continuance across consecutive periods and, on the other hand, was able to quantify the research field by means of a performance analysis.

Year-wise distribution of publications. From analyzing the 10.612 papers (1987-2014), it emerges (see Figure 1.1) that it is possible clearly identify specific years in which it is possible to record a significant quantitative leap in the number of publications.

In the year 1999, there are 190 publications, compared to 96 in 1998; and in the year 2007, there are 470 articles published, compared to 234 in the year 2006. These leaps in the evolution of studies allow us to divide the years and create sub-periods that are useful for conducting a bibliometric analysis. Moreover, in the first twenty years, only 2.210 are published, while in the last seven years (2007-2014), the number of publications has increased dramatically to 8.402 published articles. This growth shows that "sustainability" results in a boundary-free debate in the scientific literature, and the widespread use of the term reinforces the expectations that this concept may have to pursue new development models (Stubbs and Cocklin, 2008).

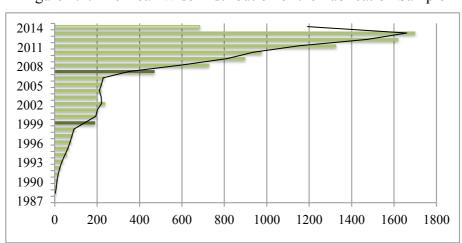


Figure 1.1: The Year-Wise Distribution of the Publication Sample

Source: Author's elaboration

Journal-wise distribution of publications. Environmental management journals play a significant role from 1987 to 2014 (see Figure 1.2), specifically journals such as the International Society for Ecological Economics (ISEE), which integrates the study and management of ecology and economics; the Journal of Cleaner Production, which is an interdisciplinary journal for the exchange of information and research concepts, policies, and technologies designed to help ensure progress towards making societies and regions more sustainable; and the International Journal of Sustainable Development and World Ecology, which covers biological, environmental, sociological, political, geographic, economic and legal aspects of this complex area, with in-depth analyses of specific problems and overviews of the meaning of sustainable development, to name only a few. Periodicals, such as the Journal of Business Ethics, which examines moral aspects of systems of production, consumption, marketing, advertising, social and economic accounting, labor relations, public relations and organizational behavior, that focus on ethics and corporate social responsibility have contributed the most since the year 2000.

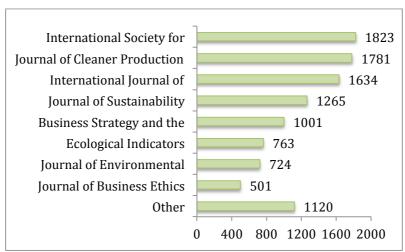


Figure 1.2: The Distribution of Papers across Journals

Source: Author's elaboration

Sustainability dimensions. The environmental, social and economic dimensions of sustainability have been adopted as the basis for a further appreciation of the distribution of papers on sustainability. Papers have been categorized as: (1) environmental – when ecological and environmental issues and strategies were mainly discussed; (2) social – when societal, communal or employee-related matters were analyzed; and (3) economic – when the capacities to generate income and employment through the most efficient mix of resources and to produce and maintain the highest value added to enhance the specificity of territorial products and services were examined.

Table 1.1 shows the overall distribution of the dimensions described above. Clearly, environmental issues have been dominating the sustainability arena and are the main theme in approximately 51% of the papers, compared to only 19% focusing on social issues.

Table 1.1: Distribution of Publication Papers regarding
Sustainability Dimensions

Sustainability Dimensions	Quantity (Number)	Percentage
Environmental	5.412	51%
Social	2.016	19%
Economic	3.184	30%
Total	10.612	100.00

Source: Author's elaboration

Emphasis. From a reading of the papers' abstracts, it is possible to highlight the trajectory of studies on sustainability or, more specifically, the main topics that characterize each paper, that is, the central topic emphasized.

Until the early 1990s, sustainability was a subfield of development studies on environmental and ethical issues, the human impact on the use of land resources and sustainable development (Tolba, 1984; Tisdell, 1988; Stedman and Hill, 1992; Redclift, 1992; Solow, 1993; Ayres, 1996). This finding is due to the support of international agencies, such as the United Nations Conference on Environment in 1972, the Brundtland Commission with the Brundtland Report in 1987, and the Montreal Protocol in 1989.

Academic initiatives have gained strength with debates on the definition of sustainability that interpret and conceptualize sustainable development (Lèlè, 1991; Mitcham, 1995; Mebratu, 1998; Parris and Kates, 2003). Concomitantly, sustainability has been characterized by its economic, social, and environmental dimensions, with several scholarly discussions emerging (Kaivo-Oja, 1999; Foxon, Leach and Butler, 1999; Lehtonen, 2004; Dempsey, Bramley, Power and Brown, 2011).

In the business world, after 1996, sustainability was introduced through the concept of sustainable management, which addresses how companies produce their products and services and maintain and improve human and natural resources (Isaksson and Steimle, 2009; Fauzi, Svensson and Rahman, 2010; Porter and Derry, 2012; Urban and Govender, 2012; Gaussin, Hu, Abolghasem, Basu, Shankar and Bidanda, 2013). Regarding research methodologies, both qualitative methods (case studies, literature reviews, etc.) and quantitative methods that measure the sustainability have emerged (Epstein and Roy, 2001; Linton and Yeomans, 2002; Cabezas and Fath, 2002; Todorov and Marinova, 2011). In this context, the evolution of the field has generated certain forms of sustainability assessment, such as indicators, indices and bibliometric analysis (Callens and Tyteca, 1999; Hueting and Reijnders, 2004; Dahl, 2012; Hak, Kovanda and Weinzettel, 2012; Moldan, Janouakovà and Hàk, 2012; Singh, 2012).

The analysis shows that a large segment of the articles address the environmental dimension of sustainability as the capacity to increase and raise the value of the environment and its peculiarities while assuring its protection and the renewal of natural resources and the environmental patrimony (e.g., discussions on environmental impact; studies on environmental change and challenges; ecology and biodiversity; approaches of green projects). Clearly, economic and social sustainability also emerge in this analysis.

Economic sustainability is the capacity to generate revenue to sustain populations and firms (e.g., the debate on economic sustainability; contributions of business for sustainable development; corporate sustainability and corporate social responsibility; discovering indices and indicators of sustainability; environmental policy to improve corporate sustainability; supply chain and investment projects). Social sustainability is the ability to guarantee welfare, security and education (e.g., the socio-environmental interface of sustainability development; sustainability education; human development and sustainability; developing countries and sustainability; sustainability and well-being).

Sustainability is studied in its many facets, including communication, innovations, tourism, and the changes and challenges that have broadened the field of study on this topic (see Table 1.2).

Table 1.2: The Emphasis Analysis

Emphasis	Percentage
Discussions on environmental impact	8.93%
Analysis of dimensions of sustainability and comparisons	6.92%
Studies on environmental change and challenges	6.45%
Other (Sustainability system; behavior, food, network)	6.12%
Social interface of sustainability development	5.21%
Communication of sustainability	5.03%
Discussions on sustainable tourism and cultural heritage	4.42%
Origins and conflicts of sustainable development	4.36%
Conceptual review of sustainability	4.21%
Ecology and biodiversity	4.06%
Identification indices and indicators of sustainability	4.03%
Innovation in the context of sustainability	3.73%
Corporate sustainability and corporate social responsibility	3.61%
Green projects	3.52%
Sustainability education	3.43%
Contributions of business to sustainable development	3.21%
Methods to evaluate the relevance of sustainability	3.15%
Sustainability: resources and strategies	3.09%
Debate on economic sustainability	3.02%
Environmental policy for improving corporate sustainability	2.75%
Different approaches to and application fields of sustainability	2.31%
Supply chain and investment projects	2.01%
Debate on urban social sustainability	1.71%
Human development and sustainability	1.61%
Strengths and weaknesses in sustainability indices	1.07%
Developing countries and sustainability	1.03%
Sustainability and well-being	1.01%

Source: Author's elaboration

Research methods adopted. Papers were classified into five main groups based on the research methodologies that were broadly employed to conduct the studies they reported. These groups are: (1) case studies, (2)

review papers, (3) conceptual and theoretical papers, (4) papers adopting quantitative models, and, (5) survey-based research. In detail, 2.865 papers (27%) employed a case study research methodology because it allowed an in-depth contextual analysis of complex issues within the field of sustainability, while 2.547 papers (24%) adopted a survey-based approach to produce results that could be generalized across the field. In addition, 2.228 papers (21%) did not have any empirical component and were either theoretical or conceptual in nature; this finding is not surprising for an evolving field that is still attempting to lay down its foundations.

Additionally, 1.910 papers (18%) used mathematical models based on variables and their causal relationships as a depiction of reality. Lastly, 1.062 literature reviews (10%) were produced that highlighted major research contributions and identified gaps in the field to pave the way for further research. Figure 1.3 shows the methods applied in the sustainability studies.

Review Papers
Surveys
Quantitative Models
Theoretical Papers
Case Studies

0 500 1000 1500 2000 2500 3000 3500

Figure 1.3: Applied Methods

Source: Author's elaboration

1.4 A Co-Word Analysis

To review the literature on sustainability, a bibliometric analysis is developed, choosing a time interval that ranges from 1987to 2014 because the aim of this paper is to trace the evolution of the sub-themes of this area of interest from the publication of the Brundtland Report (1987), which can be regarded as the official birth of attention to sustainability, to the present.

Bibliometrics is an important tool for assessing and analyzing the academic research conducted in different countries, universities, research centers, research groups and journals. It provides basic criteria for evaluating the research developed by scholars, and therefore, it is increasingly valued as a tool for assessing scholarly quality and productivity (Moed, De Bruin and Van Leeuwen, 1995). This tool contributes to the progress of science in many different ways (Martinez-Sanchez, Cobo, Herrera and Herrera-Viedma, 2014): by allowing an assessment of the progress made, identifying the most reliable sources of scientific publication, laying the academic foundation for the evaluation of new developments, identifying the major scientific actors, developing bibliometric indices to assess academic output, etc.

There are two main methods for exploring a research field: performance analysis and science mapping (Noyons, Moed and Luwel, 1999a; Noyons, Moed and Van Rann, 1999b; Van Rann, 2004). While performance analysis aims to evaluate the citation impact of the scientific production of different scientific actors, science mapping aims to display the conceptual, social or intellectual structure of scientific research and its evolution and dynamical aspects. Science mapping, also known as bibliometric mapping, is a spatial representation of how disciplines, fields, specializations, and documents or authors are related to one another (Small, 1999). This tool has been widely used to show and uncover the hidden key

elements (documents, authors, institutions, topics, etc.) in different research fields (Peters and Van Raan, 1993; Van Eck and Waltman, 2007; Porter and Youtie, 2009; Tang and Shapira, 2011; Cobo, Lòpez-Herrera, Herrera and Herrera-Viedma, 2012a; Cobo, Lòpez-Herrera, Herrera and Herrera-Viedma, 2012b; Gao-Yong, Ji-Ming and Hui-Ling, 2012; Lopez-Herrera, Herrera-Viedma, Cobo, Martinez, Kou and Shi, 2012).

In this essay, the study was conducted using SciMat (Cobo, Lòpez-Herrera, Herrera and Herrera-Viedma, 2012b), which is able to perform science mapping analysis within a longitudinal framework, by downloading the papers from the Scopus database.

Once the raw bibliographic data are downloaded from the bibliographic sources, the first step in SciMat is to build a knowledge base and load the retrieved data using the importation capabilities of the knowledge base management module.

In the second step the knowledge base is modified to fix possible errors (in titles, authors, references, etc.) and improve the quality of the data. To that end, SciMat incorporates a command for each entity (Document, Author, Reference, Word, Journal, etc.) so that the information associated with each entity and its relationships to other entities can easily be edited.

Once the knowledge base is complete, the de-duplicating process is begun. In this step, words with very close concepts and similar words by plurals are grouped together. The next step is the selection of the time periods to be analyzed and the unit of analysis, in our case, author keywords.

The next step involves deciding on the data reduction methods: a minimum frequency threshold of "2" was selected for each sub-period; that is, the analysis was conducted only with words that appear together at least twice within the data set.

Afterwards, the co-occurrence matrix is picked for the type of matrix

that will build the network and the Equivalence Index as a similarity measure (Callon, Courtial and Laville, 1991): Eij= c²ij/ci*cj, where cij is the number of documents in which two keywords "i" and "j" co-occur, while ci and cj represent the number of documents in which each keyword appears. This measure seems to be the most appropriate for co-occurrence analysis (Callon, Courtial and Laville, 1991; Van Eck and Walman, 2007).

The selection of the clustering algorithm follows, and among all the available options, the simple center algorithm was selected because this cluster algorithm has the advantage of returning labeled clusters (Cobo, Lòpez-Herrera, Herrera and Herrera-Viedma, 2012b). Then, the document map is selected, the core mapper is chosen, and the analysis is conducted for the core documents. A document is called core when it has at least two keywords presented in the thematic network; when a document has only one keyword, it is called a secondary document.

The last two steps are the selection of the bibliometric measures and the similarity measures for the maps (design). Regarding the former, the following indices were identified: Documents count, Hirsh index (H Index) and Sum citation. In the first index, the number of published documents for each theme is shown. With the second index, an idea of the impact of the documents is proposed, while the third index is able to present the number of citations obtained for each theme.

For the construction of the evolution map, the Jaccard Index has been adopted:

Jaccard Index =
$$\frac{|A \cap B|}{|A \cup B|}$$

This index is a statistic that is used to compare the similarity and diversity of simple sets. For the overlapping map, which gives an idea of the keywords evolution (see Figure 1.8), the Inclusion Index has been chosen:

Inclusion Index =
$$\frac{\#(U \cap V)}{\min(\#U, \#V)}$$

According to Inclusion Index there is a thematic evolution from a theme (U)

to another theme (V) when there are keywords presented in both associated thematic networks so that V can be considered to be a theme that evolved from U. In the subsequent section, the described methodology is applied to the selected literature on sustainability.

1.5 Development Over Time

This section is devoted to presenting the results that derive from the analysis of each sub-period. The entire period (1987-2014) has been divided into three sub-periods (1987-1998; 1999-2006; 2007-2014); this choice was made considering the years when there was a spike in the number of publications (1999 and 2007), as emerged from the descriptive analysis presented above.

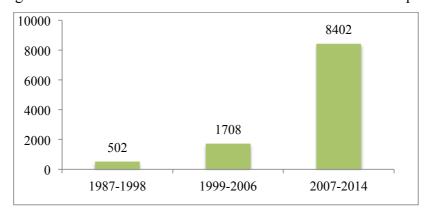


Figure 1.4: The Year-Wise Distribution of the Publication Sample

Source: Author's elaboration

The division of sub-periods in this analysis is strategic because, as seen in figure 1.4, in the first two groups, the number of publications is low, despite constituting a period of approximately twenty years (2.210 papers from 1987 to 2006).

However, in the last group, which lasts only seven years, the number of publications has quadrupled compared to the second sub-period (8.402 papers from 2007 to 2014).

After selecting the periods and conducting the data analysis with SciMat, it was possible to interpret the results through cluster analysis. Cluster analysis allows grouping a set of keywords in such a way that the keywords in the same group (called a cluster) are more similar (e.g., singular and plural) to each other than to those in other groups (clusters). Based on the cluster analysis, there emerge core themes (environmental impact, sustainable), many basic (economic impact, social impact,) and transversal themes, which are the basis of the remaining themes in each subperiod. Taking quantitative measures, such as the number of documents associated with each theme (cluster), into account, the conceptual evolution of the sustainability field was discovered.

Similarly, taking the qualitative measures into account, the themes with the greatest impact, i.e., the themes that have been highly cited, can be identified. In this sense, it is easy to identify the themes that have been treated in all the periods, the themes that have disappeared, and themes that have emerged in the most recent periods.

The first sub-period (1987-1998) clearly shows that environmental impact is the theme with the greatest focus that rotates the orientation of sustainability (see Figure 1.5); environmental impact is the core theme of the first sub-period, with 85 published papers, an H index of 22 and 923 citations. The keywords "sustainable" and "social impact" are present with some continuity along the three sub-periods, but the keyword "sustainability" has a high number of citations compared to the other words. Several theoretical studies are conducted in the academic field on the topic, and the relevant analysis of ecology also emerges (Glavic and Lukman, 2007). Policy and legal issues are strongly linked to each other, in the sense of a model of environmental law and policy that entails the creation of

detailed pollution and planning statutes and new specialist agencies equipped with wide-ranging controls on the economy.

Environmental regulation in this era was built on the assumption that the law can effect social change through direct and purposive intervention in the area of social relations.

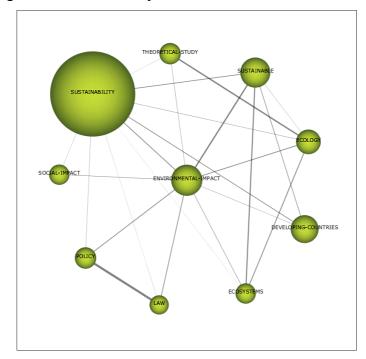


Figure 1.5: Sustainability Evolution – Sub-Period 1987-1998

Source: Author's elaboration applying SciMat software

In the second sub-period (1999-2006), the core theme (sustainability) appears in 897 published papers, with an H index of 63 and 20.925 citations.

In this period, new keywords, such as "economic impact", "tourism", "natural resources" and "management", emerge, highlighting the insertion of sustainability topics in new fields. Although sustainability is now generally understood to be a combination of environmental, social and

economic performance, the cluster analysis shows that economic sustainability is the most elusive component. The literature review reveals few direct discussions on economic sustainability within the context of sustainable development because, if organizations or countries well understood what it meant to be economically sustainable, then there would be full employment, less poverty and no bankruptcy. Unfortunately, economic sustainability is a complex picture, the nature of which cannot be fully understood without examining both the internal and external environments in which organizations operate. Tourism is a factor that can offer considerable economic, environmental and social benefits for many countries, regions and communities; studies pay particular attention to the two main areas of the environmental impact of tourism, pressure on natural resources and damage to ecosystems.

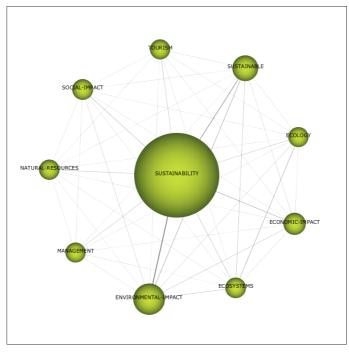


Figure 1.6: Sustainability Evolution – Sub-Period 1999-2006

Source: Author's elaboration applying SciMat software

In the third sub-period (2007-2014), the core theme (sustainability) appears in 3.928 published papers, with an H index of 73 and 31.980 citations.

This cluster proposes new areas of research, such as corporate social responsibility, innovation, indices and indicators. This aspect indicates that most of those publications effectively focus on addressing the subject of sustainability from managerial perspectives and drive for the stimulus and development of corporate social responsibility actions. Innovation and other results, such as energy, green buildings, government, technology and the proper notion of competitive advantage, are also considered to be relevant, despite the fact that they are not as stressed as the top aspects. Finally, another change in this cluster is the need for a quantitative assessment of sustainability. In this context, the evolution of the field has generated many forms of sustainability assessment, such as indicators and indices.

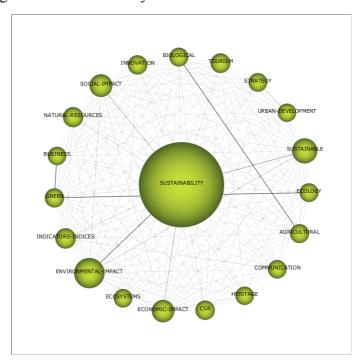


Figure 1.7: Sustainability Evolution – Sub-Period 2007-2014

Source: Author's elaboration applying SciMat software

1.6 The Overlapping Map

SciMat also allows building a map, called an overlapping map (see Fig. 1.8), that is able to give an idea of the evolution of the keywords cited in the articles taken into consideration. The three circles represent the considered sub-periods, and the numbers inside the circles show the number of keywords for each sub-period.

127 101 (0.8) 911 881 (0.97) 1935

Figure 1.8: The Overlapping Map

Source: SciMat Elaboration

The arrows horizontally connecting the sub-circles represent the number of keywords shared between the sub-periods, while the similarity index (Inclusion Index), which indicates the percentage of keywords that have been held in the next sub-period, is shown in parentheses. The upper incoming arrows indicate the number of new keywords in the sub-period, while the upper outgoing arrows represent the keywords that are not present (discontinuous) in the subsequent sub-period.

For instance, in the second studied period (1999-2006), there are 911 keywords, of which 881 (97%) remain in the next sub-period, while the other 30 are not maintained in the subsequent sub-period (2007-2014). The similarity index between the second and the third sub-periods is 0.97, meaning that 97% of the keywords have been maintained in the subsequent sub-period. By observing the overlapping map, it is possible to note that the number of keywords significantly increases from one sub-period to the next

and that the third sub-period presents twice the keywords of the second subperiod, despite its being the shortest in terms of the number of years considered. This evolution certainly reflects the increased academic production in the field of sustainability and the increased complexity of the discipline.

In addition, the number of new and transient keywords is high. This finding may mean that a large number of keywords is only used in one subperiod and not maintained in the subsequent sub-period. For example, in the second sub-period, more than half of the keywords are transient (881), and in the third sub-period, there are 1.054 new keywords. The large number of keywords created every sub-period could be a consequence of a change in the terminology used but also may signify new emerging trends in the field.

1.7 Final Considerations and Discussion

As clearly emerged from the analysis of this work, the field of sustainability is characterized by a wide variety of topics from different areas and different frameworks.

This study selected relevant articles with the aim of analyzing the sustainability theme, characterizing its stages of development, the gaps in the field and challenges for future contributions. The issues discussed are diverse, concerning environmental, economic and social dimensions, growth and limits, the use of resources, indicators and indices, innovation, and models of sustainability; there are many concepts of and debates on sustainability, but its applicability is rare. There is a consensus on sustainability challenges: integrating economics, the environment, society and institutional issues, considering the consequences of sustainability actions in the future, and cultivating awareness and the involvement of

society.

The central message that emerged from the analysis of the development of sustainability studies over the years can be summarized in one word: change. However, this message is strictly correlated with the rapid change of a world that, conversely, asks people to change and to pay increasing attention to the environment and sustainability. In addition to the economic field, tourism has seen an unprecedented growth in recent decades, and this field could not require greater sustainability.

In addition, the transition from an industrial to a knowledge economy has generated a greater focus on people and their well-being, using paradigms that are different from those of the past. Not surprisingly, studies on sustainability also address the problem of well-being, attempting to reach a type of "philosophy" that can be considered new but that has strong roots in the past: happiness.

The analytical findings show that the main objectives have been achieved. The bibliometric analysis highlights the capacity of the co-word methodology to explore a research field by thoroughly identifying its building blocks. Moreover, this methodology allows forecasting future trends (well-being, happiness, etc.) by taking into account the evolution of the research themes.

1.8 Limits and Future Research

Some limitations to this study should be noted. The analysis was conducted only on academic journals, but it is clear that relevant information on the topic is also traceable in other types of sources, such as conference proceedings and professional journals, in addition to other journals that are not included in the Scopus database.

Plans for future research include extending the keyword analysis to monitor the keywords, specifically to monitor the evolution of topics that are currently marginal, with a specific frequency (e.g., every two years).

Essay 2

What happens to Well-Being and Happiness by Combining with Sustainability?

Abstract

Sustainability has become increasingly essential due to its potential to give voice to future challenges that will affect societies and economies. While a considerable amount of literature has focused on environmental and economic factors, there is little systematic research on how sustainability can interact with well-being and happiness as new paradigms for individuals, communities, and organizations. The concept of sustainable happiness (O'Brien, 2012) can be applied to foster sustainable behavior and well-being in its broadest sense, involving the physical, emotional, social, spiritual, and ecological spheres. Because all individuals naturally desire well-being, human beings can promote more sustainable lives by becoming more aware that their own well-being and pursuit of happiness are associated with the wellness of others and the natural environment (O'Brien, 2010).

Starting from these reflections, the aim of this essay is to identify the current academic interest on the relationships between sustainability, well-being and happiness in its various facets through a co-word analysis supported by the Science Mapping Analysis Software Tool (SciMat) open source software (Cobo, Lòpez-Herrera, Herrera and Herrera-Viedma, 2012b) and, subsequently, with a narrative literature review. Given the novelty of the research question and the emerging nature of the theoretical framework, the present study contributes to extending the existing theories on the three

pillars of sustainability and clearly identifies well-being and happiness as new driving factors.

Keywords: sustainability, well-being, happiness

2.1 Introduction

Sustainability is based on the simple principle that everything that is needed for survival and well-being depends, either directly or indirectly, on the environment in a broad sense: not only the natural environment but also the social environment, political environment, cultural environment, etc. Sustainability creates and maintains the conditions under which human beings can exist in productive harmony and the conditions that permit fulfilling the social, economic and other requirements of present and future generations.

To achieve these conditions, sustainable individuals generate terms that allow an equitable access to the use of (natural, environmental, social, economic, political and cultural) resources (Ehrlich and Ehrlich, 2009); their consumption of these resources is moderate (De Young, 1996; Iwata, 2001), allowing everybody to have access to them; sustainably-oriented people are also cooperative and assist others in need (Pol, 2002), which means that they are "altruistically" motivated (Schultz, 2001). In addition, human behavior plays a paramount role in the emergence and support of environmental dynamics, which is why a fundamental shift in people's behavior is required (Oskamp, 2000).

What happens to well-being and happiness by combining with sustainability? What types of perspectives on utility and connection with sustainability do they offer? To what extent do they represent a boundary topic?

Given the increasing prominence of sustainability, well-being and happiness in recent academic debates, this essay presents the various aspects of these concepts and considers the possible synergies between them.

These concepts are rooted in several different academic disciplines (economics, development studies, psychology, etc.), and they are widely

recognized in society. Therefore, it is important to be clear about what exactly these notions mean because several definitions may result in different considerations of the relationships between them. This essay is organized as follows. First, a review of the literature concerning sustainability is provided. Subsequently, the methodology applied is explained, and the results are then described. Finally, concluding remarks and some implications for managerial practice are presented.

2.2 Theoretical Background

The core idea of sustainable development was defined most influentially by the World Commission on Environment and Development as "development which meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987: 43). In its broadest sense, this normative abstraction has been widely accepted and endorsed by thousands of governmental, corporate, and other organizations worldwide (Gladwin, Krause and Kennelly, 1995).

Today, sustainable development and sustainability imply three different aspects or dimensions of sustainability, i.e., environmental, economic and social sustainability. These dimensions are the basic elements of sustainability and sustainable development (Basiago, 1999; Munier, 2005). Generally, environmental sustainability can be described as environmental protection (Munier, 2005), and economic sustainability can be defined as economic growth and economic progress, although, as Munier asserts, "Economic growth does not necessarily mean a better living..." (Munier, 2005:17).

Social sustainability is often related to problems such as poverty, social exclusion, unemployment, inequalities and the like not only for present but also for future generations (Ekins, Dresner and Dahlstrom, 2008; Partridge, 2005). Social sustainability, on a general or basic level, can also be seen as: "A system of social organization that alleviates poverty, but in a more fundamental sense, however, social sustainability establishes the nexus between social conditions (such as poverty) and environmental decay..." (Basiago, 1999:152).

Meanwhile, Sen (1999) considers the capabilities of human beings to be the basic components for a truly endogenous sustainable socio-economic development. If it is true that human beings are central in sustainable development, then similarly this development may be achieved only if human beings become a component of the environment-economy-society combination.

New studies that strongly focus on well-being and happiness have emerged in relation to the increasing recognition of the centrality of feelings to human beings (Grinde, 2004).

Several scholars (Dasgupta, 2004; Diaz, Fargione, Stuart Chapin and Tilman, 2006) define sustainability as a state of well-being; a deep-rooted belief that human beings can live in a harmonious coexistence with the natural world. Definitions of sustainability in relation to well-being focus on the basic requirements for good health, (cultural) identity, personal security and freedom of choice (Dodds, 1997; Dasgupta, 2004).

The research field has witnessed the formation of two relatively distinct, yet overlapping, perspectives on and paradigms for empirical research on well-being that revolve around two distinct philosophies. The first of these can be broadly labeled hedonism (Kahneman, 1999), which reflects the view that well-being consists of pleasure or happiness. The second view, both as ancient and as current as the hedonic view, is that well-being consists of more than just happiness. The two traditions, hedonism and hedonic, are founded on distinct views of human nature and of what constitutes a just society. Accordingly, they ask different questions

concerning how developmental and social processes relate to well-being, and they implicitly or explicitly prescribe different approaches to enterprises.

Closely linked to the study of well-being is the concept of happiness, which is often used interchangeably with the expressions "quality of life" (Babin and Dardin, 1994; Lyubomirsky and Lepper, 1999; Veenhoven, 2007; Veenhoven, 2008), "subjective well-being" (Levett, 2010), "life satisfaction" and "experiences" (Bekhet, Zauszniewski and Nakhla, 2008).

Abdel-Khalek (2005) states that happiness is the ultimate aim of human beings and that every human being seeks happiness and wants to be happy. The meaning of happiness is different for each human being, with various ways and means to achieve it. Therefore, human happiness cannot be guaranteed because human beings make choices of their own and happiness differs from person to person. Argyle (1987, cited in Bekhet, Zauszniewski and Nakhla, 2008) conceptualizes happiness as positive inner experience, the highest good, the ultimate motivator for all human behaviors and the degree to which an individual judges the overall quality of his or her life as a whole. On the basis of happiness, Tashi (2004) insists that this state of mind must be cultivated through right effort and an understanding of the causes and conditions that lead to happiness.

Finally, Evans (2006) notes that changing how people live, what they do, how they think and what they believe cannot ensure happier, more contented and satisfied people until people are fully changed through a change in their belief system.

2.3 Methodology

To explore what types of utility and connection the concepts of well-

being and happiness have with sustainability, a co-word analysis using SciMat (Cobo, Lòpez-Herrera, Herrera and Herrera-Viedma, 2012b) was conducted. Bibliometric analysis (co-word, co-author, co-citation analysis, etc.) analyzes the evolution of the detected clusters (i.e., a set of keywords) through the different periods studied to identify the main general areas of the evolution of the research field, their origins, and their interrelationships (Cobo, Lòpez-Herrera, Herrera and Herrera-Viedma, 2012a).

Subsequently, a narrative literature review was performed (Green, Johnson and Adams, 2001), synthesizing the findings on the concepts retrieved from the papers downloaded from the Scopus database to conduct the bibliometric analysis and in this way making a valuable contribution to the literature. To conduct the analysis, the Scopus database was chosen because it is the largest citation database of peer-reviewed literature: scientific journals, books and conference proceedings.

2.4 Research Setting

Based on the bibliometric principle that the most important knowledge on a topic is concentrated in only a small proportion of important journals, citation data were retrieved from the Scopus database to conduct the searches and gather publication data. In the research on the articles in the Scopus database, the following choice criteria were adopted:

- 1. Only papers with the author keywords combinations "Sustainability-Well-Being-Happiness", "Sustainability-Well-Being", and Sustainability-Happiness" were considered.
- 2. All types of documents (articles, books, book chapters, conference papers, conference reviews, reviews, editorials, articles in press) were evaluated

- 3. Only manuscripts written in the "English" language were selected.
- 4. No time limit was inserted.

This paper aims to identify the current state of the academic literature regarding the relationships between sustainability, well-being and happiness through a bibliometric analysis. While scientometrics is regarded as the measurement of both scientific and technical research activities (Jeyasekar and Saravanan, 2012), bibliometrics is a sub-category of scientometrics that primarily focuses on the quantitative study of scientific publications for statistical purposes. Bibliometric methods serve the purposes of description, evaluation and scientific monitoring. This inquiry is motivated by several research questions: How do the articles relate the concepts of sustainability, well-being and happiness as a whole? What types of perspectives on utility and connection with sustainability do well-being and happiness offer? Based on these topics, how likely is the literature to set the stage for future work?

With the above research questions as reference, a series of procedures were performed to obtain a proper sample and advance further in the inquiry phases. As noted above, in the search of papers related to the topics cited, all documents types were included because this aspect of sustainability appears to have been little studied in the literature.

2.5 Analysis and Results

The combination of author keywords entered in the Scopus database finds a total of 100 papers (between articles, books, book chapters, conference papers, conference reviews, reviews, editorials, and articles in press) that jointly analyze the themes of sustainability, well-being and happiness and that were published during the time period from 1994 to

2014. The number of publications has dramatically increased in the last four years; only 8 papers were published from 1994 to 2001, whereas 26 were published from 2002 to 2009, and 66 were published from 2010 to 2014 (see Figure 2.1).

0 5 10 15 20

Figure 2.1: The Year-Wise Distribution of the Publication Sample

Source: Author's elaboration

Regarding the journals in which the 100 papers under analysis were published, more than environmental journals, even psychology journals and books play a significant role (35% of papers). Psychological theories and empirical evidence show that solutions to these socio-ecological problems are to be found in human nature and its psychological predispositions.

These predispositions include personal motives, world views, future perspectives, environmental emotions, altruistic tendencies and behavioral capacities, among other psychological predispositions that could allow the adoption of sustainable lifestyles (Basiago, 1999; Munier, 2005; Bekhet, Zauszniewski and Nakhla, 2008; Levett, 2010; O'Brien, 2010; O'Brien, 2012). In addition, reading each paper shows that a large segment (52% of

papers) develops behavioral solutions and highlights the impact of sustainable behavior on human well-being (Buunk and Schaufeli, 1999; Cacioppo, Gardner and Berntson, 1999; Bechtel and Corral-Verdugo, 2010).

To analyze the predominant topics listed as keywords, all selected articles were downloaded on SciMat (Cobo, Lòpez-Herrera, Herrera and Herrera-Viedma, 2012b), which, through a guided procedure, allows conducting a co-word analysis that verifies hot topics, that is, the most frequently noted words, for a single period of time (1994-2014). SciMat enabled us to divide the period into sub-periods. However, because few (100 papers) papers were analyzed, and the largest number of publications only appeared in recent years, it would be meaningless to perform an analysis with several sub-periods.

Figure 2.2 shows that the topics of sustainability, well-being and happiness revolve around the theme of behavior, which indicates that much of what has been produced is based on aspects of psychology. However, by reading all the articles that were objects of analysis of this study, it is possible to verify how these three topics are linked together through the principles of sustainable lifestyles (Basiago, 1999; Munier, 2005) and states of satisfaction (Bekhet, Zauszniewski and Nakhla, 2008) that lead to psychological well-being (Levett, 2010; O'Brien, 2010; O'Brien, 2012). Experience is also among the topics noted because, in the academic literature, the concept of well-being refers to how people experience the quality of their lives (Veenhoven, 2007) and includes both emotional reactions (Iwata, 2001; Jacob, Brinkerhoff and Jovic, 2009) and cognitive judgments (Cacioppo, Gardner and Berntson, 1999).

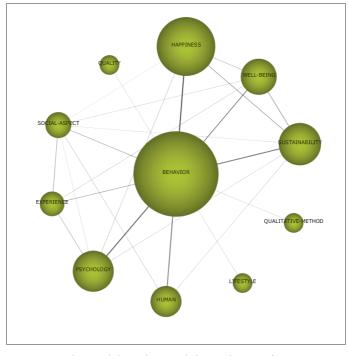


Figure 2.2: Keywords Analysis

Source: Author's elaboration applying SciMat software

Several studies (Schroeder, Penner, Dovidio, and Piliavin, 1995; Oskamp, 2000; Vlek and Steg, 2007; Robertson and Birch, 2010) provide psychological theories to explain the link between these issues. Indeed, "qualitative approaches" (see Figure 2.2) to the study of these relationships emerge as keywords. In detail, these articles adopt case studies, conceptual and theoretical papers and survey-based studies as their methodologies, but approximately 40% of the papers analyzed do not have any empirical component and use a theoretical and conceptual approach. This finding is not surprising for an unexplored field that is still attempting to lay down its foundations and mark its intellectual territory.

Also, social well-being, which comprises human happiness, quality of life, and aspects of environmental well-being, is an important factor that influences human behavior, and as seen in figure 2.2, it is worth acknowledging that the ethical issue of how individuals may live a better or

happier life has been widely discussed in the scientific literature (Basiago, 1999; Buunk and Schaufeli, 1999).

An interesting finding that emerges from the co-words analysis is that the link between sustainability, well-being and happiness is little explored in relation to firms. The keywords "enterprise, or firm, or company" do not emerge in the analysis (see Figure 2.2). However, that does not mean that these keywords do not appear in the articles but only that they are not among the most commonly cited keywords.

Indeed, of the 100 documents analyzed, only 6 (Gladwin, Krause and Kennelly, 1995; Sneddon, Howarth, and Norgaard, 2006; Gardner and Prugh, 2008; Robertson and Cooper, 2009; Robertson and Birch, 2010; Oswald, Proto and Sgroi, 2014) address the connection between sustainability, wellbeing and happiness within companies.

These papers mainly treat these factors as a source of competitive advantage, stressing that a comfortable working climate and sustainable and responsible behaviors involve a state of well-being for firms and for employees.

2.6 Narrative Literature Review

This narrative review (Green, Johnson and Adams, 2001) summarizes the body of literature and draws conclusions on the topic in question. Its primary purpose is to provide a comprehensive background for understanding the current knowledge on sustainability and highlighting the relationships to new core topics, such as well-being and happiness.

2.6.1 Relationships between Sustainability, Well-Being and Happiness

In recent years, additional indicators and the positive consequences of sustainability have been proposed. Indicators that are of a psychological nature are not as tangible as environmental, social, and economic dimensions; however, they are fundamentally important for all individuals: satisfaction, personal well-being, intrinsic motivation, and happiness (Iwata, 2001; Kaiser, 1998; Kasser, 2009).

Some studies have found that equitable individuals experience greater subjective well-being (Amato, Booth, Johnson and Rogers, 2007; Chibucos, Leites and Weiss, 2005), although coincidently they suffer more when they realize that inequity affects others around them (Napier and Jost, 2008). Simultaneously, research (Bechtel and Corral-Verdugo, 2010) shows that altruistic individuals tend to be happier than egoistic individuals and that altruism makes people feel good in the long term (Schroeder, Penner, Dovidio and Piliavin, 1995) and causes them to experience happiness in their close relationships with others (Buunk and Schaufeli, 1999). As a tenet of sustainable lifestyles, frugality precipitates the states of satisfaction that lead not only to psychological well-being (Brown and Kasser, 2005) but also to the satisfaction and intrinsic motivation that allow the maintenance of lighter levels of consumption (De Young, 1996; Iwata, 2001). Something similar occurs when such behaviors are aimed at conserving the physical environment: people who frequently practice pro-ecological behaviors perceive themselves to be happier than those who do not (Brown and Kasser, 2005; Turcotte, 2006; Bechtel and Corral-Verdugo, 2010). Happiness can be considered during any analysis of people's proenvironmental behavior (Gardner and Prugh, 2008) and as an autonomous or intrinsic consequence of being sustainable (Crompton and Kasser, 2009;

Kasser, 2009).

Some scholars (Gardner and Prugh, 2008; Talbert, 2008) claim that any society that practices sustainable behaviors should be a happy society or at least on its way to achieving well-being.

In recent years, there has been an escalating interest in happiness, and several studies have emerged to guide people and organizations towards finding the "good life". When happiness is partnered with well-being and sustainability, it takes on an entirely new dimension: sustainable happiness (O'Brien, 2005).

O'Brien defines sustainable happiness as "the pursuit of happiness that does not exploit other people, the environment or future generations" (2005:290).

O'Brien (2005) develops the concept of sustainable happiness to draw attention to the consequences, both positive and negative, of how individuals, communities, and nations pursue happiness. In a globalized world, policies and behaviors have repercussions on distant lands and peoples. Some impacts are immediate and short-term, while some have enduring effects, e.g., linking happiness to sustainability, now and into the future (O'Brien, 2012); emphasizing the reality of our mutual interdependence (Munier, 2005); and generating discussion regarding the potential for making substantial contributions to sustainability efforts through research from happiness studies (Kasser, 2009).

Noddings states that "happiness should be an aim of education, and a good education that should contribute significantly to personal and collective happiness" (2003:1). To ensure happiness and the sustainability of the environment, sustainable happiness should be an aim of education and a good education of many organizations that should contribute significantly to happiness and well-being.

In summary, the union of sustainability, well-being and happiness can have the potential to be transformative for individuals, for communities and nations, and for firms themselves.

2.6.2 Sustainable Behaviors and Happiness

In recent years, happiness research has expanded its focus beyond an examination of the causes of and the effects produced by happiness (Harvard Business Review, 2012). In particular, there has been an interest in the effects of happiness on companies, e.g., happy employees are more productive (Oswald, Proto and Sgroi, 2014).

Evidence also supports the notion that happiness has a positive effect on our health. Happier people live longer – indeed, much longer – than people who are less happy do (Veenhoven, 2008). Therefore, because happiness has an effect on our health and productivity, it is possible that the same mechanism comes into play in regard to the connection between happiness and sustainability.

It could be that happier people are more likely to engage in sustainable behaviors as a result of positive emotions or being "in a good mood", and this engagement leads us to care more about nature, the environment, and future generation (Munier, 2005).

Corral-Verdugo argues that "Positive emotions are among the dispositional antecedents that promote sustainable behavior. Happiness, one of the most positive emotions ... seems to be also related to a decreased consumption of resources" (2012:97).

Regarding the effect of happiness on health, there is an emerging body of knowledge on the impact of positive emotions and moods on sustainable behaviors and resource management. Individuals who engage in resource management may experience boosts in both affective and evaluative forms of happiness as the very result of their sustainable behaviors (Jacob, Brinkerhoff and Jovic, 2009).

The literature provides some explanations of human beings who, by virtue of engaging in simpler lives, experience increased feelings of satisfaction and meaning (Elgin, 2010). The first evidence surfaced at the beginning of the 1970s, when researchers conducted a survey among the first voluntary simplifiers, that is, people who consume less, spend less, reduce their ecological footprint, and are more community oriented (Elgin and Mitchell, 1977). The testimonies of these early simplifiers show that they choose simplicity because it satisfies their psychological needs: they feel more autonomous, competent, and socially related.

Another study conducted in 14 Chinese cities shows that individuals who display sustainable motivations and patterns of consumption directed at reducing waste and saving energy score higher on life satisfaction than individuals who are mildly or not engaged in green behaviors (Xiao and Li, 2011). In addition, sustainable behaviors taken generally provide psychological rewards, such as positive emotions or higher life satisfaction (Iwata, 2001).

However, why would people experience an increase in happiness by living less wasteful, simpler, or more sustainable lives? Some scholars claim that producing less waste has positive effects on both life and domain satisfaction (Gandelman, Piani and Ferre, 2012). A pioneering study on the small holding movement in Canada showed that individuals derived high satisfaction from their simple living (including low consumption and waste production) because it increased their feeling of self-reliance (Brinkerhoff and Jeffrey, 1984).

Finally, another explanation may be found in the field of evolutionary psychology, according to which a sense of pleasure and well-being is produced when people engage in activities that ensure the survival of the individual and the species, leading to a state of happiness for people (Grinde, 2002).

2.7 Final Considerations and Discussion

"People who are happy don't necessarily engage in environmentally friendly behavior automatically. I believe that it depends on how you have been socialized. You could be very happy, and you could still be not aware of your impact on other people and the natural environment, if you have been socialized that way. But I think that once people do make the connection, that their happiness and well-being is interconnected with other people, then it creates a paradigm shift. And that helps sustain the sustainable behavior" (O'Brien, 2012:1198).

It emerges from the quotation cited above that well-being and happiness are strongly associated with the issue of sustainability. Happiness research offers evidence that sustainable behaviors depend on the fulfillment of basic psychological needs. Individuals need to feel secure, autonomous, socially related, and competent in their everyday lives. Therefore, the challenge becomes one of inducing people to act in certain ways without forcing them to do so. That is, the choices available to individuals may be altered to promote more sustainable outcomes.

The main contribution can be summarized in the demonstration that the concepts of sustainability, well-being and happiness are related to behavior. Indeed, the bibliometric analysis clearly highlights that the keyword "behavior" is the thematic engine of this new paradigm and, moreover, while happiness, well-being and sustainability studies have been underway for 30 years, most advances, such as the joint study of these concepts, have emerged only in recent years. The narrative review also highlights that the academic research has become increasingly interested in concepts such as well-being, quality of life, happiness and sustainability, always in relationship to human behavior. The discovered relationships between the three elements of the analysis constitute the answer to the first

research question: "How do the articles relate the concepts of sustainability, well-being and happiness as a whole?"

Regarding the types of perspectives on utility with sustainability, it is important to underline the concept of sustainable happiness, which offers a fresh approach to happiness, an approach that invites reflection on issues of sustainability, coupled with opportunities to enhance quality of life and contribute to the well-being of individuals, communities, firms and the world. This connection generates the answer to the second research question: "What types of perspectives on utility and connection with sustainability do happiness and well-being offer?"

Finally, psychologists, sociologists, economists, and philosophers investigate a broad range of topics related to human welfare, such as what makes people happy, how people define happiness, why some societies are happier than others, and what sustainable happiness means, but few studies in the literature were found regarding the joint application of these concepts in relation to enterprises. This gap sets the stage for future works and establishes the answer to the third research question: "Based on these topics, how likely is the literature to set the stage for future work?"

2.8 Managerial Implications and Limits

Starting from the central role played by behavior (which clearly emerged as a significant finding), managers can take advantage of these results to achieve organizational objectives because behavior and the commitment of people are more likely to be sustainable when psychological well-being is high (Robertson and Cooper, 2009).

Robertson and Birch have found preliminary evidence of the importance of psychological well-being for sustaining employee engagement: "the highly

engaged individuals with high levels of well-being are the most productive and happiest employees, while employees with low levels of well-being are more likely to leave organizations in which they operate" (2010:10).

They also suggest that, if organizations only focus on initiatives that target commitment and discretionary efforts, without nurturing employee psychological well-being, then these initiatives will be limited in the impact they can achieve.

Another key message that emerged from this study is that sustainability is defined as responsible behavior, which is a premise for a state of well-being (O'Brien, 2005). The implication here is that creating and sustaining a condition of wellness is an important way to ensure an authentic emotional and sustainable engagement: managers who manage in ways that not only encourage employees to demonstrate engagement externally by their actions but also engender emotional engagement represent a vital mechanism for creating a workforce that is sustainably engaged and well (and productive).

Essay 3

Sustainability as a Matrix of Experiential Marketing

Abstract

Recent years have highlighted a significant increase in the relevance of environmental protection and sustainability to consumers, firms, and society as a whole. Taking this new situation into account, most organizations are aware of this change and wish to be seen as taking steps to improve behaviors in this regard. This challenge requires managers to make wise strategic choices and for organizations to be more flexible in adapting to changes in the economy, in the environment and in the "whims" of consumers. The aim of the present study is to examine the potential role of sustainability as a matrix of experiential marketing to understand how a memorable, emotional and responsible connection between consumer and sustainable brand can generate customer loyalty and affect the purchase decision. Taking a case study approach, this study analyzes an ecological campaign called "The Fun Theory", contributing to strengthening this new theory, according to which "fun" is the best way to change the bad habits of people in responsible and sustainable manner.

Keywords: sustainability, experiential marketing, "The Fun Theory"

3.1 Introduction

A firm, a society or an ecosystem can be characterized as sustainable only when it expresses the ability to keep itself in time. To achieve this result, not only is economic equilibrium necessary, but also it is necessary to take into account the social and environmental aspects of activities. Thus, a process of transformation of companies' business models towards more sustainable paradigms (Belz and Peattie, 2009) is inevitable. In the past, this process could be defined as a strategic choice, but today, it is also a mandatory condition for survival in the market (Keller, 2003). This situation implies a rethinking of all organizational functions, particularly marketing.

Are managers aware of their customers' increasing propensity towards sustainability? How are they preparing themselves to answer this challenge?

Because conventional marketing is considered mainly responsible for continuously stimulating consumers to increase consumption, the goal of sustainable marketing is to promote sustainable consumer behavior. The ability of businesses to successfully use sustainable marketing in support of their strategy to obtain sustainability depends on economic, social and environmental sensitivity and also on the ability to enhance experience (Sheth and Parvatiyar, 1995). In recent years, there has been an increase in interest in building and enhancing customer experience among researchers and practitioners.

Schmitt (1999a) assures us that, currently, experience is one of the "hottest" movements in business practice and defines experiential marketing (Schmitt, 1999b) as a new approach that treats consumption as a total experiment by taking cognizance of the rational and emotional aspects of consumption using eclectic methods.

Brakus et al. (2009), instead, conceptualize the brand experience as

sensations, feelings, cognitions and behavioral responses evoked by brandrelated stimuli that are part of a brand's design and identity, packaging, communications and environments (Brakus, Schmitt and Zarantonello, 2009). However, the brand experience (Zarantonello, Schmitt and Brakus, 2007; Schmitt, 2009) binds a sustainable and responsible behavior that adds value to the experience, allowing recipients to undergo unconsciously sustainable experiences.

A new trend in marketing that allows living "original" experience is called "Gamification" (Hamari, 2013). Gamification can help companies to develop a mindset oriented to the market and improve the job satisfaction of employees and customers through fun. Some scholars (Deterding, Dixon, Khaled and Nacke, 2011) have defined this practice as the use of the elements of fun in marketing and particularly in relationship marketing; however, other scholars (Huotari and Hamari, 2012) have emphasized the processes that transform leisure, habits and customs in a way that can obtain and provide experiences of sustainable value.

This paper is organized as follows. After the introduction, a literature review on experiential and sustainable marketing and an analysis of the concept of gamification as a realization of games and its rise in the market are presented. The next section explains how gamification is used by businesses and the manner in which it may constitute a powerful motivational lever that can have positive effects for more sustainable directions. To better highlight this concept, a case study of a company that dynamically uses gamification is examined. Finally, concluding remarks and implications for managerial practice are discussed.

3.2 Theoretical Background

3.2.1 Experiential Marketing

Traditional marketing strategies that focus on price or quality are no longer a source of differentiation and competitive advantage. Scholars advocate that one of the main routes to successful differentiation and competitive advantage is a much stronger focus on the customer (Peppers and Rogers, 2004).

Experiential marketing has evolved as the dominant marketing tool of the future (McNickel, 2004). Companies have moved away from traditional "features and benefits" marketing towards creating experiences for their customers (Williams, 2006).

Customer satisfaction is a key outcome of experiential marketing and is defined as the "customer fulfillment response", which is an evaluation and an emotion-based response to a service. It is an indication of the customer's belief in the probability or possibility of a service's leading to a positive feeling. This favorable affect is positively and negatively related to satisfaction (Liljander and Strandvik, 1997) and involves the marketing of a product or service through experience (Mathur, 1971). Experience is a personal occurrence with emotional significance created by an interaction with product or brand related stimuli (Holbrook and Hirschman, 1982).

Schmitt (2003) distinguishes between five types of experience that marketers can create for customers, including sensory experience (sensing), affective experience (feeling), creative cognitive experience (thinking), physical experience, behaviors and lifestyles (acting), and social- identity experience, all relating to a reference group or culture (relating). The author posits that the ultimate goal of experiential marketing is to create a holistic

experience that seeks to integrate all of these individual types of experiences into a total customer experience.

The concept of "experience marketing" also offers engaging, interactive, and entertaining brand experiences (Brakus, Schmitt and Zarantonello, 2009). The idea is to communicate the essence of a brand through personal experience.

However, there is no consensus today on what the term "experience marketing" refers to and the context in which it is used. Lee, Hsiao and Yang (2010) assert that experience marketing aims to induce marketing staff to emphasize the overall experience quality for consumers conveyed by brands, including rational decision-making and sentimental consumption experience. Baron, Harris and Hilton (2009) define experience marketing as "the creation of a memorable episode based on a customer's direct personal participation or observation". However, they simultaneously use the exact same definition for experiential marketing.

Experiences offer human beings the chance to feel, think, act, relate, and promote sustainability. Sustainable experiences are a dynamic, innovative way to respect the environment, to improve social life and to have a deeper understanding of people's lives, leading to better marketing decisions.

3.2.2 Sustainable Marketing

Sustainable marketing is "a management conception which attends to the environmental and social demands and eventually turns them into competitive advantages by delivering customers value and satisfaction" (Belz and Karstens, 2010:3). A wide view of sustainable marketing regards it as the adoption of sustainable business practices that create better

businesses, better relationships and a better world (Anderson, 2012).

Other scholars (Belz, 2008; Belz and Peattie, 2009) have attempted to explain the thin line that constitutes the difference between "sustainable" and "sustainability marketing". They explain that the word "sustainable" is related to something that is durable or long lasting and, "sustainable marketing is a kind of marketing, which builds long lasting customer relationships effectively, without any particular reference to sustainable development or consideration of sustainability issues" (Belz, 2008:120), whereas "sustainability marketing is more explicitly related to sustainable development agenda" and defined as "building and maintaining sustainable relationships with customers, the social environment and the natural environment" (Belz and Peattie, 2009:110).

Regarding the field of business, the ability of businesses to successfully use sustainable marketing in support of their strategy to obtain sustainability depends on their social and environmental sensitivity. Belz and Karstens (2010) state that there are certain distinguishing features of the sustainable marketing paradigm.

Environmental and social issues are the easiest to identify. In traditional marketing, the environmental and social aspects of products are hardly considered, and green marketing (Mintu and Lozada, 1993; Polonsky, 2001) only includes ecological problems.

Another particular problem is the identification of the intersection of social and environmental problems with consumer behavior (Belz, 2008). This identification is a crucial aspect of sustainability and sustainable marketing, which simultaneously attempt to find solutions to social and environmental problems and meet customer demands (Belz and Peattie, 2009).

The central role of communication, which must create both a vision and an experience concerning sustainable values such as clean air, green technology, waste, energy savings, etc., also provides a good development of sustainable marketing; in sum, the communication of experiences leads people to act more responsibly (Tromp, Hekkert and Verbeek, 2011).

The appropriate communication for sustainable change has a participatory character, and today, new tools for sustainable development, such as fun, are emerging. Indeed, recent studies (O'Brien, 2010) have shown that communicating an experience through fun can be the best way to change the bad habits of people.

3.2.3 A New Trend: "Gamification"

In the academic literature, the idea that, through doing fun things, people are more likely to change behavior is called "gamification". According to Zichermann and Linder, this idea constitutes one of the core concepts of business and strategy: "without employee and customer engagement, the best laid strategies and tactics are doomed to fail" (Zichermann and Linder, 2013:16).

There are two main definitions, one definition that refers to the use of game thinking and game mechanics to engage users and solve problems (Zichermann and Cunningham, 2011) and another definition that concerns the use of game elements and game design techniques in non-game contexts (Werbach and Hunter, 2012).

Both definitions highlight that this new trend requires the use of game mechanics, game elements or game design techniques.

One of the main things to highlight about gamification is that can be used in non-game contexts, e.g., with firms, making effective behaviors and fun into business applications (Werbach and Hunter, 2012). Gamification has gained popularity in recent years because organizations have become aware that traditional incentive structures for motivating employees and

customers no longer work (Werbach and Hunter, 2012) and gamification represents a method that can successfully replace the old approaches. Through gamification, businesses can move away from extrinsic motivators, such as monetary rewards, towards intrinsic motivators (Zichermann and Cunningham, 2011). In doing so, gamified applications and businesses can positively drive engagement, interaction, collaboration, awareness and learning by combining fun and happiness.

Sustainability is not immune to the growing proliferation of gamification as a way to encourage desired behaviors through the allure of competition, rewards and fun. Cities, business organizations and product manufacturers, among others, have begun creating such games and incentives to meet their goals to be more sustainable (Zichermann and Linder, 2010).

Gamification is not all fun and games. It is important for organizations to clearly identify their goals, understand the motivation they are seeking to tap into and develop intrinsic and extrinsic rewards that encourage long-term behavioral changes.

3.3 Methodology

The case study is the preferred research method for examining complex social phenomena because it allows researchers to develop a holistic understanding of real-life events (Yin, 1984; Eisenhardt and Graebner, 2007; Siggelkow, 2007; Yin, 2009). This methodology is particularly well-suited to developing an analysis through providing a deep comprehension of the empirical phenomena and the context in which they occur.

The present study considers an ecological campaign called "The Fun

Theory", launched by a Stockholm-based advertising agency and promoted by Volkswagen. According to "The Fun Theory", fun is the best way to change the bad habits of people. This theory, in essence, is based on the same concept as gamification: by making things fun, people are more likely to change (Zichermann and Linder, 2013).

Several sources were used to collect data that were useful to building the case study. First, extensive archival work, including the collection of relevant articles, was conducted. Second, the manner in which Volkswagen promoted "The Fun Theory" was analyzed, highlighting the numerous ecological campaigns that oriented people towards sustainable behavior.

Indeed, this case study begins by analyzing how things as simple as fun and happiness are the easiest way to change people's behavior for the better, for the environment, for organizations and for society. As Aristotle argued, "What we have to do, we learn by doing", which is the exact approach to life experiences.

3.4 Case Study

Experience marketing offers the opportunity to change routine transactions into powerful events that demonstrate the value of a business.

An effective example of experiential marketing was provided by "The Fun Theory" promoted by Volkswagen. The overall concept was to engage people to invent creative ways to make everyday activities more fun. Over 700 people submitted different ideas to make routine activities, such as recycling, picking up trash and going to the gym, more enjoyable. These ideas were collected by a Stockholm-based advertising agency (DDB), which created successful and effective viral videos to show how "green" behaviors can be fun. Only in the last ten years or so have companies begun

to harness the marketing power of what is known as the viral video - a video that becomes popular through internet sharing, typically through media sharing sites such as YouTube.

Humor is oftentimes a vital component to making these videos catchy. Whether the videos provide humor, wit, surprise, or sheer entertainment, the key to their success is their voluntary and rapid distribution across a wide variety of Internet circuits, generating thousands of views.

"The Fun Theory" video seems to have hit the nail on the head and, surprisingly, not through humor or shock value but rather through the sheer uniqueness of taking everyday mundane behaviors and making them fun.

In each experiment, the test is to see whether people will alter their simple, everyday behaviors to be more environmentally friendly if such behaviors are made to be more fun. One of the videos documents "The Fun Theory" as it is tested on a staircase in a Stockholm subway station that was converted into working piano keys in an attempt to convince commuters to take the stairs instead of the escalator. Another test uses sound effects to make the proper disposal of trash a cartoon-like experience. The idea is intriguing, and the results are even more so: apparently, turning a set of subway stairs into a real-life piano makes people 66% more likely to use it, and more than 60% of people throw waste in the sounding bin. For this reason, the videos are highly entertaining, and their Internet circulation has soared, with some videos having accrued over a million hits on YouTube.

The positive reactions to these "being-green-made-easy" videos cause us to forget that they are actually part of a campaign. No wonder this occurs, given that viral videos take their name from "viral marketing", which is also known as "word-of-mouth" or "stealth" marketing: the videos are shared, and the marketing occurs on its own. In "The Fun Theory" videos, Volkswagen's brand placement is as subtle as possible, with a simple VW logo that appears at the end of each video. Yet, with the videos

spreading across the Internet like wildfire, the logo makes an understated yet collectively powerful impression on consumers.

These videos make their way among hundreds of thousands of viewers, and positive associations with the VW brand accompany them. Despite the fact that these videos do not market the VW car by promoting its performance and its virtues of efficiency but instead launch new green experiential initiatives, these videos sound like the definition of a perfect brand experience.

Some key takeaways from this experience marketing campaign can be summarized:

Surprise: This experience marketing event was clearly a surprise to each person who walked in the park or to each commuter coming out of the train station. It broke them out of their normal routine and created a unique and memorable experience. Look for ways to brighten the clients' day that will take them by surprise.

Document the fun: The team that created the sounding waste bin or the stairs also installed multiple cameras to document the reactions of people who experienced the fun of throwing away their trash or climbing the piano keys. When you create an experience marketing event, give special thought to how you are going to record the fun. Video, photos and testimonials are golden content marketing opportunities that extend the impact of what could be a single-day event.

Create shareable content: The total time for each video is approximately one minute. This is an ideal length for social media users to share this content on their networks. The videos continue to pop up on Facebook on a regular basis. Facebook has also made sharing interesting content doable in two simple clicks. This ease in shareability increases the chances that smart content will reach beyond your network.

Open up to crowdsourcing: The theme of the campaign was "the thought that something as simple as fun is the easiest way to change people's behavior for the better". Look for ways to open up the experience marketing idea through contests, comments and other social features.

Consider a soft sell: The videos only made a brief mention of Volkswagen at the end of each video. Taking a conservative approach to overt branding boosted the shareability of the video because it did not feel like a sales pitch; associating the brand with moments of happiness in peoples' lives will make more of an impact than a standard features-and-benefits sales presentation.

The case study shows that, in this advertising campaign, the consumer enables the marketing process in more ways than one. People like to undergo experiences, specifically fun experiences, and adopting a marketing strategy based on fun experiences can be a way to educate people to be sustainable in a fun and experiential manner.

"The Fun Theory is based on the idea that something as simple as fun is the easiest way to change people's behavior for the better. We apply this thinking to every environmentally friendly innovation we make. It should never have to be a compromise to help the planet. Moreover, we believe more people will act responsibly, and drive greener, if they have fun on the way" (www.volkswagen.com, 2014).

3.5 Conceptual Model

Experience, as defined within the realm of management, is a personal occurrence with emotional significance created by an interaction with product- or brand-related stimuli (Holbrook and Hirschman, 1982).

For marketing to become experiential, the marketing activities must create "something extremely significant and unforgettable for the consumer immersed in the experience" (Caru and Cova, 2003:273).

A well-designed experience engages the attention and emotion of the consumer, becomes memorable and allows for a free interpretation because it is non-partisan (Hoch, 2002). In contrast to traditional marketing, which focuses on obtaining customer satisfaction, experiential marketing creates emotional attachment for consumers (McCole, 2004).

The sensory or emotional element of a total experience has a greater impact on shaping consumer preferences than the product or service attributes (Zaltman, 2003). The benefits of a positive experience include the value it provides the consumer (Babin, Darden and Griffin, 1994; Holbrook, 1999) and the potential for building customer loyalty (Pine and Gilmore, 1999; Gobe and Zyman, 2001).

Starting from these considerations and the numerous conceptual models proposed (Csikszentmihalyi, 1997; Wood and Masterman, 2007; Leppiman and Same, 2011) for the formation of experience marketing, this work proposes a model with the goal of developing the relationship between sustainability, experiential marketing and "The Fun Theory" as high-impact emotional elements.

The proposed conceptual model (see Figure 3.1) shows a process of interaction between sustainability, "The Fun Theory" and experiential marketing, creating a stimulus and a change in consumer behavior. It is essential to understand that a product/service or a brand is not inherently experiential and may constitute merely positive stimuli. In turn, "The Fun Theory" may have an effect on behavior and purchase decisions through fun and indirectly lead consumers to make more responsible choices.

Several experiments (www.volkswagen.com, 2014) demonstrate that "fun" appears to be the best way to change human behavior for the better, so what better way to tie this theory to a company or brand?

Experience creates value for both consumers and firms, and it represents a significant relationship between the perceptual activity of a person and his or her life situations (Perttulla, 2007; Leppiman and Same

2011).

Thus, experience as an economic offering is a relevant, meaningful relationship, facilitating communication between the company, brand, service and consumers. That is what the consumer is experiencing in life situations that create meaningful and fun relationships. All this is connected to the reference context (environmental, economic, social), emphasizing the interaction between business and the environment and the strong sustainable orientation for businesses and consumers in general.

Schmitt also states that experiences are private events that occur in response to some stimulation (1999). By selecting the ExPros (Schmitt, 1999), marketers can also provide stimuli that result in fun experiences for consumers. The fun is a positive stimulus linked to a brand that can change the life experiences of the consumer.

Human Beings

The Fun Theory

- Environmental
- Economic
- Social

- Experience
- Emotions

Experiential Marketing
- Consumer (behavior, values, personality...)
- Company or Brand (logo, image, communications...)

Figure 3.1: Conceptual Model

3.6 Final Considerations

From the analysis of the case study, it clearly emerges that there are different benefits to implementing an experiential marketing strategy, e.g., creating an emotional connection, developing positive perceptions, and gaining credibility; and when all this is combined with fun, firms obtain even more advantageous results.

The conceptual model proposed creates a strong interaction between the company and the consumer through "fun experiences" that lead people to act in a more responsible and sustainable manner.

The creation of this model integrates aspects that have become more and more essential today for the development and success of a firm. In other words, the implementation of experiential marketing strategies that adopt "The Fun Theory" must integrate and balance all three dimensions of sustainability in a responsible manner.

Focusing on delivering experiences is an ideal way to develop relationships and bonds that enable brands to grow over time and create a strong sustainable orientation for consumers.

Managers are aware of both the important role of experiences and the propensity of customers towards sustainability, but they must think to communicate easily and effectively. Communication campaigns are too elaborate, and people today need simple and immediate actions. The case study presented in this essay applies simple and immediate actions, "fun", to create a strong competitive advantage for the firm and to make consumers more responsible. These results constitute the answers to the following research questions: "Are managers aware of their customers' increasing propensity towards sustainability?" "How are they preparing themselves to answer to this challenge?"

Today, people are in search of meaning, happiness, fun, sense, new

forms of fulfillment and core values, which they often find in market offerings (Fortezza and Pencarelli, 2011). To be successful, Poulsson and Kale (2004) also argue that experiential marketing should have personal relevance for the customer, offer an element of surprise and engender learning, as shown by the case study examined.

3.7 Further Research

This essay seeks to understand whether the sustainability can be a matrix of experiential marketing and to explain the relationships between them.

The connection between "experience" and "sustainability" is taking its first steps, and "The Fun Theory", which is an emerging theory, represents only a first application of this connection. For this reason, there is little empirical research in the field, the relationships between the terms have not yet been studied and new conceptual models must be tested.

It is necessary to continue studying the relationship between the two concepts more thoroughly through content analysis and also to analyze the terms to better understand the relationships between them. This essay proposes a qualitative research methodology with a case study and creates a conceptual model to finalize "The Fun Theory" and to yield a rich understanding of the phenomenon. Finally, the further development and application of the proposed conceptual model by firms is also necessary.

3.8 Managerial Implications

The success of companies derives from their abilities to embrace and

deliver emotionally engaging customer experiences (Shaw and Ivens, 2002) or transform customers by guiding them through experiences (Pine and Gilmore, 1999).

Creative experience marketing, when applied correctly, leads to a greater impact for the customer and increased effectiveness and is also very useful as a differentiation strategy.

The proposed model and the case study should assist marketing professionals and scholars in understanding the importance of relationships between these concepts and exploring this bond (between experience and sustainability), which has been little studied in the academic literature.

Marketing managers should also perform observational research to monitor what people do when they have an experience and conduct surveybased research to examine the meaning and value of an experience to obtain relevant input for designing effective marketing strategies.

Dissertation Conclusions

In developing the research program, some central research questions, which were at the core of the effort to shed light on the role of sustainability, were posed: i) Which evolution affected the studies on sustainability? ii) What are the less explored topics related to sustainability? iii) Are managers aware of their customers' increasing requests for sustainable actions?

To answer these research questions, extensive archival work to collect the relevant articles was conducted. More specifically, to empirically explore the research questions, a variety of methodologies (i.e., descriptive and bibliometric methods in Essay 1, a narrative literature review and cowords analysis in Essay 2, and the case study in Essay 3) were adopted. The following sections discuss the results of the research as they pertain to each of our research questions.

4.1 Which evolution affected the studies on sustainability?

From analyzing the field of sustainability studies, it immediately emerged that several and different disciplines influenced and contributed to the sustainability debate. The analysis that constituted the core of Essay 1, "Sustainability: The State of the Art and Emerging Perspectives", took into account approximately 30 years of studies. It was a period of time (from 1987, the year of the official birth of the first document concerning sustainability, to the present) that was adequate for providing a good sense of the changes in interest with regard to the sustainability sub-themes. More specifically, at the beginning, studies focused primarily on the environmental dimension (51% of the papers).

In addition, through the co-word analysis, the core themes (environmental impact, sustainable, social impact) appeared with a high impact across the three periods studied, and new themes (corporate social responsibility, innovation, indices/indicators) emerged from 2006 onwards.

In the second half of the past century, attention to the new challenge posed by the increasing role of sustainability clearly appeared. Thus, it is important to well understand, first, the development that affected the sustainability studies and, second, the present taxonomy and the future facets that should be assumed.



Figure 4.1 Evolution of Study on Sustainability

To have a clear and immediate picture of the changes that occurred over the decades in the field of sustainability and of the development of a wide variety of topics from different research areas, see Figure 4.1.

From analyzing the figure, over the course of the 30-year period,

new topics and, interestingly, the need to pay attention to and provide interesting suggestions for future studies have emerged. In sum, there are numerous challenges for future studies, including applied research that generates practical results.

4.2 What are the less explored topics related to sustainability?

From Essay 1, "Sustainability: The State of the Art and Emerging Perspectives", it emerged that economic growth, environmental protection and social issues are interconnected. The analysis of the evolution of studies on sustainability also highlighted the emerging attention to new factors that influence the quality of life and behavior of people, i.e., "well-being" and "happiness". More specifically, these factors have been included in the new development paradigm of sustainable development. This type of sustainable development pattern must take into account not only the interdependence between the economic, social and environmental dimensions of sustainability, but also the manner in which they influence the behavior of human beings. The potential congruence of economic growth and social and environmental sustainability can only appear within a broader paradigm of well-being and happiness. This new way of thinking diverges from one traditional discourse on sustainability by focusing on the ways in which human behavior can engender sustainable production and consumption patterns inclusively with solutions that integrate social decisions and environmental considerations into everyday economic activity (Mangal and Sheldon, 2011). This approach complements and enriches the three dimensions of sustainability by identifying well-being and happiness as new driving factors.

4.3 Are managers aware of their customers' increasing requests for sustainable actions?

There are significant opportunities for businesses to help consumers choose and use their goods and services sustainably (Saxena and Khandelwal, 2010).

Through sustainable marketing, businesses are in a position to create sustainable value for consumers by supplying products and services that meet their functional and emotional needs now and for future generations while respecting social and environmental limits and common values. In addition, through experiential marketing, it is possible to connect to a brand and make smart and responsible purchase decisions (Belz, 2008). To address these changes and to foster customers' increasing propensity towards sustainability, managers are aware that, by building an emotional bond between the company and the consumer through fun experiences, it is easier to lead people to act in a more responsible and sustainable manner.

Essay 3, "Sustainability as a Matrix of Experiential Marketing", demonstrates how managers can contribute to stimulating sustainable behavior by adopting "The Fun Theory".

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