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THE EFFECT OF INDIVIDUAL CREATIVITY
ON ECOPRENEURSHIP

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DECLARATION

I hereby declare that this master's thesis titled as "The Effect of Individual Creativity on Ecopreneurship" has been written by myself in accordance with the academic rules and ethical conduct. I also declare that all materials benefited in this thesis consist of the mentioned resources in the reference list. I verify all these with my honor.

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ABSTRACT
Master's Thesis
The Effect of Individual Creativity on Ecopreneurship
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Ecopreneurship is a concept that is important for the developed and developing countries of the world, and the core value of ecopreneurship is to protect ecology while protecting the profits of business. Therefore it can be seen as a business behavior committed to sustainability. In today's world sustainability is a crucial criterion for many businesses because of increasing rate of ecological consciousness of the public. For that reason ecopreneurs focus on making innovations for creating eco-friendly businesses.

Ideas are prominent factors in order to make innovations; and finding an innovative idea is related to creative ability. This ability is especially required in the field of ecopreneurship; because it generates high-quality creative ideas that provide maximum efficiency for business.

In this study, the effect of individual creativity on ecopreneurship is discussed through the use of individual creativity scale and ecopreneurship scale that encompasses three dimensions as ecopreneur's orientation, weak structural influences and strong structural influences. This study has especially made a broad contribution with regards to literature for ecopreneurship field.

The sample of the research has been chosen from recycling sector in central districts of Izmir which have five and more than five businesses. Data taken from 83 questionnaires (5 points Likert Scale format) were analyzed and a positive relation was found between individual creativity and dimensions of

ecopreneurship level. Also it was seen that there is a low level of individual creativity in the sample.

Keywords: Creativity, Ecology, Ecopreneurship, Entrepreneurship, Individual Creativity.

ÖZET
Yüksek Lisans Tezi
Bireysel Yaratıcılığın Ekogirişimcilik Üzerindeki Etkisi
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Ekogirişimcilik, dünyanın gelişmiş ve gelişmekte olan ülkeleri için önemli bir kavramdır. Ekogirişimciliğin temel faydası işletmenin karını korurken ekolojiyi de korumasıdır. Bu nedenle ekogirişimcilik, sürdürülebilirliğe adanmış işletme davranışı olarak da görülebilir. Günümüzde, kamuoyunun ekolojik bilinçlilik düzeyinin artmasından dolayı birçok işletme için sürdürülebilirlik önemli bir kriter haline gelmiştir. Bu yüzden, ekogirişimciler çevre dostu işletmeler oluşturabilmek için yenilikler yapmaya odaklanmışlardır.

Fikirler, yenilikler yapmak için önemli faktörlerdir ve yenilikçi bir fikir bulmak yaratıcılık yeteneği ile ilgilidir. Bu yetenek, özellikle ekogirişimcilik alanında gereklidir. Çünkü bu yetenek, işletme için maksimum etkinliği sağlayan yüksek kalitedeki yaratıcı fikirleri oluşturur.

Bu çalışmada, bireysel yaratıcılığın ekogirişimcilik üzerindeki etkisi, bireysel yaratıcılık ölçeği ile ekogirişimcinin yönelimi, zayıf yapısal etkiler ve güçlü yapısal etkiler olarak üç boyutu kapsayan ekogirişimcilik ölçeği kullanılarak ele alınmaktadır.

Araştırmanın örneklemi İzmir'in beş ya da daha fazla işletmeye sahip olan merkez ilçelerindeki geri dönüşüm sektöründen seçilmiştir. 83 soru formundan (5'li Likert Ölçeği Formatlı) alınan veriler analiz edilmiş ve bireysel yaratıcılık ve ekogirişimcilik düzeyinin boyutları arasında pozitif bir ilişki

bulunmuştur. Ayrıca, araştırmanın yapıldığı örnekleme bireysel yaratıcılık düzeyi düşük çıkmıştır.

Anahtar Kelimeler: Yaratıcılık, Ekoloji, Ekogirişimcilik, Girişimcilik, Bireysel Yaratıcılık

THE EFFECT OF INDIVIDUAL CREATIVITY ON ECOPRENEURSHIP

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ABBREVIATIONS

TDK	Türk Dil Kurumu
USA	United States of America
P	Page
&	And
%	Per cent
DOI	Digital Object Identifier
H	Hypothesis
UNFCCC	United Nations Framework Convention on Climate Change
SPSS	Statistical Package for the Social Sciences
ECOIQ	Ecologic Intelligent Quota

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INTRODUCTION

Entrepreneurs establish businesses and as they grow, they try to utilize mass production in order to concentrate on meeting the demands of the market. However, they do not mostly care about results of higher production. These results can be seen as ecologic damage to environment and disturbing natural balance through harmful waste. Therefore, in order to prevent the destruction of ecologic balance and to minimize the ecological damage, ecopreneurship concept was formed. In today's world, businesses want to give importance to ecology by minimizing the damage to it and using non-ecological technique for production. The main reason of these initiatives comes from ecologic innovations which provide cost reduction and the efficiency for production and marketing practices.

Recent increase in ecological problems gives ecopreneurship a more important role than other types of entrepreneurship such as strategic entrepreneurship, social entrepreneurship, and corporate entrepreneurship. But in order to reach a high efficiency for ecopreneurship practices, new ideas should be found for businesses. These ideas are part of an authentic innovation process, and this process cannot be accomplished without creative ideas. Therefore individual creativity level of an ecopreneur should be high and such a business man should have an ability related to finding new ideas and analyzing implementation part of this idea. On the other hand, reaching success in both finding innovative ideas and creating sustainability logic for whole processes in the businesses through establishing ecopreneurship and individual creativity relation will provide an important image for businesses in the stiff competition. So, profitability of businesses will reach the most effective level. For that reason, to contribute to the effort of creating a creative ecopreneurial initiative, the relationship between individual creativity and ecopreneurship will be discussed in our study. Examining the nature of relationship among these concepts will provide an important contribution to the study related to ecopreneurship and creativity fields.

In our study, the effect of individual creativity on ecopreneurship is discussed with regard to creativity scale and ecopreneurship dimensions.

This study is composed of four chapters.

In the first chapter, ecology has been defined and concepts of ecologic problems, ecologic innovation are discussed with the entrepreneurship and its types. On the other hand the relationships between entrepreneurship types and ecopreneurship have been established.

In the second chapter creativity, creativity process, creativity techniques for ecopreneurship have been discussed.

In the third chapter theoretical framework is established with discussion of the relationship between individual creativity and ecopreneurship. Hypotheses of the study are given.

In the fourth chapter aim of the study, type of the study, measurement unit of the study, sample of the study, scales for the study and statistical analysis have been made. Hypotheses testing results are given, and results of the study and conclusion have been discussed.

CHAPTER ONE

ECOLOGICAL ENTREPRENEURSHIP (ECOPRENEURSHIP)

This chapter has been composed of seven main titles. In the first part, definitions of ecology, ecological problems and ecologic innovations are discussed. In the second part, entrepreneurship concept and its characteristics are discussed. In the third part, the concept of entrepreneur is examined. In the fourth part, types of entrepreneurship in relation to ecologic perceptions are made. In the fifth part, the concept of ecopreneurship is introduced. In the sixth part, the concept of ecopreneur and its types are mentioned and in the seventh part, discussion on authenticity of ecopreneurship is presented.

1.1. ECOLOGY

Ecology is a science that examines the relationship between biological assets and their environments. The concept was first used in 1869 by *Ernst Haeckel* who was a biological scientist from Germany. Ecology derives from two Greek words that are *oikos* (house or a living place) and *logos* (knowledge). Furthermore, after 1930, the concept of ecosystem was introduced as encompassing both living organisms and the inorganic environment (Muslu, 2000: 1-2).

Ecology, which encompasses balance of the biosphere and integrity, has a wider coverage in comparison to the concept of the environment. It explains the relationship between nature and humanity in the world. Actually ecology has faced a particular development in human history. In primitive society, individuals needed to learn and know their environment with regards to understanding the forces of nature, plants and animals around them in order to survive (Çakar, 2007: 2-3). As civilization has developed further, humans developed skills such as using fire and other tools and these gave humans an authority to modify the environment and this increasing power and decreasing dependence to the natural environment begin to create pollution of the environment (Odum and Barrett, 2004: 2). In general, using the term of environment instead of ecology can be seen after the industrialization

approach which created the logic of a modernist human-centric understanding (Çalgüner, 2003: 7-8). This understanding can be explained by the nature of the concept of environment because it is defined as all the things that affect individuals. On the other hand, ecology examines the interrelated effect of all organisms to each other (TDK, access date: 03/03/2012).

Everybody have an impact on the earth; because consumption of products and services is necessary for all human beings. This consumption process encompasses ecological impact which can create ecological problems (Wackernagel et al., 1999: 376). The increasing rate of those ecological problems has created an important concept which is called *ecological footprint*. This concept was created by Mathis Wackernagel (State Of The World, 2006: 15). Ecological footprint expresses “*the critical natural requirements of a defined economy or population in terms of the corresponding biologically productive areas*”. Ecological footprint is affected by population size, material living standards, used technology and ecological productivity (Wackernagel et al., 1999: 377).

According to Venetoulis and Talberth (2008: 442) the ecological footprint is a measurement of how many resources are needed in order to cover the consumption of a city, a country, an individual or humanity considering productive land and water and to absorb the waste which is constituted by the usage of resources, using the most valid technology. On the other hand, another concept, bio-capacity tries to answer the question “*How many of the renewable resources have been made available by the biosphere’s regenerative capacity?*” (Schaefer et al., 2006: 6).

The difference between ecological footprint and bio-capacity is important for the sustainability situation of the planet. There are three results for the equation of ecological footprint and bio capacity. If the ecological footprint is greater than bio capacity, it means that there is negative ecological balance. If the ecological footprint is less than bio capacity, it means that there is positive ecological balance. Equality between the ecological footprint and bio capacity indicates neutral situation (Venetoulis and Talberth, 2008:443). The current situation of the planet is of negative ecological balance, which can be expressed as an eco-deficit. Bio-capacity is used to express the natural biological capacity of the world. Table 1 indicates the

eco-deficit with regard to the Millennium Ecosystem Assessment which was created in 2005.

Table 1: Ecological Deficit

	Carbon	Cropland	Grazing Land	Forest	Fishing Ground	Built-up Land	Total
World Total Ecological Footprint,2005	1.41	0.64	0.26	0.23	0.09	0.07	2.7
World Total Ecological Biocapacity,2005		0.64	0.37	0.81	0.17	0.07	2.1
Ecological Deficit							-0,6

Source: Wiedmann and Barrett, 2010: 1651

The table illustrates that the planet is not living within sustainable limits and ever since 2005 this situation has been worsened. Higher income level countries have a greater ecological footprint than lower income level countries. All data illustrates that global society has been grown from an economic perspective and this causes pollution.

The greenhouse effect is an important factor in the current ecological crisis; it causes global warming and includes gases such as carbon dioxide, nitrous oxide, and methane. It is obvious that power stations, industry, transportation, and agricultural byproducts have produced greenhouse gases and it needs to be regulated by the governments of countries (Jorgenson, 2007: 138-141). Initiatives for regulating greenhouse gas emissions and global warming have been attempted by many governments; so the Kyoto Protocol was established in Kyoto, Japan in 1997 by the United Nations Framework Convention on Climate Change (UNFCCC). The protocol is the most comprehensive international agreement that aims to reduce greenhouse gases globally and one hundred eighty seven countries had ratified it by 2010 (Çakar, 2007: 20; Kumazawa and Callaghan, 2012: 202-203). Even though it has favorable provisions to reduce emissions, it had problems in USA (it's the country with biggest ecological footprint); but most of countries have tried to

regulate their emission rates and have tried to reduce them under some limits which have been created by the governments (Freedman and Jaggi, 2011: 49).

Increasing ecological deficit and global warming has created colossal ecological problems. In order to reduce and prevent these problems, there is an emerging need for an ecological approach to problems.

1.1.1. Ecological Approach to Problems

The production of goods and services has exponentially increased due to increasing demand for those products by humans. This development has created a wealthier and easier life for people. Industrial development was crucial in order to reach these favorable conditions. It is obvious that many products are produced at an increasing rate day by day but this industrial improvement has given a great damage to the environment. Environmental problems cause climate change and degradations such as air, water and soil pollution. Therefore, prediction of these problems is very easy for governments and ecological experts; but ecological experts have minor impact in comparison to governments (Filipkowski, 2011: 537-538).

Even though there is a high demand for industrial development due to the willingness to have higher life conditions, there is a reality that natural resources are limited and continuous consumption of agricultural products and water brings technological degradations that damage ecology. Results of this ecological damage can be seen in every part of the earth. Most countries want to control population and its effects in order to reduce ecological pollution. In other words; the balance of nature can be broken by uncontrolled population in countries. Population control policies are implemented in many countries including China in order to prevent ecological problems and pollution (Brown, 2006: 31-32).

Ecological problems occurring in the world are caused by uncontrolled population growth and human-made damage to ecology. Especially unequal relationship between population and agricultural food causes a very dangerous situation for the people. Because population increases geometrically and agricultural food increases arithmetically (Brown, 2006: 177).

Industrial development and population have been seen as key factors for ecological damage. The effects of these indicators can be reduced by considering ecological approaches that can have positive outcomes of both industries and populations. In this context, an innovative point of view is needed to create the most effective solutions to ecological problems therefore innovations for eco-protection are crucial topics for today's world (Çakar, 2007: 90). Actually, implementing an ecological approach to problems is possible by having knowledge about ecological footprint. Because, it indicates the level of the earth's ecological problems, so this rate is a crucial factor in order to evaluate the current positions of both nations and the world with regard to ecology. It is obvious that the current position of the ecological footprint signals ecological problems that create disorders in the earth. This effect will show its own negative effect in the following years in an exponential way therefore scientists try to take some precautions in order to decrease the negative impacts of ecological problems will have. Of course, inventions for new technologies or finding effective technological ways to overcome ecological problems are not enough for the earth today. Therefore, the popularity of ecological innovation is increasing day by day. Innovations for ensuring the protection of ecology are called eco-protection. Application of eco-protection innovations can benefit the countries and understanding innovations for eco-protection will provide individuals who live in different societies a new mindset for approaching ecology.

1.1.2. Innovations for Eco-Protection

The emergency situation regarding ecological crisis has been considered by many nations. So, many creative solutions were created in order to reduce carbon emissions and environmental damage.

Most countries try to constitute innovations to protect ecological value. Especially Germany and Sweden are important eco-innovative countries. There are simple but effective ecological implementations of their government policy. For example, Germany has increased energy tax and has decreased working tax. There are two core ideas to start this policy. The first one is reducing the emission rate and the second one is increasing the employment rate of that country. Therefore, 250

thousand people were employed up to 2003. On the other hand, Sweden applied a different tax policy. Government has imposed taxes on the most polluting products and practices, and then it gave tax incentives to the cleanest products and practices. This policy was applied between 1990 and 1992. The evaluation of that policy indicated that the emission rate was reduced 34% in 1992 in comparison to 1990 (State Of The World, 2008: 14).

Governmental implementations which are related to taxes on companies, have affected some specific sectors. One of them is the building sector because costs in this sector are too high and therefore a reduction in taxes can provide high profit margin. This situation encourages scientists to find innovations with regard to providing less negative effects on ecology. In 2006 scientists found a method to produce a lower weight brick that was still suitable for cement. The main logic of production is to use fly ash because the increasing usage of fly ash will provide fewer brick or cement productions so it will decrease toxic materials output, and it will provide less damage to ecology (State Of The World, 2007: 112-116). On the other hand, in addition to building innovation, energy source issues are crucial ecological factors for all industries. Tax regulations in the countries encourage scientists to find innovative solutions especially for alternative sources of energy so that damage to environment and the costs of energy can decrease. This is because the production of energy in contemporary methods consumes a great amount of natural materials and produces a lot of hazardous waste. Therefore, some scientists suggest methods to produce some alternative sources of energy especially for illumination. Firstly, extensive use of natural illumination sources (sun) is important to reduce the consumption of energy. Solar energy's sustainable and clear power will decrease the costs of business and provides an eco-friendly innovative solution for today's world (State of The World, 2007: 112-116).

Innovations and precautions in order to provide protection of ecology have an important effect on businesses. They are redefining the business, and because of this entrepreneurs are critical for this process. Because, entrepreneurs can be seen from the first stage of creating a business and they establish the system of production, management and marketing. For that reason, the consciousness of entrepreneurs is important in order to attain the ecological goals of the world. It is obvious that

ecological problems have been expressed extensively by both scientists and the media so consumers give their attention to ecological issues. Consumers show their attitudes in an ecological way and they give negative reactions to companies that ignore ecological concerns or do not create an ecological initiative. In this context, the evaluation of ecological precautions, innovations and activities are mostly related to the attitudes of entrepreneurs so the concepts of entrepreneur, entrepreneurship and sub-categories of entrepreneurship are important issues that have to be understood so that a transition to an ecological understanding of business and an ecological model of entrepreneurship can be achieved. Only then ecological support of consumers, scientists and governments can be achieved. To reach this goal, firstly entrepreneurship and its sub-categories have to be defined.

1.2. CONCEPT OF ENTREPRENEURSHIP

New organizations provide socio-economic development. The reason for this, they catalyze economic growth, advance new technologies, redefine products and services, and in some situations create entirely new industries (Dobrev and Barnett, 2005: 433). These are important to increase employment for a country because new organizations that encompass new industries will make huge contributions to create new job opportunities and thanks to these situations social mobility and economic attainment can be enabled (Carroll and Hannan, 2000: 32).

The opportunities and economic advantages of new organizations can be made possible by the means of entrepreneurship. The increasing popularity of entrepreneurship through global advancement of technologies and generating new industries makes entrepreneurship a key concept in order to create new innovative organizations. Because these kinds of organizations can take the risk to transition to a new stage and entrepreneurs are the ones that can control this risk (Dobrev and Barnett, 2005: 434).

The origin of entrepreneurship concept comes from the French language. The word “entreprendre” which is translated as “*to undertake*” is a core concept for entrepreneurship (Chegini and Khoshtinat, 2011: 165).

Entrepreneurship is an important concept which is studied in accordance with different point of views. Most people believe that it is a kind of driving factor of economic development for both developed and developing countries. Wealth production, technological development and productive employment factors are crucial for this development. Chegini and Khoshtinat (2011: 165) define entrepreneurship as “*a new idea which is conceptualized for developing or establishing business*”. The process which is created by using creativity, time, resources and risk is called as entrepreneurship.

Sánchez (2011: 425) defines entrepreneurship as “*Creating opportunities which are considered after processes of identification, evaluation and developing, at the same time exploiting these opportunities with resources which can influence processes*”. According to this definition, the four components of entrepreneurship are identification, evaluation, developing and exploiting opportunities. Identification is a process for finding niche point in the market and after that process, evaluation of a specific market will provide knowledge about how development occurs and what opportunities will exist. The main argument of this view is opportunity creation.

The definition of the Schumpeterian view with respect to entrepreneurship defines it as an idea which should be supported by innovative thinking in order to reach a new reality through new business models and try to replace conventional business systems (Korres et al., 2011: 1156). The Schumpeterian view claims that innovation derives from an idea that will contribute to entrepreneur’s understanding of individuals; therefore entrepreneurship and innovation are interrelated concepts.

Entrepreneurship and innovation are commonly used and closely related concepts, so it can become fuzzy to distinguish. Multiple meanings have been given to both concepts. They are often regarded as overlapping concepts. Schumpeter has defined entrepreneurs as individuals who create different types of combinations such as innovations in order to improve an idea which can reach higher quality after processing. He mentions four roles in the process of innovation (Korres et al., 2011: 1159; Stevenson and Jarillo, 1990: 19):

- **Inventor**, who finds a new idea to be processed,
- **Entrepreneur**, who thinks about the commercial part of this idea as constituting a project,

- **Capitalist**, who searches for financial resources in order to support this idea and who bears all risks with regard to this project,
- **Manager**, who performs the corporate management using the planning, organizing, leading and controlling functions of management.

Similarly, Tekin (2009: 3) defines entrepreneurship as activities which are related to a business and which are based on a business idea that benefits from the opportunity of markets with the goal of producing goods and services thanks to a combination of factors of production such as capital, natural resources and labor. This understanding of the definition is an operation management oriented view so the fundamental factors of entrepreneurship are determined as goods and services with factors of production.

According to Johnson (2011: 3), entrepreneurship is the creation of different things by giving them the necessary time and effort and processing all creation by considering risks which can be financial, psychological and social, at the same time entrepreneurship is providing personal satisfaction in every process of creation. This definition claims that entrepreneurship is risk and time oriented. It means that taking risks with effective time usage is the root of entrepreneurship. On the other hand, Tan et al. (2005: 357) expresses risk-based definition of entrepreneurship with their core definition of entrepreneurship which is *“the process of attempting, [over time] to make business profits by innovation in the face of risk”*.

Ireland et al. (2001: 51) define entrepreneurship *“as a social process which includes individuals and teams; and creation of wealth shaped in accordance with unique packages of resources to exploit marketplace opportunities”*. This definition focuses on marketplace opportunities. Actually, there can be some organizational, political or economic opportunity for a business; but the main part of this view of entrepreneurship taken as marketing part of business so if there is an opportunity for a market, it means that individuals or teams can create an organization which is an entrepreneurial practice but it is perceived as a social process which is society-oriented.

There are many other definitions in contemporary entrepreneurship literature. The key concepts can be found as the creation of new organizations, the new combination of existing factors, the exploration and exploitation of opportunities and

the bearing of uncertainty (Ulhøi, 2005: 940). These are the modern patterns of entrepreneurship.

When all definitions regarding to entrepreneurship are considered, there are some basic patterns for examining the concept. The study of Shane and Venkataraman (2000: 218-220) indicated a general examination of entrepreneurship. There are opportunistic approaches to resources which are used in practice, a processed base which has importance for discovering new things with creative ability and an advantage base. As a conclusion, individuals' discovering, evaluating and exploiting opportunities are at the heart of the activities that makes entrepreneurship.

1.3. CONCEPT OF ENTREPRENEUR

The origin of the entrepreneur concept comes from French and it means "*taking the initiative to bridge*". A combination of four elements which are money, people, ideas and resources constitutes an entrepreneurial activity and the person who makes this activity is called an entrepreneur. In this activity there is a two-way relation in the market between suppliers and customers. Entrepreneurs establish a bridge between these market factors (Schaltegger and Wagner, 2011: 222-230).

The entrepreneur (or entrepreneurial team) is a key factor for understanding the reason for establishing new organizations and the ways with which to create them (Ulhøi, 2005: 941). Entrepreneurs consist of groups or individuals who act independently and they have four main functions that are organizing an existing organizational system, establishing new organizations, making some innovation and renewing procedures for organizations in order to become an entrepreneur (Chrisman and Kellermanns, 2006).

An entrepreneur is defined as "*a person who is committed to accept, manage and organize risks of an economic activity*" (Chegini and Khoshtinat, 2011: 166). This definition expresses entrepreneurial activity as taking an opportunity and using that opportunity in order to create an organization by taking a risk and the willingness to accept that risk. Of course, managing that organization must be the first agenda for an entrepreneur because failed management practices will create unfavorable organization so success cannot be expected by that kind of organization.

Actually, this explanation states that entrepreneurs can face failure as well as success. Even though, prevailing perceptions on entrepreneurs are success oriented, the perception of permanent success cannot be valid for entrepreneurs.

The concepts of entrepreneur and entrepreneurship are like nested boxes. Namely, they are interrelated concepts therefore definitions for the entrepreneurship field in studies use both entrepreneur and entrepreneurship. Even if entrepreneurship is evaluated as a process to create a new company or to provide growth for companies, entrepreneurs are individuals who expand business and develop the company's practices; therefore they have many initiatives for changing the existing consumption of consumers and production markets. However, if there is willingness on the part of the entrepreneurs to reach success, they should have innovative and creative skills. At the same time, they should mostly have positive characteristics such as ambition, leadership, team-building skills, personal involvement and commitment in order to attain success in the market. In this sense, the concepts of entrepreneurship and entrepreneurs are firmly attached to each other and there are no definitions to distinguish entrepreneurs and entrepreneurship (Schaltegger, 2002: 47).

Entrepreneurship is a main concept that covers sub-categories; thus entrepreneurship types should be both known and attached to ecological logic in order to provide a transition to ecopreneurship, which is needed for an ecological transformation. Strategic entrepreneurship, social entrepreneurship and corporate entrepreneurship are the chosen concepts in order not to have notional types of entrepreneurship such as creative entrepreneurship, innovative entrepreneurship and opportunist entrepreneurship (Tekin, 2009: 3-7).

1.4. TYPES OF ENTREPRENEURSHIP

1.4.1. Strategic Entrepreneurship

The ability to find a strategic position is an important success criterion for a business. This can be achieved by using company's resources, competencies and capabilities. This part of creating a strategic position for a business is related to organization; on the other hand, the expectations of key stakeholders and satisfying

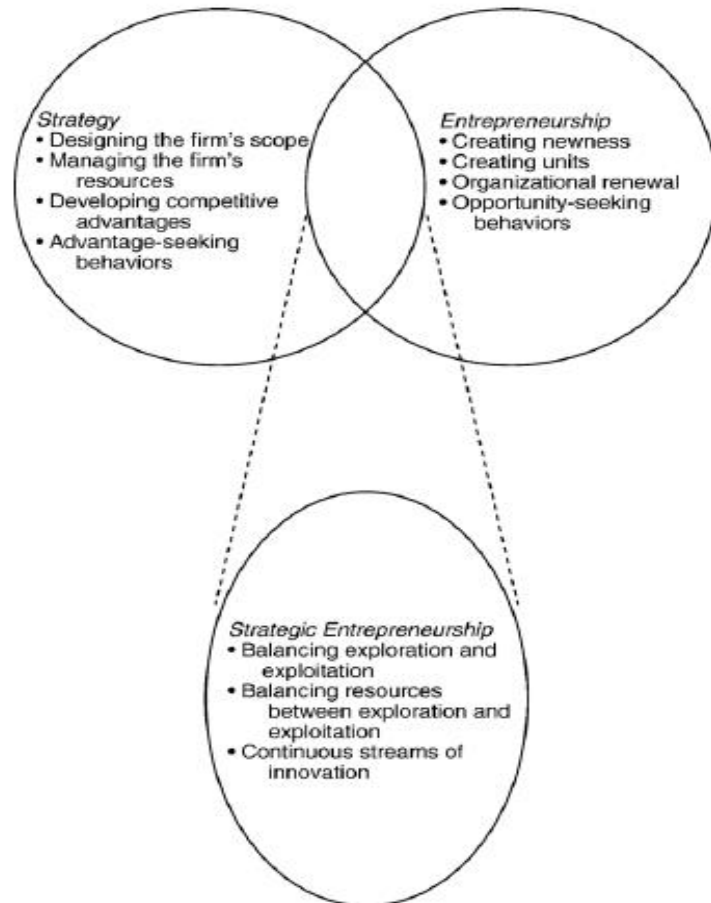
their demands with regard to business activity and management are another factor in order to reach a good strategic position. For that reason, the concept of entrepreneurship from a strategic perspective comes from satisfying needs for key stakeholders and other parties which are in relation to a business. The Strategic Management Approach is in use to provide a valuable strategic position for a business (Thompson, 1999: 279-280).

Defining the terms *strategy* and *entrepreneurship* are needed to describe strategic entrepreneurship. Strategy is born for the needs of the long-term development of a business (Ghemawat, 2002: 37-45). Long-term development encompasses a number of factors such as thoughts regarding scope of activities, managing and acquiring of resources and intended sources of competitive advantage (Ireland and Webb, 2007: 51). On the other hand, entrepreneurship is related to actions in order to generate newness, units, organizational renewal and opportunity-seeking behaviors. Therefore, the combination of strategy and entrepreneurship constitutes strategic entrepreneurship which creates balancing factors to enable exploitation and exploration with regard to the benefits of customers, suppliers and shareholders (Ireland and Webb, 2007: 51-52).

Ireland et al. (2001: 51) describe strategic entrepreneurship as a combination of entrepreneurial actions and strategic actions. Entrepreneurial actions are determined as “*a fundamental behavior to find new markets with using existing resources in new ways in order to have new customers and to reach high business reputation*” (Ireland et al., 2001: 50). On the other hand, strategic actions consist of selection and implementation of a firm’s strategies (Ireland et al., 2001: 50). It is obvious that firms cannot complete entrepreneurial actions without having any strategy because strategy is like a checklist to complete an entrepreneurial behavior, creates an opportunity to make a move. The strategies adopted by business depend on the market environment and current conditions. Today’s world has increase in the importance of ecological issues and eco-friendly products therefore many businesses have determined their strategy according to ecological concerns and understanding as their main agenda. Figure 1.1 illustrates the intersection of entrepreneurship and strategy and it summarizes the concept of strategic entrepreneurship. Examining the

Figure 1 according to ecological concerns will explain the relationship between strategic entrepreneurship and ecological entrepreneurship.

Figure 1: Strategic Management: A value-creating intersection between strategy and entrepreneurship



Source: Ireland and Webb, 2007: 51

A firm's scope, resources and competitors are the main concepts in order to develop a business but this can be provided through organizational renewal and newness. In other words, creating innovation with regard to business operations will enable businesses to reach their aims. As stated before, the ecological tendency of consumers is growing at an exponential rate therefore many businesses have taken ecological approaches into consideration in their business operations and practices via their marketing, production and management strategies. Therefore, strategic entrepreneurship has begun to evolve into ecological entrepreneurship because of current conditions but if there is another tendency in the world in the following decades, then the tendency of strategic entrepreneurship would be changed again. On

the other hand, the intersection of entrepreneurial actions and strategic actions makes wealth creation with six dimensions which are innovation (creation and implementation of ideas), networks (providing access to networks), internationalization (adaptation to new states quickly and expanding), growth (stimulating access and change), organizational learning, top management teams and governance (effective selection of strategies with the right implementation) (Ireland et al., 2001: 51; Luke et al., 2011: 315).

1.4.2. Social Entrepreneurship

This type of entrepreneurship is used to find a new way for societal change. In addition, it is becoming a global trend. Social problems and new models to create wealth, support social well-being, and restore the environment are issues which are related with social entrepreneurship. Because of increasing awareness regarding environmental destruction, entrenched poverty, health risks, human rights abuses, failing education systems and rising violence, social entrepreneurs try to find solutions to overcome these kinds of social issues. Therefore they work hard to develop new approaches for social problems (Al-Alak and Eletter, 2010: 81).

Social entrepreneurship is a relatively new concept compared to other entrepreneurship types such as conventional and commercial entrepreneurship. According to Roberts and Woods (2005: 46), there are two types of perspectives for social entrepreneurship. They are academic and practitioner perspectives. Social entrepreneurship is defined “*based on the process that is followed or on the outcomes that are achieved*” and academics have a common decision about the outcome of “addressing social needs”, however consensus of opinion for the process achievement is likely to be more realistic. Table 2 shows the perspectives, focus, primary interest and distinctive features of social entrepreneurship (Roberts and Woods, 2005: 46).

Table 2: Perspectives for social entrepreneurship

Perspectives	Focus	Primary Interest	Distinctive Feature
Academic view of Social Entrepreneurship	Activity in the social sphere drawing on the principles of conventional entrepreneurship	The connection between an opportunity for social change and the entrepreneur	Construction, evaluation and pursuit of opportunities for social change
Practitioner view of social entrepreneurship	Activity in the social sphere drawing on the actions of practitioners	The attributes of the practitioners and the process they follow to drive social change	Walking anecdotes, people with new ideas to address major problems, who are relentless in the pursuit of their vision, people who simply will not take no for an answer and who will not give up until they spread their ideas as far as they possibly can

Source: Roberts and Woods, 2005: 48

In addition to definitions of social entrepreneurship, there are some factors which effect on social entrepreneurship. Boschee and McClurg (2003: 2) state these factors as:

Adopting a mission to create and sustain value (not just private value); recognizing and relentlessly pursuing new opportunities to serve that mission; engaging in a process of continuous innovation, adaptation, and learning; acting boldly without being limited by resources currently in hand; and exhibiting a heightened sense of accountability to the constituencies served and for the outcomes created (Boschee and McClurg, 2003: 2).

These factors include the mission to create value and sustain this procedure, the recognition of opportunities in order to reach some advantage in the market, innovation, adaptation and a learning process for attaining higher knowledge and competitive advantage in the market, using limited resources in a confidential way by bearing risk and a sense of accountability for outcomes. These factors can be seen in every sector in a market. Namely, social entrepreneurship can be seen in private or non- profit sectors or both of them (Austin and Reficco, 2009: 1). On the other hand, social entrepreneurs are applicants of social entrepreneurship. They are individuals who find creative solutions for society's most noticeable social problems. Characteristically, they are ambitious and persistent, offering new kinds of solutions to issues with regard to society's interests. In addition, social entrepreneurs are *passionate, intelligent, motivated and capable of solving difficult problems* (Al-Alak

and Eletter, 2010: 85).Therefore; ecopreneurship encompasses social entrepreneurship; because ecopreneurship has a social value due to considering ecological issues with regard to quality of societal life and providing good life conditions for people.

1.4.3. Corporate Entrepreneurship

Corporate entrepreneurship is a set of activities that occurs inside of an organization in order to discover and pursue new opportunities through creating new business models and innovation (Thorgren et al., 2009: 357- 358; Zahra, 1996: 1715- 1718). Guth and Ginsberg (1990: 5) define corporate entrepreneurship as “*A new business creation in an existing organization through internal innovation or venturing*”. Zahra et al. (2009) define corporate entrepreneurship as “*stimulation of innovation which is a top concept for indicating business activities and encouraging risk taking through its operations*”. Actually corporate entrepreneurship includes changing the system in order to have better conditions for an organization. On the other hand, another definition of corporate entrepreneurship considers three factors. They are being vision-oriented, rejuvenating the organization by considering it as a whole with regard to the entrepreneurial behavior which it relies on, and benefitting from opportunities in order to change or improve the scope of operations for the organization (Ireland et al., 2009: 21). This creates a competitive advantage through entrepreneurial behavior (Heavey et al., 2009: 1291).

Dizgah et al. (2011: 493) observed that market developments for process and product innovations may exist in both formal and informal activities that have the goal to create new business in established companies. These activities can occur in every level of business such as corporate, divisional (business), functional or project levels and considers competitive position and financial performance. This observation indicates that innovation; venturing and strategic renewal activities are three important dimensions of corporate entrepreneurship through the restructuring of products, processes, services and strategies for all organization.

There are two fundamental issues regarding corporate entrepreneurship. On one hand, there is the “strategic philosophy approach” which is about the company’s

philosophy to act entrepreneurially (Lumpkin and Dess, 1996: 151-160; Schmelter et al., 2010: 718). On the other hand, there is the “activity approach” which is used for the examination of entrepreneurial activities and actions. There are five different dimensions which are identified (Schmelter et al., 2010: 718) in order to describe corporate entrepreneurship: *innovativeness*, *risk propensity*, *pro-activeness*, *corporate venturing* and *self-renewal*. In today’s world, this entrepreneurship type is beneficial for business but the important situation is to consider which type of innovation should be made and what the risk level of a business should be. As stated that corporate entrepreneurship means internal innovation which means change in the existing organization, so it needs to have risk-taking in case of unsuccessful outcomes of an innovation. In general, most businesses have changed their operations to become more ecological while making innovation. The goals of these businesses are both to attract the attention of consumers who give importance to ecology and to make advertisements which show social responsibility. Mostly the aims of businesses are to continue their operations and profitability. In other words, current trends trigger businesses to be ecological and this situation encourages having the logic of corporate entrepreneurship and for that reason, this entrepreneurship type is attached to ecopreneurship but it doesn’t mean a complete ecopreneurship, as it is still inside the borders of an established organization. Corporate entrepreneurship needs to adopt more of the logic of ecopreneurship.

1.4.4. Transition to Ecopreneurship

Strategic entrepreneurship, social entrepreneurship and corporate entrepreneurship are intertwined concepts. It means that the strategic approach, social approach and corporate approach to entrepreneurship should all occur in the same business because a business should have a strategy and should take into consideration social problems. In addition to this understanding, as change and innovation are continuous processes for the business therefore corporate entrepreneurship is a must. Even if these are important entrepreneurial practices, they should include ecological issues and find some innovation in relation to ecological protection and benefit. However, strategic, social or corporate entrepreneurship have

just taken a part of ecological consideration so this situation has created a need for a type of entrepreneurship which only focuses on the holistic ecological logic of every practice of entrepreneurs. For that reason ecopreneurship is introduced in order to prevent shallow or pretentious ecological entrepreneurship initiatives.

1.5. ECOPRENEURSHIP

Environmental sustainability consciousness is increasing day by day. As a result of this situation, societies need entrepreneurs who are environment friendly because there are strong fears regarding the future of our ecology. Finite nature of resources, the rapid growth of the world population and the loss of biodiversity are parts of these fears. All indicators show that there is not an environmental friendly growth; because growth is not sustainable most of the time. Consuming more products has caused damage to environment and accordingly businesses try to provide awareness of natural resource consumption in order to encourage more sustainable growth. This situation has brought the concept of green entrepreneurs and green thinking which are directly related with ecopreneurship (Allen and Malin, 2008: 828- 831; Zampetakis et al., 2006: 135-137).

Ecopreneurship can be defined in both a narrow and a wide sense. It is defined in the narrow sense as *“creating a start-up company which supplies environmental products and services with innovative logic”*. More widely, ecopreneurship can be defined as *“the start-up phase of a company which determined innovation, market-oriented logic and personality-driven form of value creation through environmental innovations and products”* (Schaltegger, 2002: 47-48).

Zampetakis et al. (2006: 136) defines ecopreneurship as *“system-transforming, socially committed environmental businesses characterized by breakthrough innovation.”* On the other hand, according to Isaak (2002: 82), ecopreneurship is to create a start-up business which has high commitment to sustainability with green designs and green processes. In other words, designs, processes, system transforming, environmental innovations and products are core concepts for the concept of ecopreneurship.

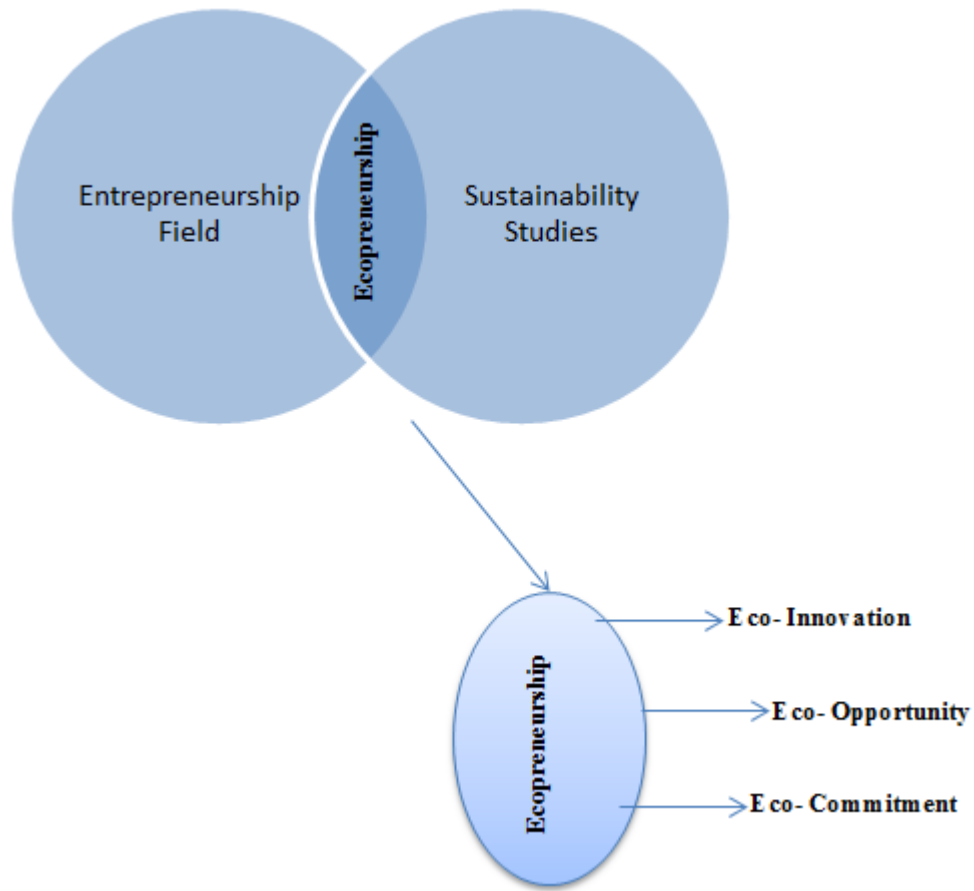
According to Lordkipanidze et al. (2005: 787-792), ecopreneurship is not different from other types of entrepreneurship but consists of social and environmental issues getting integrated with economic ones. Therefore, this aspect gives a special importance to the ecopreneurship. The person who makes ecopreneurship is an ecopreneur and this concept also has some different definitions in the literature.

Isaak (2002: 82-84) uses the term ecopreneur with regard to the principle of sustainability which is mentioned in “green-green” businesses. Namely, he suggests that social and ecological goals must be pursued by ecopreneurs in profit oriented businesses.

According to Allen and Malin (2008: 829), ecopreneurs are individuals who consider environmental values in an ecological perspective for their business practices in order to have a good competitive advantage in the marketplace.

In addition to the definition of ecopreneurship, there are two theories regarding the concept. They are explorative and instrumental theory. The concept of constituting ecopreneurship is examined as an overview by explorative theory. It does not have a certain definition or final definition for ecopreneurship but it creates an offering for the framing of ecopreneurship which includes some suggestions for readers as indicating concepts that overlap and relate to each other. On the other hand, concepts of eco-innovation, eco-opportunity and eco-commitment are introduced by instrumental theory. The theory tries to describe ecopreneurship in practice. This theory focuses on ecopreneurial companies for the procedure of collecting and analyzing information with regard to evaluating their practices (Kainrath, 2009: 20).

Figure 2: Framing Ecopreneurship in terms of the Surrounding Scientific Fields.



Source: Kainrath, 2009: 16

Figure 2 indicates the relation between explorative and instrumental theory. The entrepreneurship field and sustainability studies overlap through explorative theory and explanation in practices are made by instrumental theory which deeply examines ecopreneurship in three sub-concepts which are eco-innovation, eco-opportunity and eco-commitment. The main ideas of those concepts are based on innovating to decrease ecological impact of human-beings, benefiting from ecological applications and providing commitment to eco-friendly goals. These goals can be made by some environmental strategies such as eco-efficiency, beyond compliance leadership, environmental cost leadership and eco-branding.

1.6. ECOPRENEURS

The concept of ecopreneurship is not a widely-used term yet, because in the literature there are few studies which mention ecopreneurship and ecopreneurs. Isaak has expressed his evaluation about ecopreneurs as follows:

“The ideal type of ecopreneur is defined as a person who creates green-green businesses in order to radically transform the economic sector in which s/he operates. In a similar way, ecopreneurship is determined as an existential form of business behavior committed to sustainability.”(Isaak, 2002: 81)

The definition makes a separation among ecopreneurs because the beginning part of that definition expresses the ideal type that means there are possibilities of becoming a less-than ideal version of ecopreneur. Actually, Isaak mentions the radical change for the economic sector because of the ecological crisis and he focuses on sustainability as an ideal ecopreneurial behavior. To achieve this he expresses the need for commitment to the environmental goals. On the other hand, ecopreneurs make business environment-friendly and environmentally friendly businesses have two main kinds; green-businesses and green-green businesses. There are some differences between them. Managers of green businesses focus on cost and innovation and marketing advantages. On the other hand, green-green businesses do not take into consideration the costs of products; they just think about the ecological side and effect of business practices. Actually the differences among these concepts can be understood by the differences between types of ecopreneurs who are commercial oriented or social oriented.

1.6.1. Commercial Ecopreneurs

Isaak (2002: 84) defines “*commercial ecopreneurs*”, which can be named as ecopreneurial corporations, as ecopreneurs who create green business opportunities (such as eco-friendly products and processes) and make their own gains as their main agenda (Pastakia, 2002: 94-97). The main idea of this kind of ecopreneur is to have a good image in society because own advertisement of their own environmental social responsibility can be seen to be very friendly for society. Actually it is related to the

maximization of profits (Pastakia, 1998: 159). At the present time, the green logic of customers is important so the most corporations seem to move in a green way (Kirkwood and Walton, 2010: 206). Segway human transporters can be given as an example for a commercial ecopreneurship initiative because it produces a non-polluting and easily transportable Stirling engine that provides a transformation from polluted water to clean water and at the same time, the production of some electricity occurs (Isaak, 2002: 85).

1.6.2. Social Ecopreneurs

Isaak (2002: 84) defines “*social ecopreneurs*” (social ecopreneurial organizations) as ecopreneurs who find eco-friendly ideas, products or technologies. For example in the agricultural sector, productivity of crops increased thanks to the elimination of chemical materials. It enabled green agricultural products. In this example, the idea of finding another way to produce crops with green logic is social ecopreneurship because the main goal of that activity is to provide eco-friendly ideas for general production, we cannot mention only one single corporation as an applicant of that method therefore it is a social part of ecopreneurship (Pastakia, 1998: 159-163).

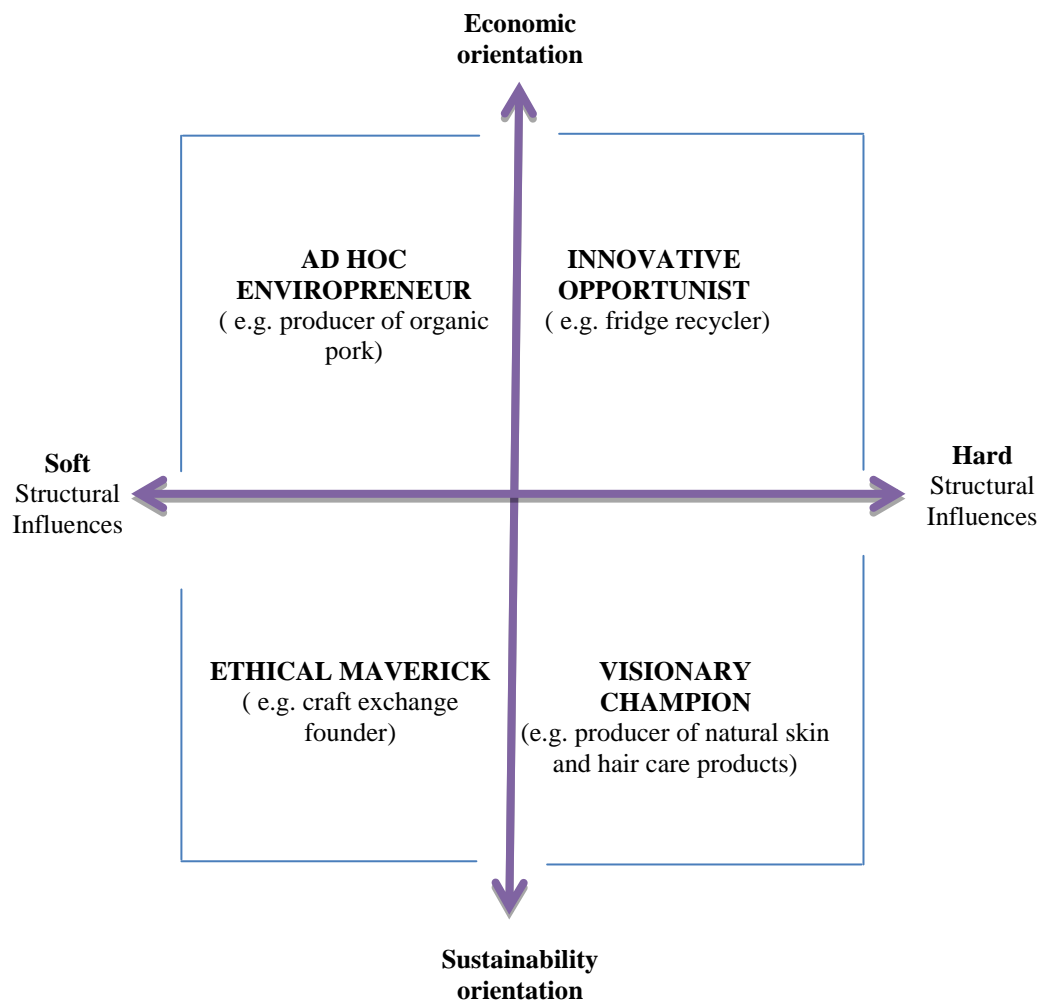
1.7. ECOPRENEURSHIP: FAKE OR REAL?

The desires of ecopreneurs will provide an insight for understanding intentions of ecological practices. Because depending on the desires of the ecopreneur, some ecopreneurship initiatives may be lacking in their authenticity. According to Linnanen (2002: 78-79), there are four types of desires for ecopreneurs. These desires have changed depending on the drivers of eco-business sectors which are the non-profit business, the self-employer, the opportunist and the successful idealist.

The non-profit business composes of intentions based on a high desire to change the world and low financial drive. The self-employer has intentions based on a low desire to change the world and low financial drive. The opportunist composes

intentions based on a low desire to change the world and high financial drive. The successful idealist composes intentions based on a high desire to change the world and high financial drive (Harbi et al., 2010: 187-188; Linnanen 2002: 78-79). On the other hand, Walley and Taylor (2004: 58-62) have mentioned another typology of ecopreneurs as the ad hoc enviropreneur, the innovative opportunist, the ethical maverick and the visionary champion which are indicated in Figure 3.

Figure 3: Typology of Green Entrepreneurs (Ecopreneurs)



Source: Walley and Taylor, 2004: 60

- **Ad hoc enviropreneurs:** They are mostly financially driven but they give importance to the environment due to soft structural drivers therefore they are evaluated as accidental green entrepreneurs.

- **Innovative Opportunists:** They have been affected by hard structural influences such as regulations so they try to find a green niche in order to overcome hard structural influences.
- **Ethical Mavericks:** Past experiences, networks or friends can be determined as soft structural drivers and they are influenced by a sustainability orientation; for that reason they try to find an alternative business model.
- **Visionary Champions:** Changing the world is the first agenda of visionary champions therefore their businesses are founded with regard to sustainability (Gibbs, 2009: 72).

As it can be seen above, many studies have been conducted in relation to the typology of ecopreneurs in order to understand their real intentions. Therefore, the first rule to check the authenticity of ecopreneurship initiative is observing of the real intentions of ecopreneurs. If it is financially driven or ecology is a secondary agenda, then it cannot be expected to be an ecopreneurship style for both society and scientists. In the field, there are categorizations regarding the intentions of ecopreneurs such as non-financial drive vs. the financial drive, desire to change the world vs. not desiring to change the world or hard structural influences vs. soft structural influences. But the positive ecopreneurship intentions are generally rarer in comparison to financial motives. This situation is closely related to ecopreneurs operating in capitalist environment based on profit motives and they are greatly challenged by the cost pressures of governmental environmental initiatives.

It is obvious that all businesses want to earn money which means high profit; therefore they have a tendency to find more profitable markets in order to reach the highest profitability. In today's world, ecology is known as a crucial concept by many nations. For that reason ecopreneurship is a kind of advertisement for the companies because they always mention that they are ecological and they have a willingness to be classified as eco-businesses, but from the view point of ecological philosophy, if it is not based on true intentions the initiative becomes a green washing.

Epistemologically and practically, ecopreneurship faces the challenge of losing its truth due to inherent profit intentions of entrepreneurship; because dilemmatic definition of ecopreneurship concept consists of both providing and

ecologically friendly logic for business and to reach high profit rates. But it is clear that without authenticity, ecopreneurship will become shallow and will fail to reach its goals. Just a bit greening to the traditional approaches is not enough to succeed.

For realizing a complicated and challenging concept as ecopreneurship, the most important tool is creativity. Because creativity provides unique approaches that can provide advantages in the highly competitive market. Namely, ecopreneurs cannot be successful in the markets without having an unusual idea; and this idea can be occurred by creativity ability. By definition, an ecopreneur has to be even more creative than a traditional entrepreneur, because he has to think out of the box for the sake of environment. That's why, creative skills are needed to provide ideas and then innovation will be critical to process those ideas. Establishing this relation is a must for the field of ecopreneurship. A better of understanding of the creativity is needed to implement an ecopreneurship initiative. For that reason, creativity concept and related theories and techniques will be examined in the following chapter.

CHAPTER TWO

CREATIVITY (INDIVIDUAL APPROACH)

This chapter has been composed of five main titles. In the first part, the concept of creativity and its criteria are introduced. In the second part, creativity processes are mentioned by the means of creativity models. In the third part, creativity theories are discussed. In the fourth part, creativity techniques are mentioned. In the fifth part, arguments on necessity of creativity for ecopreneurs are given.

2.1. THE CONCEPT OF CREATIVITY (INDIVIDUAL APPROACH)

Creativity is a concept that comes from the Latin word “creare”. It can be stated as finding new things which had not been found or to reveal new combinations which had not been made before (Güldaş, 2009: 12).

There are many types of definitions for creativity because different parts of life encompass different needs in order to produce new ideas. According to Mrnarevic (2011: 9), creativity is a process for reaching original ideas but it is a single definition not including the questions which are related to the value of creativity and the methods of creativity.

According to Zampetakis et al. (2010: 23), creativity has been considered as providing social prosperity for both organizational and individual level; novel and useful ideas which start with innovation and entrepreneurship are determined as creativity. This definition includes an approach to creativity with an understanding of prosperity. At one hand, individuals produce ideas which are called novel or useful and which focus on prosperity on a personal level; on the other hand, individuals in organizations also focus on a prosperity oriented perspective with regard to organizational problems and performance.

Torrance (1966: 6) defined creativity as:

“the process of becoming sensitive to problems, deficiencies, gaps in knowledge, missing elements, disharmonies, and so on; identifying the

difficult; searching for solutions, making guesses, or formulating hypotheses and possibly modifying them and retesting them; and finally communicating the results.”

Personalities of individuals are important indicator in order to understand creativity level; because individuals who have creative behavior tend to develop creative products or procedures (Thatcher and Brown, 2010: 291; Zampetakis et al., 2010: 24).

Most researchers have defined creativity as *product or engendered idea* (Doyague et al., 2008: 21). Madjar and Oldham (2006: 118), Madjar (2008: 84) and Erez and Nouri (2010: 351) state creativity as *production of ideas, products, or procedures that are novel, potentially useful or practical*.

In Table 3. definitions of creativity can be seen (Bender, 2006: 48-51).

Table 3: Creativity Definitions

Scholar	Creativity Definition
Lowenfeld (1959)	Creativity is the potential power to establish personal image.
Ausubel (1964)	Creativity is to make something which was not made before.
Guilford (1968)	Creativity is an ability to think synonymously and anonymously at the same time, intelligently organizing data, flexible problem solving and to reveal original things.
Erika (1974)	Creativity is an ability to reveal new and original notions with respect to experiences.
Wagner (1978)	Creativity is an undefined concept which could not be used in science.
Adorno (1979)	Creativity is to oppose rules and to have a skeptic approach to something which is tried.
Kao (1991)	Creativity is a useful and apprehensible innovation in order to reach output.
Karayağmurlar (1999)	Creativity is to realize ordinary things in a non-ordinary manner.
Daniel (1999)	Creativity is to suggest many multiple solutions in a short time.

Resource: Bender, 2006: 48-51

There are many definitions of creativity but the most recent definition is given by the study of Tahereh and Mahnoush (2012: 25) provides a step by step approach. According to them, there are many definitions on creativity and there is not a consensus about it. So, a criterion for definition is based on the concept of quality which mentions innovations in ideas, theories, and insights. The other part of creativity is proposes new solutions which are used for problems and according to them, creativity means finding new ways to solve problems for the needs of academic community and businesses.

Mostly, concepts of innovation and creativity have been treated as similar concepts; therefore it will be beneficial to make a clarification of these concepts in order not to create confusion through this study. Creativity is related to finding a new idea but innovation can be defined as the development of new or useful ideas by individuals, teams and organizations (Cropley et al., 2011: 13-15).

Both innovation and creativity have contributed to find and to develop products in an effective way but using creativity skills is more important than innovation because finding a new idea is harder than implementing it. Therefore creativity and using of creative skills should be learnt before innovation. Thus, criteria for creativity and features of creative people are important in order to understand creativity. Especially, in businesses, owners of companies need to have creative people to compete in the market.

2.1.1. Criteria for Creativity

Creativity needs a creative mindset. For this concept, there are vertical and horizontal thinking. These concepts are important in order to explain creativity. Vertical thinking encompasses detailed research about a specific problem. On the other hand, horizontal thinking includes alternatives solutions for a problem instead of deep research. Comparison of these two thinking styles shows that a creative person has a horizontal thinking approach. (Saraçoğlu et al., 2010: 4).

Most studies state novelty, effectiveness and authenticity as three main criteria for creativity. Novelty is based on finding a new approach to solutions of societal or organizational problems or finding new processes or products. On the

other hand, effectiveness and authenticity are the concepts that are related to the creativity and they encompass personal emotions and reality. Emotions are a way to overcome problems such as “*correcting a word (anger), escaping from danger (fear), making retribution (guilt)*” (Averill, 1999: 333). Authenticity means finding original ideas instead of copying them; because if a person makes a copy of a notion, there is not authenticity; in other words lack of authenticity exists (Averill, 1999: 333).

Torrance (1974) has used four different criteria for evaluating creativity which are originality, flexibility, fluency and elaboration.

The words “basic human needs of exploration, variety, autonomy and uniqueness” are appropriate usage of creativity (Erez and Nouri, 2010: 352). Creating something new universal tendency for humanity; but perception of creativity can change from nation to nation.

According to Erez and Nouri (2010: 354), the major components of creativity are domain-relevant skills (expertise in a specific field such as technical or artistic ability), task motivation (focusing on its own goal rather than external rewards) and context (cognitive skills).

2.1.2. Creative People

Creative people have some special characteristic attributes that distinguishes them from other people. Some of these are; sharing something with other people, knowing how to keep themselves motivated motivation for production, having a sense of humor, being willing to conduct research and experiment, and having patience.

Tunç (2007: 10) describes features of creative people as having sensitivity to problems, being explorers and curious, original but functional idea producers, having willingness to change and innovation, having ability to synthesize and analyze; and controller of complex relationship.

A person’s creative ability does not necessarily mean that they will be creative; because having ability is different than using the ability. Therefore, creativity processes are needed to activate creative skills.

2.2. CREATIVITY PROCESS

There are many models which are related to this process. Main models can be counted as; Wallas model, Barron's Psychic creation model, Rossman's creativity model and the directed creativity cycle.

2.2.1. Wallas Model

The first and most popular model was proposed by Wallas in 1926. This model has four stages (Güldaş, 2009: 20-21). They are:

- **Preparation:** Creation of an idea can be triggered by environmental effects or some problems in life. Therefore, identification of a problem or specific situation will start the creativity process. The dimensions of problems or ideas that can provide innovation instead of merely solving a problem can be seen in the preparation section of the creativity process.
- **Incubation:** In this stage, focusing on a problem is important (an idea can be expressed as problem because improving it and finding some alternatives are a problem for the creative person). Collection of information will provide alternative perspectives to this problem. Namely, improving the notion is the key point in this stage.
- **Illumination:** A creative person will remove irrelevant thoughts from the mind. He/ she has great motivation to concentrate on the problem and his/her insights will be helpful to define solutions and applying them to the problem according to the solution idea.
- **Verification:** This stage includes the evaluation of the new idea, its application and achieving creative results. Especially in the illumination stage, creative person can logically check if the idea is worth applying and he/she can give up ideas. Application process starts in the verification process and the results can be predicted by a creative person.

2.2.2. Barron's Psychic Creation Model

In 1988, Barron developed the psychic model regard of the creative process. The model presents an intuitive position that defines the stages of creativity. These stages are conception (a person's mind is ready to think), gestation (time, the idea begins to mature), parturition (starting to apply the idea) and bringing up baby (further period of development). The significance of Barron's creation model comes from consideration of time for creativity stages; on the other hand the model is determined as a process which includes irregular and change logic, therefore there are not any systematic understanding regard of the outcomes (Haberkorn, 2007: 17).

2.2.3. Rossman's Creativity Model

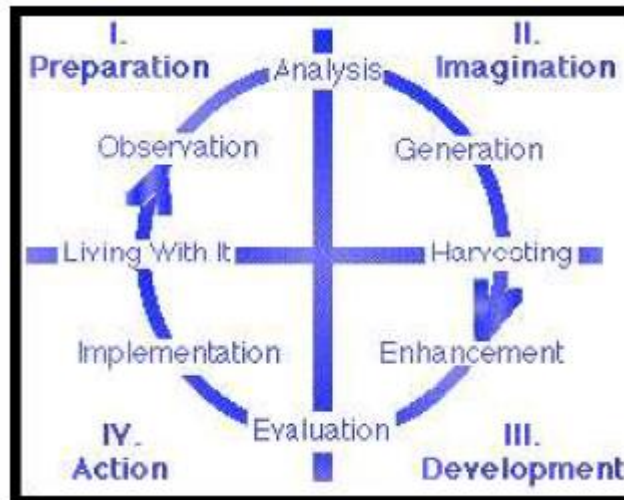
In 1931, Rossman's questionnaires with regard to the creative process were answered by 710 inventors. The main goal of that study was to expand the Wallas Model which includes preparation, incubation, illumination and verification from four to seven steps. These are (Hasirci and Demirkan, 2007: 260; Rossman, 1931):

- Observation of a need or difficulty
- Analysis of the need
- A survey of all available information
- A formulation of all objective solutions
- A critical analysis of these solutions for their advantages and disadvantages.
- The birth of the new idea which can be expressed as invention
- Experimentation to test out the most promising solution, and the selection and perfection of the final embodiment.

2.2.4. Directed Creativity Cycle

The cycle is an important model of the creative process because it combines many models of creativity in the last 80 years.

Figure 4: Directed Creativity Cycle



Source: Plsek, P. E. (1996)

Observation is a starting point in this process. Creative thinking begins with observation which is very important in order to focus on the environment. The reason for starting with creative thinking is because of the necessity of evaluating these observations on how things work and fail. Thanks to mental processes all of them constitute some concepts in our mind. Using this knowledge enables the generation of ideas that cover specific needs and links these ideas in order to find relationships between the concepts which are created by ideas. There are many techniques to constitute creative ideas.

Harvesting and enhancing ideas occur before reaching the final results for ideas. After these processes, the evaluation and implementation of those ideas start. It is obvious that ideas may need to have changes in the time line so this cycle can restart and the whole process can begin again.

2.3. CREATIVITY THEORIES

In addition to creativity models, some theories have been produced to evaluate creativity. This is because the creativity with regard to some situations is important in order to understand the potential creativity of individuals. There are four prominent theories of creativity. They are psychoanalytic, gestalt, association and humanist theories.

2.3.1. Psychoanalytic Theory of Creativity

The main argument of psychoanalytic theory is that when faced with difficult circumstances or repressed emotions, creative motives are born. For example, Freud said that people repress their emotions, bad events or traumatic parts of life and the emotions related to these events emerge as creative thinking in other words, they become drive to release creativity (Billig, 1999: 12-18).

Kris and Kubie developed a psychoanalytical part of creativity. According to them, there are two steps in the creative process. In the first step, ego has a lower effect on thought level in order to enable a pre-conscious level of thinking and in the second step, logical examination of thoughts occurs (Kubie, 1958: 226-230; Kris, 1976: 135-143).

Psychoanalytic theory defines creativity as a product of pluckiness with instinctual impulses. This kind of behavior releases products that become internalized by society. Internal conflict of a person and aggressive energy can be given as examples of behavior (Öztürk, 2007: 12).

2.3.2. Gestalt Theory of Creativity

This theory uses concepts of “*productive thoughts*” and “*problem-solving*” instead of creativity. According to this theory, a problem should be evaluated as a whole instead of focusing on parts and creativity is the re-invention of a situation (Güldaş, 2009: 22).

The gestalt theory of creativity has an aim to propose some premises for solving novel problems. They are; a) reinterpretation or reformulation of the problem, and b) the overcoming of mental blocks which is preceded by a period of inactivity which is known as incubation (Mayer, 1995: 18; Murty and Purcell, 2005: 2).

2.3.3. Association Theory of Creativity

This theory claims that evocations are derived to encourage creativity. Mednick (1962: 221-227) avers the principles of coincidence and similarity for creative solutions. This view expresses the importance of coincidence for combining the different elements of an invention. The invention of penicillin or X radiation can be given as examples of the effect of coincidence. Because, the main goal of scientist who found penicillin was bacterioscopy; and the main goal of scientists who found X Radiation was to make electrical test (Jewkes et al., 1961: 18, 349). On the other hand, benefiting from similarities can also be made through imagination. In other words, creating a model with regard to specific things which exist in nature will provide to make a technologic or useful invention. For example, the invention of aircraft was made through the analogy of birds; therefore similarities are also important to reveal creative thinking and to produce creative solutions (Bender, 2006: 54).

2.3.4. Humanist Theory of Creativity

According to this approach, creativity is a type of behavior which is expected of people and every person is born with this feature. Every person can be creative if the necessary conditions are provided (Öztürk, 2007: 12).

Rogers (1954: 255) says *“On the one hand an individual can find many methods in order to reduce pain and on the other hand another one can find a method which provides systematic torture. Actually both of them are creative actions, but evaluations of social values for those actions are different”*. In this sentence, Rogers emphasizes originality, innovation and individualized action as a humanistic perception. Because, actions which have an effect on other individuals are evaluated according to social values of society. If value creation for human being is high level in the society, actions or decisions will be humanistic and human-friendly creativity occurs. Rogers mentions two requirements of creativity. The first one is X. It is psychological security. This concept is divided into three sections. Firstly, a human is unique and valuable. Secondly, a condition in which will not be openly criticized

must be provided. Thirdly, empathic understanding should be demonstrated. (Bender, 2006: 53).

The second one is Y. It is psychological freedom. According to this view, in order to make creative actions or effectively using creative ability, individuals should have freedom. Actually X and Y cannot be evaluated separately. Individuals should carry out both requirements for creativity (Sungur, 1992: 53)

Maslow separated creativity as a special ability. He says a person who is at the self-actualization level has a flexible life. Even if there are some complex relationships in life, they can create enjoyable place and conditions (Bender, 2006: 53). On the other hand, there is a rectified version of hierarchy of needs which was updated by Maslow. The new step for this version is self-transcendence (Maslow, 1969a: 2-5). Maslow here noted *that some individuals have gone beyond even self-actualization as a salient motivation*. These individuals have strong motive toward self-transcendence. It means something beyond the self (devotion an ideal, cause such as social justice and environmentalism) or mystical experiences (aesthetic experiences, sexual experiences) as a sense of identity. Self-transcendence is called as spiritual dimension of personality (Maslow, 1969b: 725-730). Therefore having motivation to create something can be provided through individuals who are in the stage of self-transcendence; because psychological part of human being is a creativity motivator from the humanistic perception (Rivera, 2006: 2-6).

2.4. CREATIVITY TECHNIQUES

In addition to these theories, there are some creativity techniques that try to create the most suitable solutions or developments for a specific topic or idea. It is obvious that businesses especially need to have creativity techniques to make new innovations. The intention of providing growth is a reason to improve creativity level; because growth for businesses can be provided by innovations which come from the idea creation thanks to creativity; therefore, entrepreneurs or potential entrepreneurs in the business sectors should give the great importance to creativity skills in order to increase their profit margin.

The most common creativity techniques are brainstorming, synectics, the eclectic technique, mind mapping, the six hats approach to creativity, and the big dream approach and parameter analysis.

2.4.1. Brainstorming

It is defined as collecting different ideas in a group activity which includes six to twelve people. The brainstorming process does not include the evaluation of ideas, just the creation of ideas is made and there are three roles in that process. They are chairperson, note-taker and idea finders. The chairperson is a very important person for brainstorming; because she/he has key characteristics such as rule-maker, motivator and session-controller. The question of the open-session is asked by the chairman as “*in how many ways can we....?*”. On the other hand, the note-taker makes the list as an editor. The average meeting is between 30 to 45 minutes. Then the ideas are evaluated by a different group. (Armstrong, 2011: 48-50).

Brainstorming sessions have many ideas. These ideas may not be seen to be related to each other therefore establishing relationships among ideas is important to reach judgments and convenient ideas. If one of those processes is missed, the brainstorming session is not effective (Stevenson, 2000: 100-105).

Brainstorming was very popular in the 1950's but a loss of popularity occurred in 1958 with on account of a Yale University study. It says that individuals can produce higher quality ideas than groups (Isaksen, 1998: 5-7).

2.4.2. Synectics

It is similar to brainstorming but it has some differences. It is defined as a process which includes analogy and metaphor in order to reach novel ideas. It is a group working against the problems or another necessary part of business issues (Stevenson, 2000: 107-109).

It was developed by Gordon in 1944 and synectics need a specific group. In other words, the group which exists for synectics is especially selected therefore there are many tests and procedures for the selection of group members. There are

two steps in this method. The first one is finding interesting ideas with regard to a problem by taking advantage of experiences and writing details about them. The second step includes using analogies such as personal, direct, symbolic and fantasy (Summers and White, 1976: 101-102).

- Personal analogy: Identification of problem elements. In this analogy, group members can think of themselves as goods or living creatures.
- Direct analogy: Finding parallel facts with regard to the problem. Group members can benefit from birds or other animals' solutions to similar problems.
- Symbolic analogy: Images which are impersonal are used to describe a problem which is being considered by the team.
- Fantasy analogy: Fantasies which are used instead of imagination are used to solve a problem. In this analogy, there is a problem and many people in the group try to imagine alternative solutions thanks to using their imagination power.

2.4.3. Eclectic Technique

This technique was developed by Edward de Bono. Even if there are some similarities to other creativity techniques, it is not well-known and it hasn't got many references in either management publications or business in the USA. There are three approaches in this creativity technique which are *Intermediate Impossible*, *The Random-Juxtaposition* and *Challenge for Change* (Summers and White, 1976: 102).

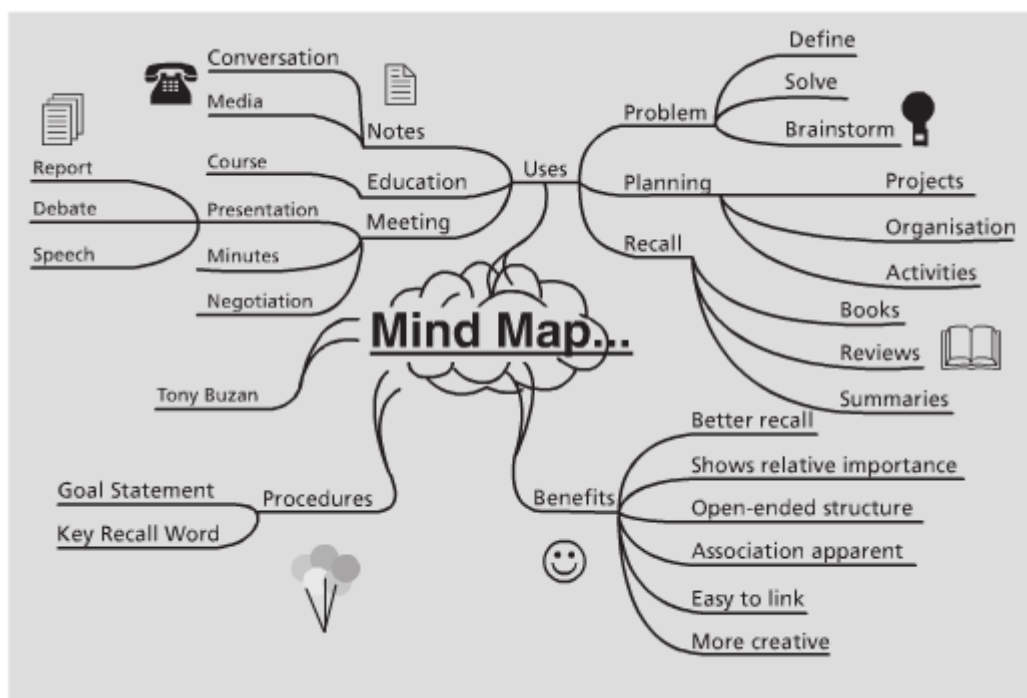
- The Intermediate Impossible: This approach is like brainstorming. Finding new ideas is by making lists without any evaluation.
- The Random Juxtaposition: It is in the forced relation category of the eclectic technique and it has a similarity to the synectics process. This technique has a starting point which is to evaluate unusual or interesting ways to the problem. There are no people to know the linkage among ideas. Just random linkage is established among ideas and by trying to reach creative solutions.
- Challenge for Change: The main understanding of this concept as a creativity technique is to find alternative ideas for a specific problem. Challenging

dogmatic and arrogant inputs and assumptions which exist and are evaluated are the main parts of this technique. Hereunder, there aren't any yes or no answers to solutions and no rejections for solutions. Just challenging answers occurs in this technique.

2.4.4. Mind Mapping

This creativity technique was developed in the 1970s by British brain researcher Tony Buzan. The mind map can be expressed as effective method for note-taking and idea generation because it depends on memory as a non-linear understanding. Therefore, this technique tries to link ideas to each other. Of course, it is done by finding some key words in order to express ideas (Buzan and Buzan, 2006: 22-23). Generally one big page is used for writing keywords. An example of a mind map is illustrated in Figure 5. (Nemiro et al., 2008: 501-504).

Figure 5: Mind Map Example



Source: Nemiro et al., 2008: 501-504.

There is a main topic in the middle of page and details are written around it using linkage among ideas which is seen in Figure 5. The main argument of this technique is to identify critical gaps. The graphical form, images or other forms

which provide colorful indications create easy connections of each keyword and individuals can easily remember them. All of them make everything visible (Nemiro et al., 2008: 501-504).

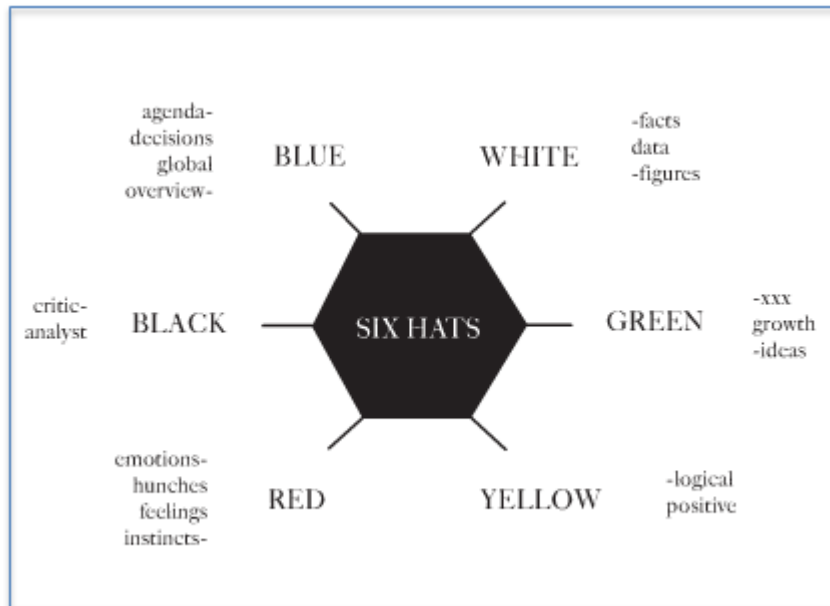
2.4.5. Six Hats Approach to Creativity

This approach was developed by Edward de Bono. The Six Hats Approach expresses the thinking style of individuals when dealing with a specific problem or matter (Sanders, 2011: 129-130). Bono (1995: 14-15) describes these hats as:

- White Hat Thinking: The keywords of this style are facts and figures. This provides rational thinking to a matter. It is the objective part of thinking.
- Red Hat Thinking: An emotional style of thinking is expressed as red hat. Senses are important to try to solve a problem or have a creative approach to a specific matter. It is the subjective part of thinking.
- Green Hat Thinking: It is the innovative part of thinking. Alternatives and new approaches are improved by this hat thinking style. The sentence *"Everything is possible"* is the main notion of this hat.
- Black Hat Thinking: It is pessimistic. Criticism of ideas, negative opinions against the ideas are important key concepts for this thinking style because it indicates possible risks to any solutions and it is necessary in a creativity session; in other words in a meeting which aims to find the best solutions to problems.
- Yellow Hat Thinking: It is optimistic. The advantages of solutions are found and better parts of ideas are supported in this thinking style.
- Blue Hat Thinking: Reviewing the whole process is done therefore the key concept of this thinking style is *"Thinking thought"*. Solutions are evaluated in this process.

Labudovic and Vukusic (2009: 326) indicate the Six Hats Approach in the mind mapping style. It is illustrated in Figure 6. This figure is important because it provides the key concepts for the Six Hats creative thinking style.

Figure 6: Mind Map for the Six Hats Approach



Source: Labudovic and Vukusic (2009: 326).

2.4.6. Big Dream Approach

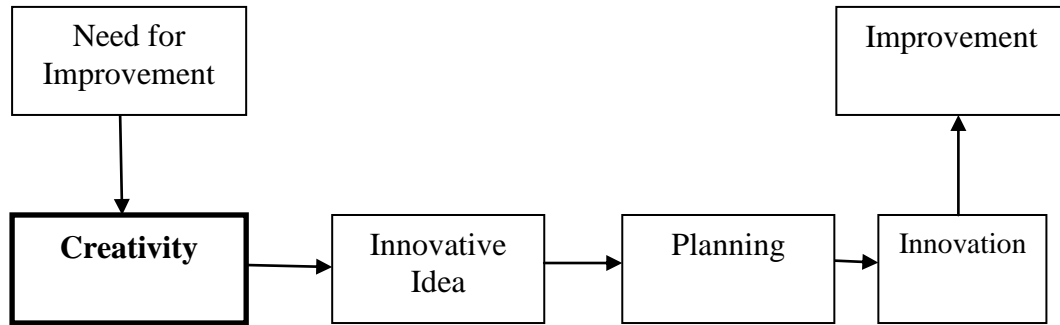
It means finding a new idea about a problem but it should cover the entrepreneur's dreams. Therefore "*think big*" expresses this approach. There are no constraints on ideas in this approach. Every possibility is considered by entrepreneurs. Actually it is a creativity technique for entrepreneurs. It is used for business decisions or taking the opportunity to realize entrepreneurs' own dreams (Hisrich and Kearney, 2011: 82).

2.5. NECESSITY OF CREATIVITY FOR ECOPRENEURS

Entrepreneurs should have some features to survive in stiff competition; because business survival depends on the different business operations such as managing resources, using the most common production system and creating a market planning program for its products. These features should be having self-efficacy, self-esteem and awareness of capabilities and limitations for businesses. So, entrepreneurs can make future plans and can take a risk to provide a progress for their enterprises (Stewart et al., 1998: 190). Making future plans or improvements for

business operations with capabilities and limitations for enterprises can be provided by a creative perception (Mieg et al., 2012: 201). Figure 7 indicates improvement process and importance of creativity for an enterprise.

Figure 7: Improvement Process



Technological advancements for production systems or transformations of society's interests (demands) to products and willingness to provide a competitive advantage among competitors have been required to make an improvement for an enterprise (Adner and Levinthal, 2001: 612; Yusuf, 2009: 3). Therefore, entrepreneurs need to have an innovative idea and the idea can be found by using creative skills. If an entrepreneur does not have these skills, there will not an idea to make an improvement. After finding an idea, planning step has been applied in order to complete procedures for innovation. Then, the improvement has been occurred. On the other hand, society's transformations are important data for entrepreneurs in order to elaborate entrepreneurship. For example, nowadays, media and many countries give great importance to ecological problem, and policy of ecologic damage prevention has been applied to businesses by many countries. Because of this, consumers have eco-friendly consciousness which is continuously increasing. This situation creates transformations of society's interests (demands) to ecological products and ecological production systems. As a result of this situation, an ecological approach is needed for entrepreneurship. This approach has been stated as ecological entrepreneurship (ecopreneurship) (Kimmel and Hull, 2012: 58-59).

Ecopreneurship provides green (eco-friendly) logic to both production and management systems. However, even if ecopreneurship is a newer concept than other entrepreneurship types, there is ecologic-oriented area is highly competitive. Therefore, new ideas and new products are important to survive in the market. In

order to provide these ideas and products, creative skill is a must for ecopreneurs. A successful ecopreneur should have these features in order both to find innovative idea and to make innovation:

- Awareness of creativity as a concept.
- Using creative processes.
- Understanding creativity in a theoretical manner.
- Using creative techniques to reveal creativity.

If an ecopreneur does not know the concept as a whole, it is not possible to have a powerful positioning for his/her enterprise among competitors.

CHAPTER THREE

INDIVIDUAL CREATIVITY AND ECOPRENEURSHIP

This chapter has been composed of two main titles. In the first part, relationship between individual creativity and ecopreneurship is discussed. In the second part, theoretical model for the study is expressed and hypotheses are presented.

3.1. RELATIONSHIP BETWEEN CREATIVITY (INDIVIDUAL APPROACH) AND ECOPRENEURSHIP

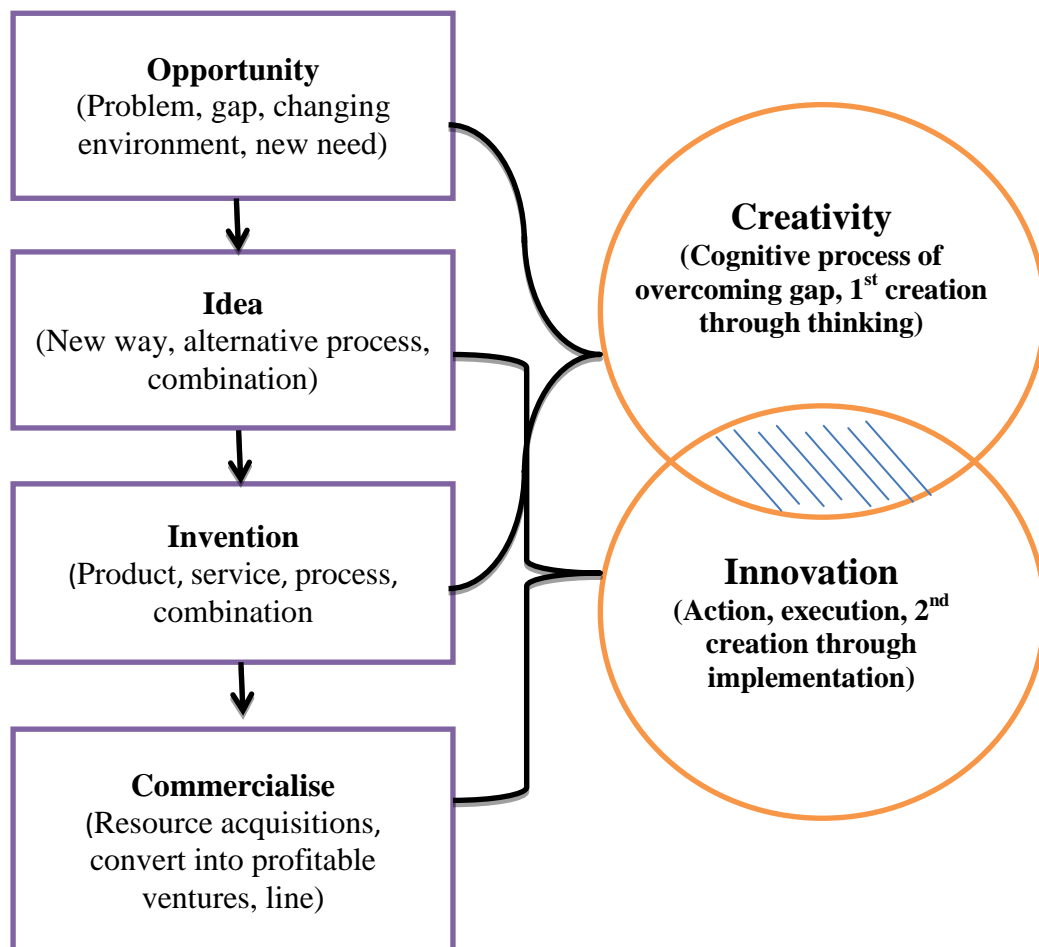
Ecopreneurship is a type of entrepreneurship and its importance has increased in today's world due to the increasing popularity of ecological issues. On the other hand, individual creativity which is evaluated as creativity (individual approach) also has increasing popularity for today's world due to improving technology and the need to find new products or services in the stiff competition. Actually even though there are many studies that demonstrate the relationship between creativity and entrepreneurship, there are not enough papers to compare ecopreneurship and individual creativity. Therefore, this study aims to examine the relationship between the concepts of entrepreneurship and creativity.

Entrepreneurs are individuals who prevent unemployment and poverty by providing employment opportunities with the establishment of modern industries. For that reason, they have been essential for industrialization and economic growth. At first glance, entrepreneurs can be seen as individuals who help society. Originally the intentions of entrepreneurs have resulted in positive outcomes for the society; because surviving both in a society and in a market has been related to society's wealth. It means that if a society or an economy is not in a growth or developing phase, it will not become a potential market or a market utilizing its niche points. Therefore firstly economic growth has been increased through many investments and then entrance into the market can be made. Actually all of these are related to the intentions of providing high transactions in order to reach profit goals by

entrepreneurs. Therefore, many times social responsibility movements or big investments have been made by entrepreneurs; so economic, social, psychological and technological advancements have been constituted. In addition to these advancements, entrepreneurs need an understanding of change and innovation to create a society or an economy which is suitable for investment and business growth (Saraçoğlu et al., 2010: 2; Top, 2006: 3).

Creativity and innovation are integrated in most studies; because creativity is the first step to find raw ideas. On the other hand, innovation is the implementation of this raw idea. Therefore, entrepreneurship and creativity are considered with innovation (Pretorius et al., 2005: 55-58). Revealing the relationships of creativity and entrepreneurship with the consideration of innovation will provide an opportunity to understand the exact relations with interpretation. It is illustrated in Figure 8.

Figure 8: Creativity and Innovation in Entrepreneurship



Source: Pretorius et al., 2005: 57

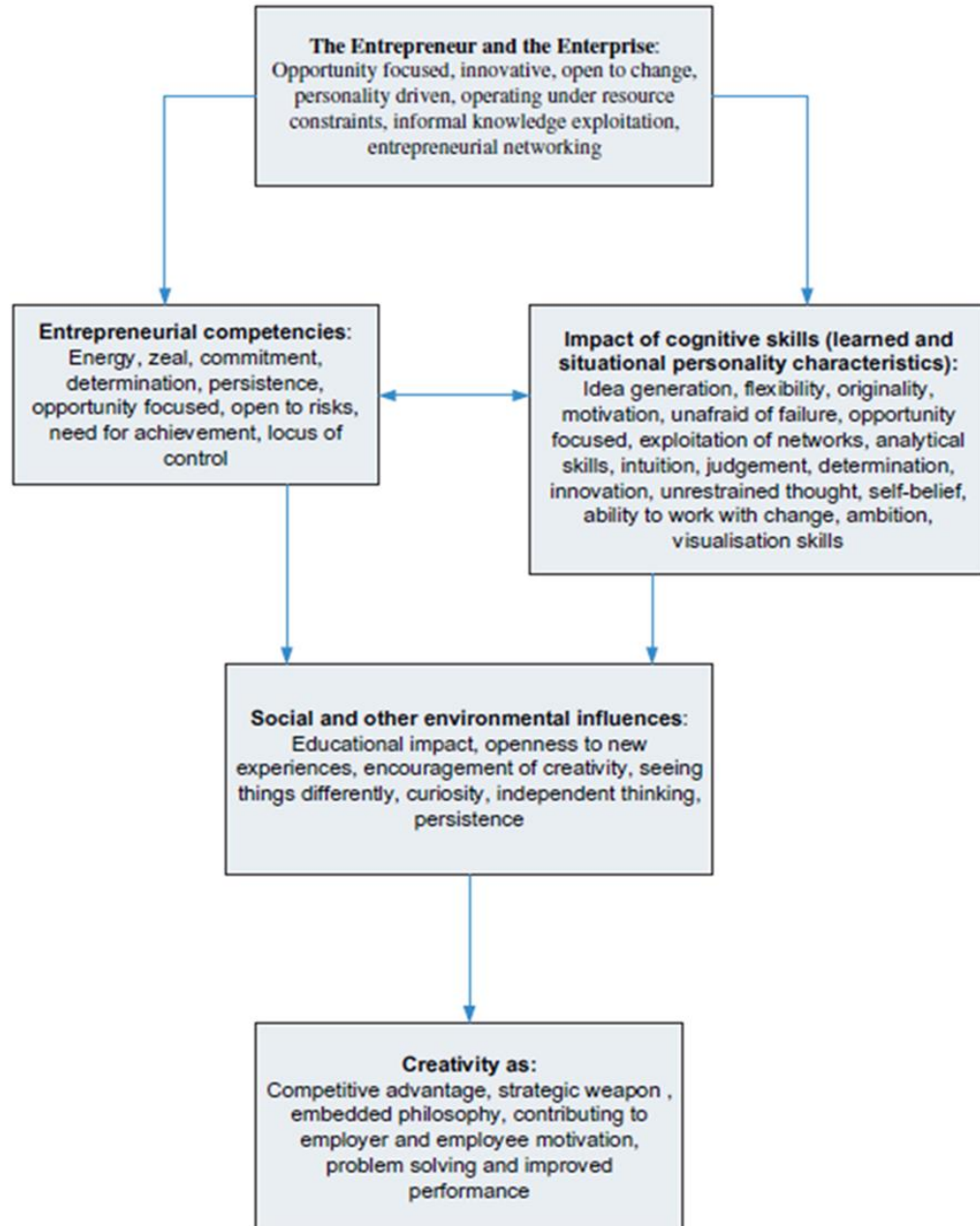
Figure 8 indicates the reason why a relationship exists among these concepts. It is obvious that a changing environment and new needs provide opportunities to earn high profits or high value added. However, these cannot be noticed easily; therefore trying to find an idea or alternative processes will provide the origin of creativity due to the need to find something different. The concrete result will be finding final products, services, processes or a combination of them. Until that point, creative ability will have a crucial role in order to improve new outcomes; but the need for commercializing requires the ability to be an entrepreneur. Therefore, not having any creative ability will prevent being an entrepreneur (Akdemir, 1996: 819; Saraçağlu et al., 2010: 3).

According to Bentley (1999: 76), creativity has five different steps for entrepreneurs. They are:

- Needs design: If an entrepreneur wants to make his/her investments, first of all he/she describes a need for the society but creativity is the crucial ability in order to find a need because no one can easily determine a need.
- Review existing information: After taking data from consumers, entrepreneurs will have information for ensuring a need for the society; therefore making a review of information is an important step for entrepreneurs.
- Interpretation and internalization of information: Collection of information will create knowledge for an entrepreneur; accordingly the correct interpretation of knowledge through the internalization of information will bring clear positions for every possibility.
- Noticing an opportunity: Notions or final knowledge after the interpretation of information with the evaluation of raw data will give choices for entrepreneurs and after evaluations of every possibility, an opportunity will be discovered from one of the alternatives.
- Evaluation of outcomes: Outcomes are determined by entrepreneurs. The importance of that step is to notice the applicability and level of creativity of an idea.

Fillis and Rentschler (2010: 68) mention in their study the relationships between entrepreneurship and creativity. Figure 9 illustrates this relationship step by step.

Figure 9: Entrepreneurship and Creativity



Source: Fillis and Rentschler (2010: 68)

Firstly, they accept that entrepreneurs have opportunistic perceptions. Therefore, entrepreneurs focus on changing the process which needs implementation of innovation by both operating under resource constraints and using their

entrepreneurial networking. Secondly, doing all these practices requires to some competencies and cognitive skills. Competencies can be ranked as energy, commitment, need for achievement and locus of control, and so on. On the other hand, cognitive skills can also be ranked as idea generation, flexibility, originality, motivation, innovation and determination, and so on. As is known, these cognitive skills have been mentioned in many creative theories. Combination of these competencies and cognitive skills with social and other environmental influences (such as educational impact, experiences, encouragement of creativity, etc.) will constitute the individual creative approach of an enterprise. This approach especially includes problem solving, improved performance and competitive advantage (Fillis and Rentschler, 2010: 69- 70).

According to Harryson (2008: 295; Kao 1991: 25); creativity is a process of the generation of new ideas; and innovation is the implementation of these ideas. Therefore, entrepreneurship is an innovative process which includes both human and organizational perspectives. On the other hand, Schoonhoven and Romanelli (2002: 180) mention entrepreneurship as becoming a networker who combines creativity and innovation in order to commercialize results after finding an idea.

Ecopreneurship is a sub-field of entrepreneurship; thusly, innovative and creative relations are valid for ecopreneurship, too; field of ecopreneurship is on progress because of the great importance of ecology for today's world. In general, most studies have examined entrepreneurship as unique concept; but the terminology of ecopreneurship has not been improved like entrepreneurship (Katsikis and Kyrgidou, 2009: 218).

When Anderson and Leal (1997: 3) define ecopreneurship, they emphasize three important areas which are the improvement of wild biotope, the protection of species against extinction and the protection of nature.

According to Archer (2009: 92; Balci, 2011: 190), ecopreneurship is a concept which includes three entrepreneurship pillars: Savings from social goods, new product creation and the balance of product and waste. All three pillars need creative ability because decision-making with regard to problems requires effective outcomes. In other words, effectiveness and efficiency are important for the

evaluation of outcomes which provide ecological solutions against to ecological problems.

Linnanen (2002: 79) has established an ideal ecopreneurship concept. It emphasizes that ecopreneurs are in balanced positions. They try to attain both making money and making the world better. Linnanen has created a virtuous cycle for ecopreneurship which is illustrated in Figure 10.

Figure 10: The Virtuous Cycle of Ecopreneurship



Source: Linnanen (2002: 79)

These four steps which create the cycle illustrate ecopreneurs' understanding of business creation. "*Desire to improve the world*" is a core concept for an ecopreneur and it needs to have a creative logic in order to have a stronger grasp on environmental necessities. As a result of this desire a motivation for the creation of markets is formed. This implementation in the field can take positive feedback from stakeholders and it enables business growth.

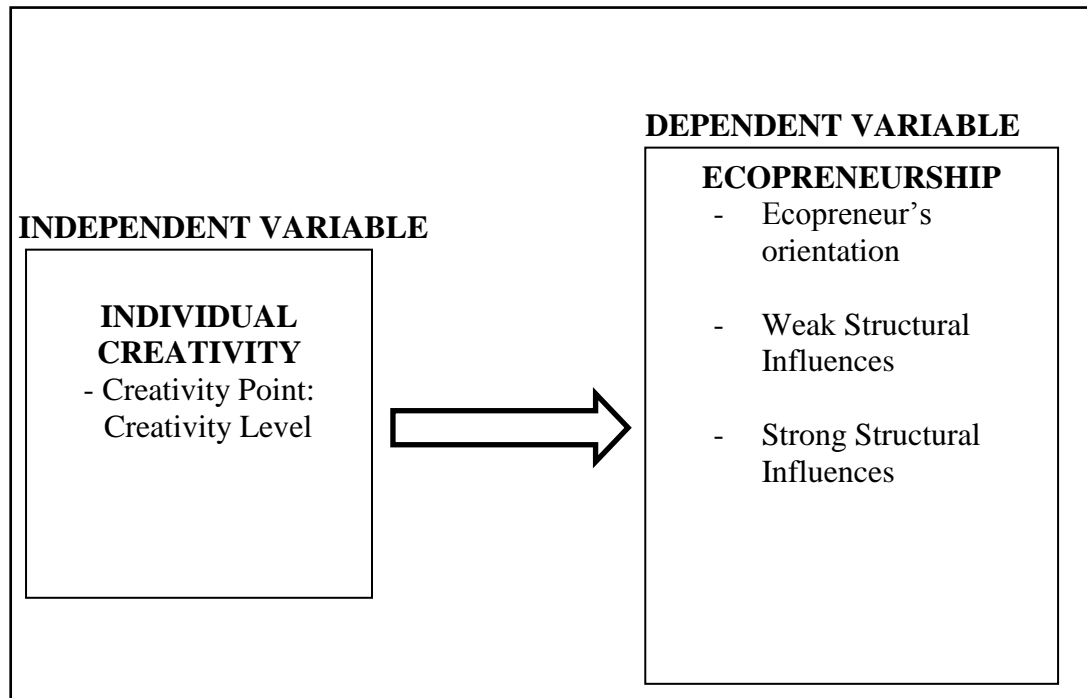
Creativity and ecopreneurship are concepts that are attached to each other; because creativity is related to finding an idea and ecopreneurship is related to the processing and commercializing of this idea. For that reason, if an interesting or beneficial idea has not been found, ecopreneurs will not be able to establish their business or even if the business is established, it will not survive due to not having an idea which will lead it to survive in stiff competition. Therefore, it can be seen that there should be a positive relationship between creativity and ecopreneurship; however there is no study that establishes a link among these two concepts. Therefore, the aim of this study is to make a contribution to the research ecopreneurship and creativity fields of research.

3.2. THEORETICAL FRAMEWORK OF THE STUDY

3.2.1. The Model of The Study

There are two variables in the scope of the study. They are individual creativity which is an independent variable and ecopreneurship which is a dependent variable. The relationship between individual creativity and ecopreneurship will be examined in accordance with their dimensions; but individual creativity does not encompass any dimensions. It will be determined as the total mark of an individual and ecopreneurship has three dimensions. Figure 11 indicates the relationship among them.

Figure 11: Relationship between Individual Creativity and Ecopreneurship



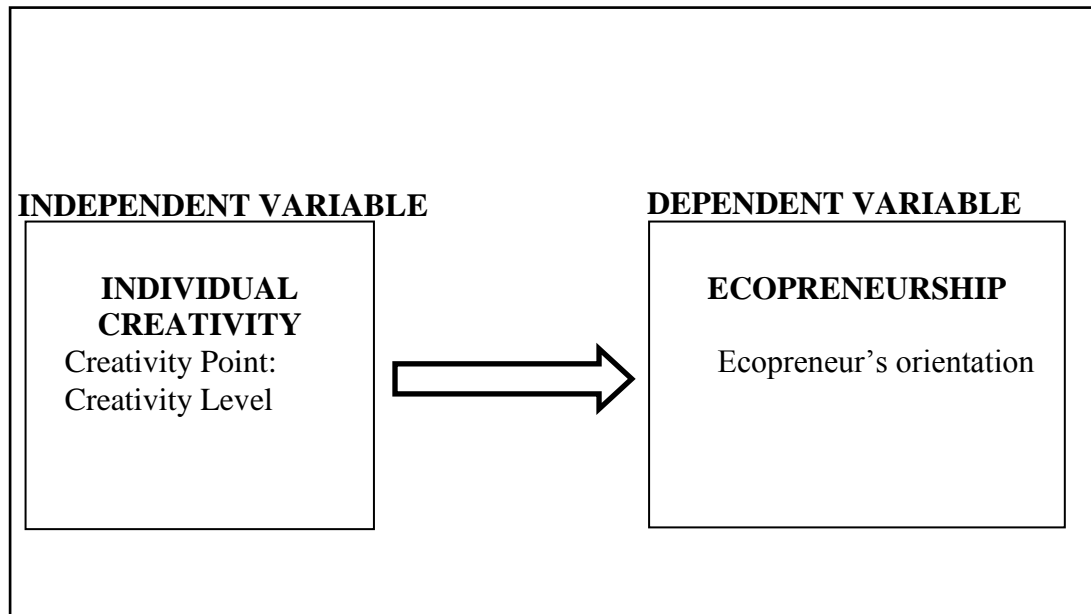
As you can see in previous sections, creativity is a core component for every type of entrepreneurship and especially for ecopreneurship. There is a need for even higher levels creative ability to find many solutions to many ecological problems (Balçı, 2011: 202; Chegini and Khoshtinat, 2011: 165; Fillis and Rentschler, 2010: 68; Harryson, 2008: 295; Isaak, 2002: 87; Kao, 1991: 25). There is no research on the relationship between ecopreneurship and individual creativity. Therefore, the

scope of this study determines the relationship between individual creativity and ecopreneurship with its dimensions. Demographic factors such as gender, age and experiences is used for introducing sample characteristics by descriptive statistics.

3.2.1.1. Creativity Level and Ecopreneur's Orientation

Ecopreneurship orientation encompasses an ecological point of view for the natural environment. Moreover, the priorities of ecopreneurs with regard to economic versus ecological thoughts have been examined in the "Ecopreneur's Orientation" dimension. Figure 12 indicates this relationship.

Figure 12: Relationship between Creativity and Ecopreneur's Orientation



The creation of an eco-friendly business requires getting knowledge about ecological matters and alternative options, especially needing to know the sector in which money will be invested. In addition, taking advantage of priorities requires creativity; because even if ecopreneurs want to benefit from some ecological priorities, they should use them with the greatest efficiency. Therefore, this provides cost-savings and can be transferred to another investment. This situation constitutes both ecological and economic benefit; but individual creativity level is an important measure in order to be an effective ecopreneur; consequently there is an expectation that both of them have direct relationships. In this context, the H_1 hypothesis will be:

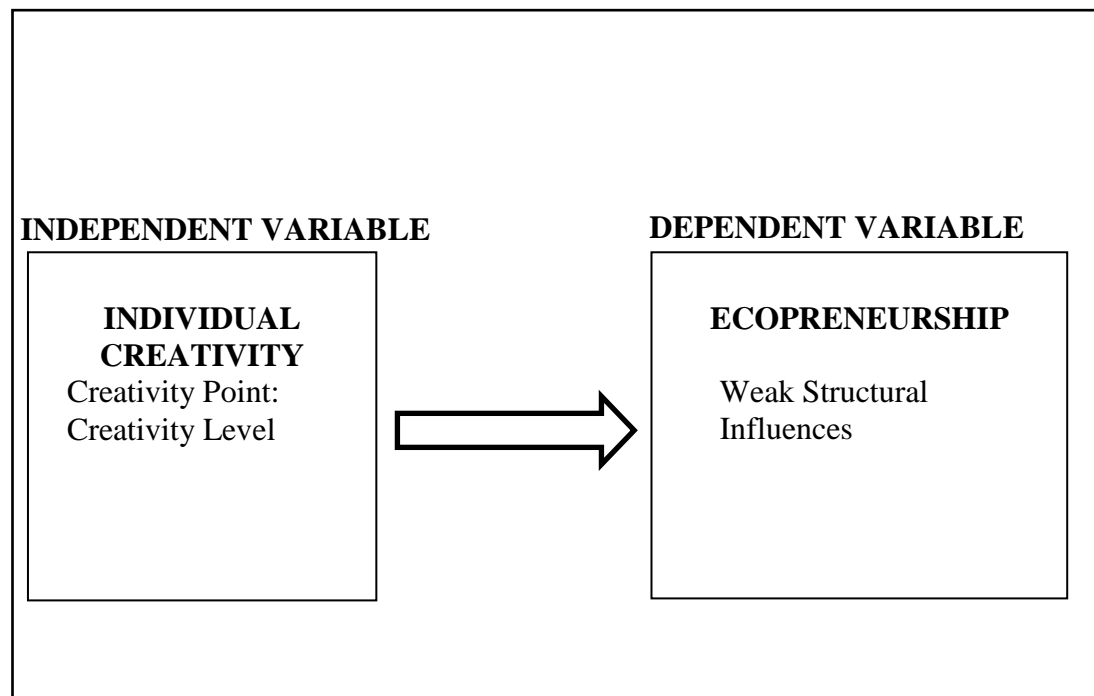
H₁: There is positive correlation between creativity level and the ecopreneur's orientation which determines the ecopreneurship level.

3.2.1.2. Creativity Level and Weak Structural Influences

The dimension of weak structural influences for measuring ecopreneurship level encompasses and benefits from previous experiences of other individuals who established an eco-friendly business. On the other hand, colleague perception with regard to the environment is considered as a weak structural influence for ecopreneurs. These situations determine the ecopreneurship level even if they have a weak effect.

Creativity level has an effect on the evaluation of weak structural influences; because if an ecopreneur does not have high creativity, it results in not benefitting from those experiences and perceptions. So, eco-business cannot be used in an effective way; and this will create profit loss (even if it is not seen as a profit loss, determination of opportunity cost for not implementing a creative idea with regard to eco-business will reveal this potential loss). Figure 13 illustrates the relationship between creativity and weak structural influences.

Figure 13: Relationship between Creativity and Weak Structural Influences



In this context, the H₂ hypothesis will be:

H₂: There is positive correlation between creativity level and weak structural influences which determine the ecopreneurship level.

3.2.1.3. Creativity Level and Strong Structural Influences

Strong structural influences include the profitability of green business, the evaluation of market conditions in order to determine potential opportunities, evaluating environmental institutions' activities in order to disseminate ecological culture and to reach necessary information which is related to ecopreneurship and the perception of the attractiveness of investment incentives for environmental protection. All of them are included as a question in the questionnaire in order to measure strong structural influences on ecopreneurship. Measuring ecopreneurship level will be determined in accordance with these items (Harbi et al., 2010: 182-189).

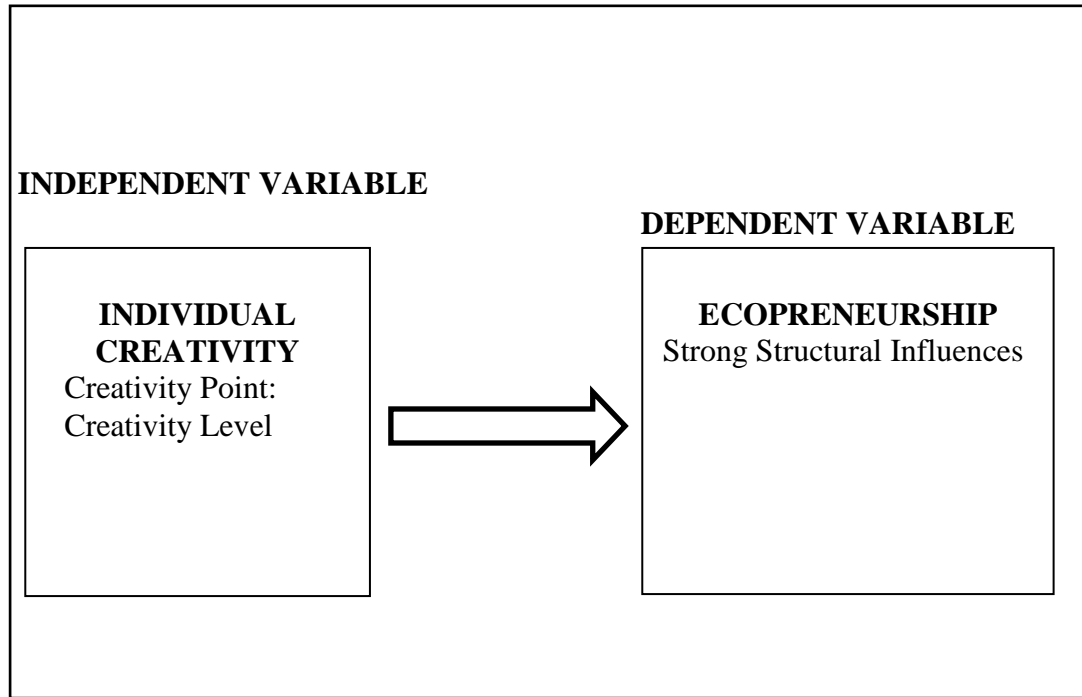
- Perception 1: Profitability of Green Business: Ecopreneurship level can be determined by ecopreneurs that focus on being profitability oriented; because if an ecopreneur makes the highest profit in his/her green business, it means that there is cost-reduction efficiency and effectiveness.
- Perception 2: Potential Opportunities from Market Conditions: It is obvious that markets have many niche points in order to take opportunities. Most entrepreneurs cannot notice these opportunities because of classical thoughts which are only profit oriented; but ecopreneurship needs to find these opportunities from the market; because ecological logic requires the effective usage of raw materials and finding alternative ways to have a positive effect on ecology. For that reason, ecopreneurship level can be determined by the taking of the opportunities in the market. As a result, the greater the creativity level, the more the opportunities from the market will be taken.
- Perception 3: Environmental Institutions Activities: Using the activities of environmental institutions is a criterion to determine ecopreneurship level; because these kinds of organizations contribute to the knowledge of the ecopreneurship field and they make some seminars and training programs. The aims of these kinds of organizations try to create an ecological

consciousness for ecopreneurship and if this consciousness is created, it will have an effect on the activities which are done by ecopreneurs. On the other hand, ecological culture as a whole will be created by environmental institutions. This provides an advantage to having an ecological centric approach to the market. Therefore, creativity can be seen as a prominent concept in order to benefit from those institutions; because creativity requires searching to find better solutions. Therefore, if an ecopreneur has a higher creativity level, it will constitute an understanding of using these kinds of organizations in order to notice niche points for both ecology and the market with the consideration of trying to find better solutions.

- Perception 4: Perception of Investment Incentives for Ecopreneurship: These kinds of incentives focus on ecological protection and most of the time ecological protection provides economic advantages for business owners in the ecopreneurship field. Namely, investment incentives lead ecopreneurs who try to search for ecological solutions to problems in order to take investment incentives. Thus, it is a stimulus for creativity. Therefore, ecopreneurs who have higher creative ability will use these investment incentives to have the ability for finding creative thoughts. On the other hand, even if ecopreneurs are firstly ecologically oriented, profitability cannot be omitted by ecopreneurs. Therefore, high usage of investment incentives will measure ecopreneurship level.

All of these four perceptions are strong structural influences and these determine ecopreneurship level and creativity has a relation to these influences. Figure 14 illustrates the relationship among them.

Figure 14: Relationship between Creativity and Strong Structural Influences



In this context, the H₃ hypothesis will be:

H₃: There is positive correlation between creativity level and strong structural influences which determine the ecopreneurship level.

CHAPTER FOUR

RESEARCH METHODOLOGY AND RESULTS

This chapter has been composed of fourteen main titles. In the first part, aim of the study is expressed. In the second part, type of study is introduced. In the third part, measurement unit of the study is mentioned. In the fourth part, sample of the study is introduced. In the fifth part, scales are mentioned and information related to scales is given. In the sixth part, validity and reliability tests of scales are made. In the seventh part, analysis method of the study is mentioned. In the eighth part, fundamental limitations of the study are discussed. In the ninth part, relationship between individual creativity and ecopreneurship is examined by statistical analysis of the scales' data. In the tenth part, individual creativity level of the sample is indicated. In the eleventh part, results of the research are discussed. In the twelfth part, conclusion related to research is evaluated. In the thirteenth part, recommendations for future researches are mentioned and in the fourteenth part, recommendations for the implementation are expressed.

4.1. AIM OF THE STUDY

The aim of the study is to determine the relationship between individual creativity and ecopreneurship. In other words, the research question of the study is based on whether high individual creativity level leads to a high ecopreneurship intention or not. In order to examine this relationship;

- an individual creativity test which includes a score on a personal level and
- ecopreneurship scale, which encompasses the dimensions of Ecopreneurs' orientation, weak structural influences and strong structural influences,

were implemented. Thus, the relationships among those two concepts will be revealed.

4.2. TYPE OF THE STUDY

The study is basically descriptive due to having the goal of revealing the relationship between individual creativity as an independent variable and ecopreneurship as a dependent variable for all dimensions.

4.3. MEASUREMENT UNIT OF THE STUDY

Studies which are related to individual creativity have made some psychological tests or applied some scales with regard to giving a personal score to individuals. Therefore, the measurement level of creativity level will be individuals. When studies on ecopreneurship level or intentions are examined, it is seen that there are many ways to evaluate this intention. In general, case studies have been made through business in order to give a decision about ecological consciousness of business; therefore many studies in this field have given to importance for business practices. Hence, business operations, ecological footprint and management point of views with regard to business implementations are the core concepts of case studies; however examining the ecopreneur's intention is more important than business practices. Because if a businessman has the knowledge or logic of ecopreneurship, he/she will try to create some innovations even if the business seems not to be eco-friendly Therefore, the measurement unit of the ecopreneurship scale is individuals who are owners of a business.

4.4. SAMPLE OF THE STUDY

In order to test the validity of the hypothesis in this study, a non-random sampling technique has been used. The sample of the study has been selected from businesses which are registered with the İzmir Chamber of Commerce under the title of Recycling Group (Code: 74) and which have an excellence rating with regard to the Chamber of Commerce. There are many businesses under this title; therefore businesses are selected from central districts which have been listed in Table 4.1.

Other central districts which have fewer than 5 businesses are not listed in Table 4 for using time in an efficient way and to reduce costs for the study.

Table 4: Sample of the Study

Central District	Number of Business (Recycling Group)
Bornova	31
Konak	27
Karabağlar	5
Buca	10
Karşıyaka	9
Çiğli	17
Kemalpaşa	8
Menderes	8
Total	123

This research was conducted between April 2012 and May 2012. 123 questionnaires were given directly or indirectly to the businesses which are listed above and 95 questionnaires were returned. It indicates that the response rate of the businesses was 77%. However, 83 of them are valid in order to analyze data.

When gender distribution of the sample is examined, it can be seen that participants are composed of 55% men and 45% women. The questionnaire has four age categories which are 20-25, 26-31, 31-36 and 37 and above. When the age group distribution of participants is examined, 29% of them belong to the 26-31 age groups, 40% of them belong to the 31- 36 age group and 31% of them belong to the 37 and above age group. There are not any participants in the 20-25 age groups. On the other hand, when the marital status of the participants is examined, it can be seen that 66% of them are married and 34% of them are single.

The educational level of the participants is another section of the questionnaire. According to the results, 5% of them graduated from primary school, 8% of them graduated from middle school, 39% of them graduated from high school, 38% of them graduated from university and 10% of them have a master's degree.

The average work experience of the sample is 10 years. Participants have at least 5 workers. The average age of businesses in the recycling sector is 11 years. All participants in the sample have written their occupation as business owner.

4.5. SCALES USED IN THE STUDY

Individual creativity is mostly measured by the Torrance Test of Creative Thinking which was developed by Dr. E. Paul Torrance (1974), the Minnesota Tests of Creative Thinking which was developed by Lester G. Duenk (1963: 207-216)) in Minnesota University, the Creativity Assessment Packet which was developed by F. Williams (1980) and the scale of *"How Creative Are You?"* which was developed by E. Raudsepp (1979: 218-219).

The Torrance Tests of Creative Thinking are the most widely used tests for creativity. These tests include drawings (pictures), questions, reasons, consequences and different uses of objects; therefore many aspects of creativity are tested; so participants in the test can take effective results. This test directly measures creativity; but even if it is the most effective and used test, it has been completed in 70 minutes (Aslan, 2001: 22-23; Öncü, 2003: 225). Moreover, Torrance is a registered brand among creativity tests and there is the ATTA version (Abbreviated Torrance Tests for Adults) and it is completed in 15 minutes; but this test needs psychoanalysis skills; and the researcher does not have these skills; therefore the test has not been used for this study.

Minnesota Tests for Creative Thinking includes picture construction, figure completion and circles in order to measure the creativity level of individuals (Yamamoto, 1964: 19-22). All tasks can be completed in about 40 minutes. In addition, the test examination needs researchers who can make psychoanalysis evaluation; but the researcher does not have enough knowledge in order to make this evaluation; therefore this test has not been used for this study.

The Creativity Assessment Packet was developed by Frank E. Williams in the United States of America. The original language of the packet is English. The Creativity Assessment Packet includes three sections which are the divergent thinking test, divergent feeling test and the William scale which measures the

perception of parents and teachers regarding children's creativity. Implementation of the test is easy; but the evaluation of that test needs special expertise (Erdoğan, 2006: 65). The researcher of the present study does not have the expertise for examining the Creativity Assessment Packet; so the scale will not be implemented in this study.

The "How Creative Are You?" scale which was developed by Eugene Raudsepp is another scale that measures creativity. It includes 50 items and the scale uses five Likert points (Strongly Agree, Agree, In-between or don't know, Disagree, Strongly Disagree). This scale gives points for each item. Therefore, every item has -2, -1, 0, +1 and +2 points. This scale is suitable for this study due to its easy applicability and the fact that it takes 10 minutes to implement for the sample. In addition, analysis of this scale is easier than other scales. Therefore, the creativity measurement of the sample will be made through this scale. The Turkish Version of the scale which was made by Sungur (1997: 321; Erol, 2010: 96-97) is in the Appendix 1. English Version of the scale couldn't be given because of copyright issues.

In addition to the individual creativity scale, the second part of the study is related to ecopreneur level. It is obvious that there are not any studies which measure ecopreneur level directly. Empirical validation of ecopreneurship studies has not included a personal measurement for ecopreneurs. There are some researchers who have used empirical validation such as Pastakia (1998): six case studies, Volery (2002): two case studies, Linnanen (2002): observations of eco-businesses over ten years, and Schaltegger (2002): seven case studies. After a detailed literature review on finding a scale with regard to ecopreneurship, the article of Harbi et al. (2010) was examined with regards to the empirical validation of their study. Then 15 questions which were included in the study of Harbi et. al. (2010) were transformed into five point Likert scales (Strongly Agree, Agree, In-between or don't know, Disagree, Strongly Disagree) with the help of statistician Assist. Prof. Dr. Neziha Tayyar. Therefore, this is the first implementation of the scale in the literature. Originally, the language of the scale is French. After the permission from authors of this scale for adaptation to Turkish, Translation to Turkish version was made by three experts who know French Language in advanced level. The Turkish version of

the scale is in appendix 1. The French version of the scale couldn't be given because of copyright issues.

4.6. VALIDITY AND RELIABILITY TESTS OF SCALES USED IN THE STUDY

4.6.1. Reliability of Individual Creativity Scale

The individual creativity scale which was developed by Eugene Raudsepp includes 50 questions. Answers to the questions are written with regard to a 5 point Likert scale (Strongly Agree, Agree, In-between or don't know, Disagree, Strongly Disagree). The scale has personal scores for individuals. Calculations have been made for each question and points for each question are indicated in Table 5 (Raudsepp, 1979: 220).

Table 5: Scores for the Individual Creativity Scale

Questions	Strongly Disagree	Disagree	In- Between or Don't Know	Agree	Strongly Agree
1	+2	+1	0	-1	-2
2	+2	+1	0	-1	-2
3	+2	+1	0	-1	-2
4	-2	-1	0	+1	+2
5	+2	+1	0	-1	-2
6	-2	-1	0	+1	+2
7	-2	-1	0	+1	+2
8	+2	+1	0	-1	-2
9	-2	-1	0	+1	+2
10	-2	-1	0	+1	+2
11	-2	-1	0	+1	+2
12	-2	-1	0	+1	+2
13	+2	+1	0	-1	-2
14	+2	+1	0	-1	-2
15	-2	-1	0	+1	+2
16	+2	+1	0	-1	-2
17	+2	+1	0	-1	-2

18	-2	-1	0	+1	+2
19	+2	+1	0	-1	-2
20	-2	-1	0	+1	+2
21	+2	+1	0	-1	-2
22	+2	+1	0	-1	-2
23	+2	+1	0	-1	-2
24	-2	-1	0	+1	+2
25	+2	+1	0	-1	-2
26	+2	+1	0	-1	-2
27	+2	+1	0	-1	-2
28	+2	+1	0	-1	-2
29	-2	-1	0	+1	+2
30	-2	-1	0	+1	+2
31	+2	+1	0	-1	-2
32	+2	+1	0	-1	-2
33	-2	-1	0	+1	+2
34	-2	-1	0	+1	+2
35	+2	+1	0	-1	-2
36	+2	+1	0	-1	-2
37	-2	-1	0	+1	+2
38	-2	-1	0	+1	+2
39	-2	-1	0	+1	+2
40	-2	-1	0	+1	+2
41	+2	+1	0	-1	-2
42	+2	+1	0	-1	-2
43	+2	+1	0	-1	-2
44	+2	+1	0	-1	-2
45	+2	+1	0	-1	-2
46	-2	-1	0	+1	+2
47	-2	-1	0	+1	+2
48	-2	-1	0	+1	+2
49	+2	+1	0	-1	-2
50	-2	-1	0	+1	+2

The interval of the creativity score is between -100 and + 100. After all questions have been answered, the creativity points will have the following ranges: 80 to 100: Very creative, 60 to 79: Creative, 40 to 59: Average creative, 20 to 39: Below Average, -100 to 19: Noncreative (Raudsepp, 1979: 218). Cronbach's alpha is 0.842 for this scale and it indicates that the scale has high reliability (Kalaycı, 2010: 405).

4.6.2. The Validity and Reliability of the Ecopreneurship Scale

The ecopreneurship scale includes 15 questions and a 5 point Likert scale (Strongly Agree, Agree, In-between or don't know, Disagree, Strongly Disagree) has been used. This questionnaire was completed by 83 business men. Cronbach's alpha for the scale is 0.672. In order to increase the reliability level of this scale, the reliability analysis was used according to Cronbach's alpha if item is deleted method and the results are indicated in table 4.3.

Table 6: Item Total Statistics

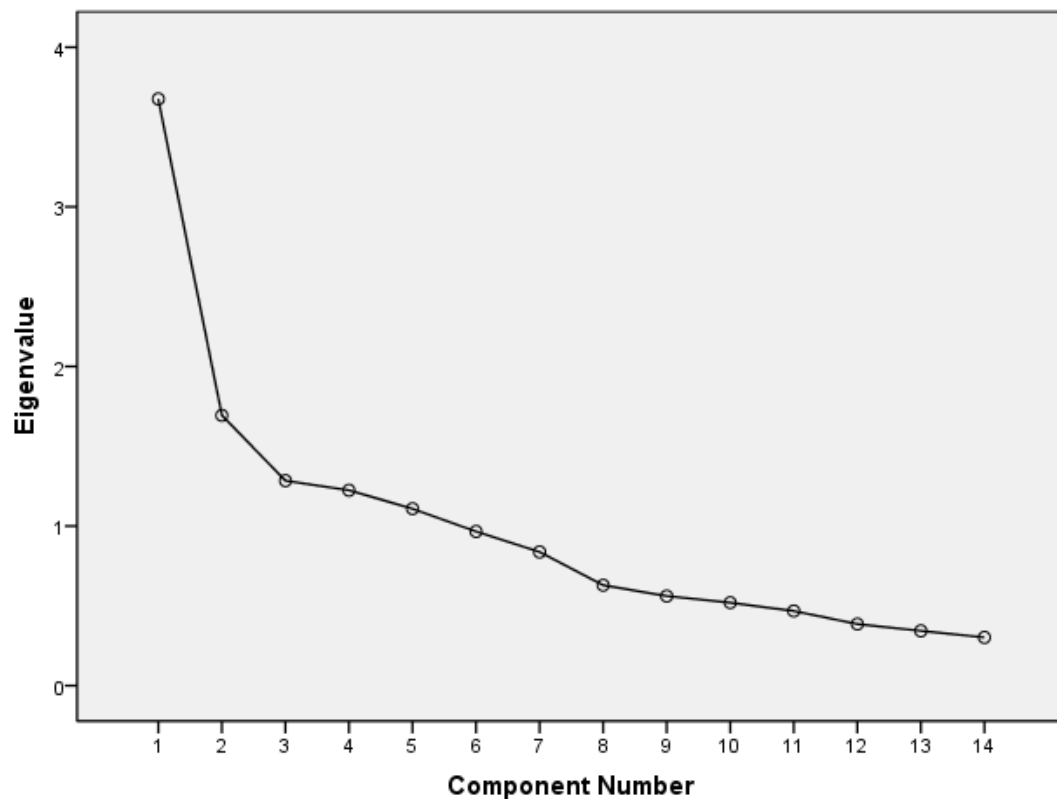
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	50.3671	38.658	.483	.630
2	50.9494	36.574	.581	.612
4	51.2342	39.544	.241	.666
5	50.3734	40.407	.453	.640
6	50.7911	39.542	.404	.640
8	50.5443	40.008	.383	.644
9	51.2342	41.012	.233	.664
10	51.9114	40.569	.280	.657
11	50.9937	39.760	.400	.641
12	51.6076	41.113	.294	.655
13	51.1456	41.495	.293	.656
14	51.1013	39.342	.512	.631
15	51.5443	40.072	.308	.653
*R3	52.8101	53.130	-.507	.758
*R7	50.9114	41.954	.218	.665

*Reverse Question

As it is stated in Table 4.3, if R3 (Reverse Question 3) is removed from the analysis, Cronbach's alpha will increase to 0.758. Therefore, in order to increase the reliability of the scale, R3 is removed.

The first step of factor analysis consisted of scree plot analysis in order to find how many factors the scale has. If Figure 15 is examined, it can be seen that there are three factors with regard to the Eigenvalue.

Figure 15: Scree Plot Analysis



BTS (Barlett's Test of Sphericity) which is applied in order to determine compliance with data is significant at 0.000 levels and it indicates that the data has multivariate normal distribution. Moreover, the value of Kaiser, Meyer, Oklin is 0.733 and it indicates there are low partial correlations among variables and the factor analysis is applicable for these data. There are three dimensions which are ecopreneur orientation, strong influences and weak influences. The Cronbach's alphas of these dimensions are 0.708, 0.668 and 0.356, respectively. Weak structural influences have a low alpha value due to not having a direct effect on ecopreneurship; therefore the name of the dimension is weak structural influences. Other values have enough of a reliability level. The factor analysis of 14 items is indicated in Table 7.

Table 7: Factors that are obtained from the Structural Validity Test for the Ecopreneurship Scale

Factor	Ecopreneur's Orientation	Strong Influences	Weak Influences
Question 5	0.689	0.344	
Question 6	0.648		
Question 1	0.626	0.359	
Question 2	0.573	0.476	
Question 10	0.557		
Question 14	0.495		
Question 4	0.361		
Question 11		0.742	0.344
Question 15		0.736	0.416
Question 8		0.676	
Question 13	0.320	0.564	
Question 9		0.563	
Question 12			0.796
Question R7			0.507

The questions which exist under the dimensions are indicated in Table 8.

Table 8: Ecopreneurship Dimensions and Questions

Ecopreneur's Orientation	Strong Structural Influences	Weak Structural Influences
1	8	*R7
2	9	12
4	11	
5	13	
6	15	
10		
14		

*R: Reverse Question

4.7. ANALYSIS METHOD OF THE STUDY

The survey of Individual Creativity (50 items) and Ecopreneurship Level (14 items) was applied to the study sample. The scale of the survey is a 5 point Likert type which aimed to measure the attitudes of individuals with regard to the topic of the study. The Likert scale can be considered as an interval scale which includes equidistant distances among items. For instance; in the 5 point Likert scale, the distance between '1' and '2' is equal to the distance between '3' and '4'. Therefore, mathematical calculations can be made through the data which is shaped with regard to Likert scale.

In order to apply the Likert scale to both individual creativity and ecopreneurship level, both of them should have interval data and the data set is interval. Thus, the relationship among them can be determined through regression analysis. This analysis is applied to individual creativity points and each dimension of the ecopreneurship scale.

Analysis of the study is made through the SPSS 18 program.

4.8. FUNDAMENTAL LIMITATIONS OF THE STUDY

- Our knowledge with regard to ecopreneurship and individual creativity will be limited to perceptions of individuals to the related items which have been included in the scale.
- The sample has been chosen from the recycling sector; but the research can be made for other sectors which can have an ecological perception.
- All individuals who joined in the research wrote "businessman" as their occupational question. Therefore, job differences among the sector are not predicted because a chemist or an engineer can be a business owner for the sector.
- The individual creativity survey has been regulated according to the Likert scale; but the Torrance Test of Creative Thinking or the Minnesota Tests of Creative thinking will indicate clearer analysis; because they include detailed analysis which has been made by specialists.

4.9. RELATIONSHIP BETWEEN INDIVIDUAL CREATIVITY AND ECOPRENEURSHIP

4.9.1. Relationship between Individual Creativity and Ecopreneur's Orientation

H₁ hypothesis of the study aimed to explain the relationship between creativity level and ecopreneur's orientation in a positive way. In order to test the H₁ hypothesis, regression analysis was applied to the data. Before that, ANOVA was used to test the applicability of regression. Results can be seen in Table 9.

Table 9: Model Summary, ANOVA and Coefficients for Individual Creativity and Ecopreneur's Orientation

Model Summary ^b					
Model 1	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.435 ^a	.189	.179	.57359	
a. Predictors: (Constant), Individual Creativity					
b. Dependent Variable: Ecopreneur's Orientation					

ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.920	1	5.920	17.995	.000 ^a
	Residual	25.333	77	.329		
	Total	31.253	78			
a. Predictors: (Constant), Individual Creativity						
b. Dependent Variable: Ecopreneur's Orientation						

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.426	.126		27.187	.000
	Individual Creativity	.015	.004	.435	4.242	.000
a. Dependent Variable: Ecopreneur's Orientation						

The model summary has indicated that individual creativity explains 0.179 (Adjusted R square) of the ecopreneur's orientation. Moreover, ANOVA testing is statistically significant (.000); so the relationship between individual creativity and the ecopreneur's orientation can be set as a model. The effect of individual creativity on the ecopreneur's orientation is positive (B: 0.015, t: 4.242, p: 0.000). It means that an individual who has high creativity will result in a high intention for ecopreneurial orientation. Therefore, the H₁ hypothesis has been accepted.

4.9.2. Relationship between Individual Creativity and Weak Structural Influences

H₂ hypothesis of the study aimed to explain the relationship between creativity level and weak structural influences in a positive way. In order to test the H₂ hypothesis, regression analysis was applied to the data. Before that, ANOVA was used to test the applicability of regression. Results can be seen in Table 10.

Table 10: Model Summary, ANOVA and Coefficients for Individual Creativity and Weak Structural Influences

Model Summary^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
2	.221 ^a	.049	.036	.74261	1.857
a. Predictors: (Constant), Individual Creativity					
b. Dependent Variable: Weak Structural Influences					

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	2.126	1	2.126	3.856	.050 ^a
	Residual	41.361	75	.551		
	Total	43.487	76			
a. Predictors: (Constant), Individual Creativity						
b. Dependent Variable: Weak Structural Influences						

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
2	(Constant)	3.144	.174		18.111	.000
	Individual Creativity	.010	.005	.221	1.964	.050
a. Dependent Variable: Weak Structural Influences						

The model summary has indicated that individual creativity explains 0.036 (Adjusted R square) of weak structural influences. This result is very low; because this structural influence that determines ecopreneurship level is weak. In other words, they do not make a huge contribution to ecopreneurship level; for that reason the adjusted R square amount can be expected to be a low rate. In addition, ANOVA testing is statistically significant (.050) so the relationship between individual creativity and weak structural influences can be set as a model. The effect of individual creativity on weak structural influences is positive (B: 0.010, t: 18.111, p: 0.050). It means that an individual who has high creativity will result in benefiting from weak structural influences. Therefore, H₂ hypothesis has been accepted.

4.9.3. Relationship between Individual Creativity and Strong Structural Influences

H₃ hypothesis of the study aimed to explain the relationship between creativity level and strong structural influences in a positive way. In order to test the H₃ hypothesis, regression analysis was applied to the data. Before that, ANOVA was used to test the applicability of regression. Results can be seen in Table 11.

Table 11: Model Summary, ANOVA and Coefficients for Individual Creativity and Strong Structural Influences

Model Summary^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
3	.381 ^a	.145	.135	.66549	
a. Predictors: (Constant), Individual Creativity					
b. Dependent Variable: Strong Structural Influences					

ANOVA^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
3	Regression	6.021	1	6.021	13.595	.000 ^a
	Residual	35.430	80	.443		
	Total	41.451	81			
a. Predictors: (Constant), Individual Creativity						
b. Dependent Variable: Strong Structural Influences						

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
3	(Constant)	3.416	.139		24.607	.000
	Individual Creativity	.015	.004	.381	3.687	.000
a. Dependent Variable: Strong Structural Influences						

The model summary has indicated that individual creativity explains 0.135 (Adjusted R square) of strong structural influences. Furthermore, ANOVA testing is statistically significant (.000) which means that the relationship between individual creativity and strong structural influences can be set as a model. The effect of individual creativity on strong structural influences is positive (B: 0.015, t: 3.687, p: 0.000). This means that an individual who has high creativity will result in benefiting from strong structural influences. Thus, H₃ hypothesis has been accepted.

4.10. INDIVIDUAL CREATIVITY OF THE SAMPLE

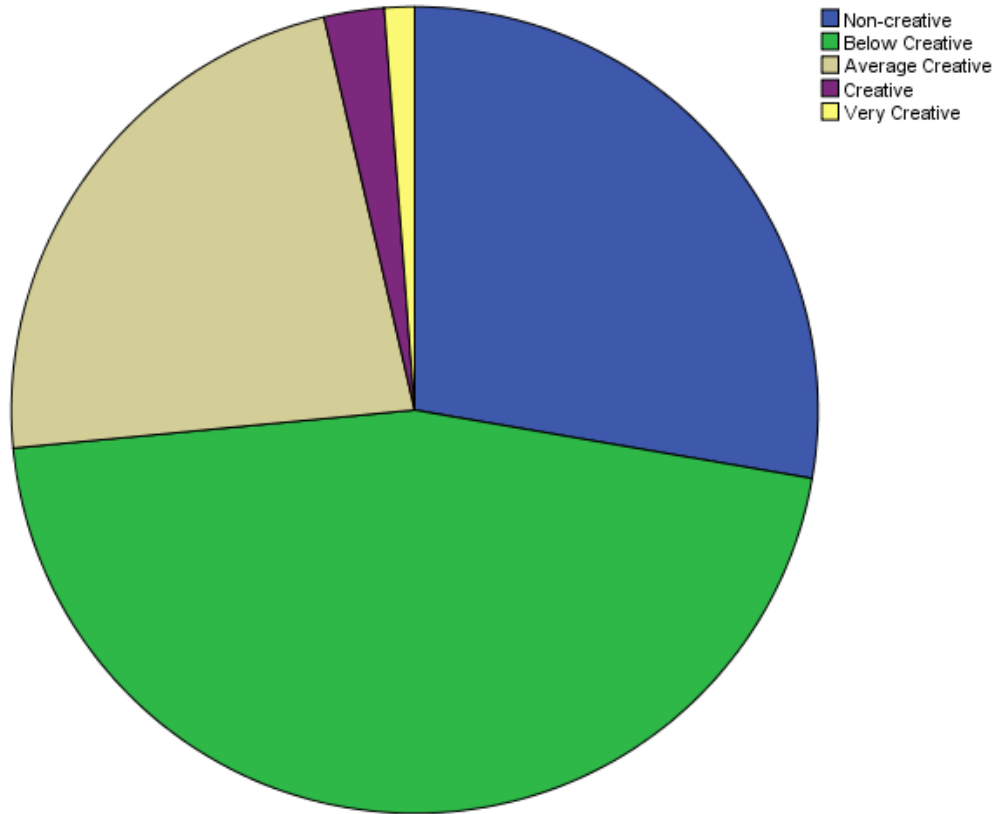
When examination of the mean with regard to individual creativity is made, the result for the sample is 29.39. In addition, the individual creativity level with regard to the points is indicated in Table 4.9.

Table 12: Individual Creativity Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Non-creative	23	27.7	27.7	27.7
	Below Creative	38	45.8	45.8	73.5
	Average Creative	19	22.9	22.9	96.4
	Creative	2	2.4	2.4	98.8
	Very Creative	1	1.2	1.2	100.0
	Total	83	100.0	100.0	

As it is stated in Table 4.9, 23 individuals of the sample are non-creative, 38 individuals are below creative, 19 individuals are average creative, 2 individuals are creative and 1 person is very creative. Figure 16 demonstrates these levels as a pie chart.

Figure 16: Pie Chart for Individual Creativity Level



According to the data taken from the Recycling Group, the creativity level for business owners is not sufficient. In addition, the total amount of average creative, creative and very creative individuals is 26.5% and it is a percentage that should not be enough for the business owners of the Recycling Group and should be improved.

4.11. RESULTS

4.11.1. Evaluation of Relationship between Individual Creativity and Ecopreneur's Orientation

H₁ hypothesis has aimed to test the relationship between individual creativity and ecopreneur's orientation. According to statistical analysis which is used in the study as model summary, ANOVA testing and regression analysis, a model between individual creativity and ecopreneur's orientation can be established (ANOVA

testing is significant and it means that creating a model among them is possible). So, according to regression analysis, there is a positive relationship among those two concepts. However, Adjusted R Square is 0,179. It means individual creativity has explained ecopreneur's orientation as 17,9%. In other words there are some other factors rather than creativity, and these factors have affected ecopreneur's orientation by 82,1%.

Individual creativity level improves perceptions of ecology; because these kinds of individuals always try to find innovative and sometimes alternative solutions to ecological issues. In general, economic priorities are more important than ecological priorities by nature; because perception of profit orientation can provide business progress and better life conditions for entrepreneurs. However, ecopreneurs have given importance to ecology; because the world trend both for the markets and the consumers are ecologic. In previous chapters, intentions of ecopreneurs are discussed and the intentions are stated as fully ecologic or making ecologic investment for the economic purposes. Even if intentions of ecopreneurs are economic or not, advantages of being ecopreneurs will provide ecologic type of investments. For example, ecological innovations have reduced the costs of products; and ecologic products have higher prices than other products; so reducing cost and increasing price have provided high profit advantage for ecopreneurs. As a result of this situation, most of entrepreneurs have transformed to ecopreneurs in order to benefit from this advantage. The importance of individual creativity for ecopreneurs can be shown in planning level for establishing a business. If an individual has high creativity level, this will provide to see crucial niche points for a sector. Therefore ecopreneur's orientation will be parallel to individual creativity and the results with regard to statistical analysis have proved it.

4.11.2. Evaluation of Relationship between Individual Creativity and Weak Structural Influences

H₂ hypothesis has aimed to test the relationship between individual creativity and weak structural influences. According to statistical analysis which is used in the study as model summary, ANOVA testing and regression analysis, a model between

individual creativity and weak structural influences can be established (ANOVA testing is significant and it means that creating a model among them is possible). So, according to regression analysis, there is a positive relationship among those two concepts. However, Adjusted R Square is 0,036. It means individual creativity has explained Ecopreneur's orientation as 3,6%. In other words there are some other factors rather than creativity, and these factors have affected weak structural influences in a 96,4%.

Weak structural influences are the concept that has encompassed previous experiences of both ecopreneur and his/her environment. In the first sense, it does not have a meaning for this study; but using weak structural influences as a drive will provide a comprehensive perception in order to create or to develop a business. According to statistical analysis, there is a positive relationship between individual creativity and weak structural influences. Namely, if an individual does not have a good creativity level, he/she does not create a different idea from previous experiences. Therefore creating idea from experiences has required creative ability. Even if individual creativity has small effect on benefiting from weak structural influences, creativity is a tool in order to create ideas which have high efficiency for business.

4.11.3. Evaluation of Relationship between Individual Creativity and Strong Structural Influences

H₃ hypothesis has aimed to test the relationship between individual creativity and strong structural influences. According to statistical analysis which is used in the study as model summary, ANOVA testing and regression analysis, a model between individual creativity and strong structural influences can be established (ANOVA testing is significant and it means that creating a model among them is possible). So, according to regression analysis, there is a positive relationship among those two concepts. However, Adjusted R Square is 0,135. It means that individual creativity has explained benefiting from strong structural influences as 13,5%. In other words there are some factors rather than creativity, and these factors have affected benefiting from strong structural influences as 69.1%.

Strong structural influences have encompassed profitability of green business, potential opportunities from market conditions, environmental institution activities, and perception of investment incentives for ecopreneurship. These four pillars of strong structural influences are affected by ability of individual creativity; because creativity is mostly related to finding an idea which can provide effectiveness and efficiency for practices of businesses. So, if a businessman who is called as ecopreneur for our study has higher creative ability, it will be possible to benefit from strong structural influences in a highly effective way. As a result of this situation, both ecologic and economic (profitability) views will create a win-win situation. It means that businessman will have higher profit and at the same time he/she will protect ecology. So consumers of products will have a positive perception to business.

4.11.4. Evaluation of Individual Creativity Level of The Sample

After implementation of questionnaires for Recycling group in Izmir, results which are related to individual creativity are very interesting. The reason of that view has come from logic of eco-centric view which is supported by creative ability of person. In the world, most prominent companies which have aimed to be an ecopreneurship have created many innovations and these innovations required high creative ability in order to find an idea which can be processed and made as innovations. Many businesses in the sample have used a prepared system for making recycling. It means that situation of finding idea in order to provide an innovation is weak; because 73.5% of the sample has below creative and non-creative. Therefore it is not possible for them to reveal very innovative ideas for their practices.

Recycling sector is very popular field in order to provide cost-efficiency for businesses; therefore government should make investments to this sector. Generally, perception to make an investment can be understood as technical; however it is not enough for today's world. Logical part of investment is more important than technical; because techniques can be found in every locations but it is not valid for logical part. Logic requires creative ability for producing ideas and businessman who

is called as ecopreneur must improve their creative ability through seminars, training and other practices.

CONCLUSION

Individual creativity has been evaluated as a skill that provides new ideas in order to create some innovations for business. A business owner has his own innovations as part of his/her entrepreneurial initiative. In the scope of the study, ecopreneurship has been emphasized instead of focusing on entrepreneurship. Main reason for this purpose has come from logic of ecologic tendency of today's world. Therefore business owner's role as an ecopreneur examined through the study.

The sample chosen from Izmir in the recycling business group has been found as having weak creativity level after making statistical analysis. On the other hand, according to results of the regression analysis between individual creativity and ecopreneurship dimensions, the positive relationship between individual creativity and ecopreneurship has been found. Actually this result is parallel to our hypothesis. Even if individual creativity has not explained ecopreneurship with a high percentage, it provides ideas that promote profit and a positive business image and this situation provides high importance to creative ability for ecopreneurship.

Recommendations for Future Research

- a) Using professional creative indexes and scales such as Torrance Test can provide high reliability for research on ecopreneurship and creativity.
- b) Instead of small sample, country-based sample can be chosen for creativity and ecopreneurship studies; so a wider research will provide higher consciousness about cultural differences.

Recommendations for Implementations

In today's world, for-profit organizations have a great importance in order to make a contribution to increase outputs with regard to higher volume of production for societies; especially in the globalization phase, most organizations are international or multinational. This situation provides business practices for having the highest profit as benefiting from the potential markets in the world. However, as

a result of high production volume, ecology is damaged. In the beginning of this damage, this situation was omitted but when effect of media has increased on consumers and societies through dissemination of information related to ecological damage of businesses, this created an important ecological knowledge for consumers. Therefore, ecological friendly understanding for both production systems and marketing became very popular in order to attract attention of ecologic-consciously consumers.

Even if businesses have willingness to behave ecologically in the markets, improving ecological perceptions and practices of these businesses should be discussed in the organizations; because organizational tendency with regard to being ecologic will create an opportunity to exist in the future markets.

The concepts of ecopreneurship and ecopreneur are discussed in the Chapter 1. It indicates that many for profit organizations transfer their perception to behave as ecologic or establishing ecologic businesses. But, willingness to create an ecologic friendly organization or being an ecopreneur is not as easy as thought; because ecopreneurs should have an idea to process and to implement it. Actually the key word for reaching success on that field is “finding an idea”. Creativity is a concept which provides ideas in order to innovate them. Therefore creative ability of members of organizations is crucial for having organizational success. If the importance of creativity is understood by organizations, they can apply some policies in order to improve the creative ability. Therefore, organizations should design creative workplace; because this kind of workplace will provide a motive to create a new idea. On the other hand, creative workplaces provide positive contribution to performance, process and people of the organization by (Martens, 2011: 64):

- cost saving, risk control, environmental sustainability;
- supporting work processes, supporting communication;
- improving employee satisfaction, attraction and retention of staff, supporting and providing organizational flexibility.

The increasing importance of organizations which have creative workplace indicates that managers of organizations which have not creative workplaces require making regular changes on workplaces in order to have an effective organization. So,

they can make idea generation. This will provide a contribution to ecologic innovation; because ideas are necessary to create eco-businesses.

Governments have understood the importance of ecology day by day with the societies and they have noticed some organizations damage to the ecologic system because of their production process and wastes. On the other hand, many businesses have not been using recycling methodology. This situation indicates that businesses are totally (except ecologic businesses and ecopreneurs) enemy of the ecology. For that reason, governments should make a legal description about being ecologic organization and providing some standards for creating an ecologic organization. Then, governments should control these organizations according to ecologic standards.

Local governments can take important role in order to control businesses. Therefore, an ecologic standards department should be designed under the local governments and it should provide ecologic certification for businesses and a distinctive tax policy should be applied to businesses which have ecologic certification. Actually, rewarding and punishing system should be designed by governments and they should give authorities to local governments. Taxes should be created according to ecologic grade of organizations which can be given to businesses yearly by the department of ecologic standards. It means if a business has high grade, it will pay the least tax rate. This is rewarding system. The least ecologic grade for a business means implementation of high tax rate to it. This system will provide businesses to transfer their operations to ecologic ones; so creating ecologic businesses and the amount of ecopreneurs will be increased.

Non-governmental organizations should be created with regard to ecologic-centric ideas; and they should make some studies on businesses. Especially, lobbying activities to governments by these organizations will have great contribution to the field of ecology. On the other hand, international non-governmental organizations have a great importance to disseminate ecologic understanding. It is obvious that every organization is established according to expertise of it. Therefore non-governmental organizations have some specific field to discuss ecologic topics in the international area. International Dark Sky Association is one of the non-governmental organizations which try to give information and to create knowledge

on ecology in order to preserve the night conditions in the cities. Main purpose of this organization is to prevent light pollution in cities. Thanks to this movement, energy saving can be provided (Çakır, 2012: 24). Even if Turkey has many ecologic non- governmental organizations, they should improve their studies on ecologic areas and they should create awareness on the society via media. Then they should reach international standards to be internationally known non-governmental organizations, because, ecologic protection cannot only be achieved by domestic organizations. The world is a planet which should be protected ecologically. Therefore, both governments and societies should give great importance to studies of non-governmental organizations.

In addition to non-governmental organizations, governmental organizations should revise their policies of entrepreneurial subsidies. For example, Small and Medium Enterprises Development Organization should be supporting ecopreneurship projects. So, individuals will have a tendency to create entrepreneurship ideas which have ecologic origin.

Business practices should be oriented to environmental protection, renewable and sustainable energy. Therefore, EcoIQ (Ecologic Intelligent Quota) should be designed for every organization. International and national ranking should be made by this standard, so it will provide an ecologic consciousness on consumers and managers of organizations. An example of this type of innovation has been made by Green Metric World University Ranking. In this ranking scale, there are some criteria to evaluate universities. These criteria are setting and infrastructure (percentage of university budget for sustainability effort, number of scholarly publications on environment and sustainability published, number of scholarly events related to environment and sustainability, number of student organizations related to environment and sustainability, etc.), energy and climate changes (renewable energy resources, energy conservation program, green building elements, policy to reduce the use of paper and plastic in campus, etc.), waste (recycling program for university waste, toxic waste recycling, etc.), water (water conservation program, piped water, etc.) and transportation (bicycle and pedestrian policy on campus, campus buses, etc.) These are titles to examine universities and ranking them with regard to ecologic consciousness. Universities are competing to win a degree inside of Green

Metric (<http://greenmetric.ui.ac.id/id/page/criteria>, access date: 20/12/2012). For example, Sabancı (Ranked 144) and Bilkent (Ranked 209) Universities are involved in this scale from Turkey. On the other hand, University of Connecticut (Ranked 1), University of Nottingham (Ranked 2), and University College Cork National University of Ireland (Ranked 3) are first three from other countries.

EcoIQ (Ecologic Intelligent Quota) should be created for individuals and organizations by scholars; because both individuals and organizations should be evaluated in order to understand their ecologic orientation level.

Creativity level and ecologic oriented entrepreneurship level should be supported by seminars, training programs and television programs; because human-being consumes limited resources of the planet in a quick manner. For that reason, European Union, Turkey's national agencies and other nations should provide ecology based projects for the sake of the future; because human being lives together in the same planet.

REFERENCES

Books

Akdemir, A. (1996). *Giriřimcilik Kùltürü: Para ile Mutlu Olunur mu?*. Kùtahya: Kiřisel Yayın.

Anderson, T. L. and Leal, D. R. (1997). *Enviro-Capitalists: Doing Good While Doing Well*. USA: Rowman & Littlefield.

Armstrong, M. (2011). *How to be an Even Better Manager*. United Kingdom: Koganpage publishing, 8th edition.

Bentley, T. (1999). *Takımınızın Yeteneklerini Geliřtirmede Yaratıcılık*. İstanbul: Hayat Yayınları: 34 Çev. Onur Yıldırım.

Bilig, M. (1999). *Freudian Repression*. United Kingdom: Cambridge University Press, First Edition.

Bono, A. (1995). *Six Thinking Hat*. United Kingdom: Granica Publishing, 1st edition.

Brown, L. R. (2006). *Dünyayı Nasıl Tükettik*. İstanbul: Türkiye İş Bankası Kùltür Yayınları. 1. Edition.

Buzan, T. and Buzan, B. (2006). *The Mind Map Book*. United Kingdom: BBC Active Publishing, 1st Edition.

Carroll, G. R. and Hannan, M. T. (2000). *The demography of corporations and industries*. USA: Princeton, NJ: Princeton University Press.

Chrisman, J. and Kellermanns, F. (2006). Entrepreneur. In Micheal hitt & Duane Ireland, entrepreneurship. United Kingdom: Victoria: Lackwell publishing, 61-63.

Çalgüner, T. (2003). *Çevre mi Ekoloji Mi?*. İstanbul: Nobel Yayın Dağıtım, 1. Edition.

Duenk, L. G. (1963). *A Study of the Concurrent Validity of the Minnesota Tests of Creative Thinking*. USA: Publication of Minnesota University.

Flavin, C. and Gardner, G. (2006). *State of The World 2006*. İstanbul: Worldwatch Institute, 23rd edition by Tema Vakfı.

Hisrich, R. and Kearney, C. (2011). *Corporate Entrepreneurship: How to Create a Thriving Entrepreneurial Spirit Throughout Your Company*. USA: McGraw-Hill Publishing, first edition.

Jewkes, J., Sawers, D. and Stillerman, R. (1961). *The Sources of Invention*. London: Macmillan, St. Martin's Press.

Kalaycı, Ş. (2010). *SPSS Uygulamalı Çok Değişkenli İstatistik Teknikleri*. Ankara: Asil Yayıncılık, 5. Baskı.

Kao, J. (1991). *Managing Creativity*. USA: Englewoof Cliffs, NJ: Prentice- Hall.

Kris, E. (1976). *On Preconscious mental processes*. In A. Rothenberg & C. Hausman (Eds). *The creativity Question* (135-143) Durham, Nc. Duke University Press.

Kubie, L. (1958). *Neurotic Distortion of the Creative Process*. Lawrence, KS: University of Kansas Press.

Labudovic, A. and Vukusic, N. (2009). *Field Guide: How to be a Graphic Designer*. United Kingdom: Rockport Publishers, 1st edition.

Mayer, R. E. (1995). *The Search for Insight*. In Sternberg R. J. & Davidson, J. E. (Eds) *The Nature of Insight*. USA: The MIT Press, Cambridge, Mass.

Muslu, Y. (2000). *Ekoloji ve Çevre Sorunları / Ecology and Environmental Problems*. İstanbul: Aktif yayınevi, 1. Basım.

Nemiro, J., Beyerlein, M. M., Bradley and L., Beyerlein, S. (2008). *The Handbook of High- Performance Virtual Teams: A Tool Kit for Collaborating Across Boundaries*. United Kingdom: Jossey- Bass Publishing, 1st Edition.

Odum, E. P. and Barrett, G. W. (2004). *Fundamentals of Ecology*. United Kingdom: Thomson Brooks/ Cole Publishing, 5th Edition.

Rossmann, J. (1931). *The psychology of the inventor*. Washington, DC: Inventor's Publishing.

Sanders, G. L. (2011). *Developing New Products and Services: Learning, Differentiation, and Innovation*. USA: Business Expert Press, 1st edition.

Sawin, J. L. and Hughes, K. (2007). *State of The World 2007*. USA: Worldwatch Institute, 24th edition

Schaefer, F., Luksch, U., Steinbach, N., Cabeça J. and Hanauer, J. (2006). *Ecological Footprint and Biocapacity*. European Communities, 2006 edition.

Stevenson, N. (2000). *10 Minute Guide to Motivating People*. USA: Alpha Books Publishing, 2nd edition.

Sungur, N. (1992). *Yaratıcı Düşünce*. İstanbul: Özgür Yayın Dağıtım, 1st edition.

Talberth, J. (2008). *State of The World 2008*. USA: Worldwatch Institute, 25th edition

Tekin, M. (2009). *Girişimcilik*. İstanbul: Günay Matbaacılık, 5. Baskı.

Top, S. (2006). *Giriřimcilik Keřif Süreci*. İstanbul: Beta Yayınları.

Torrance, E. P. (1966). *The Torrance Tests of Creative Thinking- Norms- Technical Manual Research Edition- Verbal Tests, Forms A and B- Figural Tests, Form A and B*. Princeton, NJ USA: Personnel Press.

Torrance, E. P. (1974). *Norms and Technical manual: Torrance Test of Creative Thinking* (Revised Edition), Bensenville, IL Scholastic Testing Service.

Yamamoto, K. (1964). *Minnesota Tests of Creative Thinking and Writing*. USA: Publication of Kent State University.

Articles

Adner, R. and Levinthal, D. (2001). Demand Heterogeneity and Technology Evolution: Implications for Product and Process Innovation. *Management Science*, 47 (5): 611-628.

Al- alak, B. A. M. and Eletter, S. (2010). Islamic entrepreneurship: An Ongoing Driver for Social Change. *Interdisciplinary Journal of Contemporary Research in Business*, 1 (12): 81- 97.

Allen, J. and Malin, C. (2008). *Sand Natural Resources*, 21: 828- 844.

Aslan, E. (2001). Torrance Yaratıcı Düşünce Testi'nin Türkçe Versiyonu. *M. Ü. Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi*, 14: 19-40.

Austin, J. and Reficco, E. (2009). Corporate Social Entrepreneurship. *Harvard Business Review*, March 3: 1-8.

Averill, J. R. (1999). Individual Differences in Emotional Creativity: Structure and Correlates. *Journal Of Personality*, 67 (2): 331-371.

Balasundaram, N. and Uddin, M. S. (2009). Determinants of Key Favorable Environment for Intrapreneurship Development: An empirical Study of Some Selected Companies in Chittagong, Bangladesh. *Universităţii Petrol – Gaze din Ploieşti, LXI* (2): 29-35.

Balcı, F. İ. (2011). Girişimciliğe Ekolojik Yaklaşım: Eko- Girişimcilik Teorik Çerçeve. *Nevsehir University Journal of Social Sciences*, 1: 187- 206.

Çakır, Ö. (2012). Işık Kirliliğine Karşı Karanlık Devrimi Yolda. *EcoIQ Dergisi*, 23: 24-28.

Carroll, G. R. and Khessina, O. M. (2005). The Ecology of Entrepreneurship. *International Handbook Series on Entrepreneurship*, 2: 167- 200.

Chegini, M. and Khoshtinat, B. (2011). Study of Relationship between Entrepreneurial Skills and Organizational Entrepreneurship. *Australian Journal Of Basic & Applied Sciences*, 5 (4): 165-172.

Chui, L. and Curtis, M. B. (2010). Intrepreneurs and Innovation. *Strategic Finance*, November: 49- 53.

Cohen, B. and Winn, M. I. (2007). Market Imperfections, opportunity and sustainable entrepreneurship. *Journal of Business Venturing*, 2: 29-49.

Cropley, D. H., Kaufman, J. C. and Cropley, A. J. (2011). Measuring Creativity for Innovation Management. *Journal of Technology Management & Innovation*, 6 (3): 13-29.

Dean, T. J. and McMullen, J. S. (2007). Toward a theory of sustainable entrepreneurship: Reducing environmental degradation through entrepreneurial action. *Journal of Business Venturing*, 22: 50-76.

Dizgah, M. R., Gilaninia, S., Alipour, H. R. and Asgari, A. A. (2011). High Performance Human Resource and Corporate Entrepreneurship: the Mediating Role of Organizations Citizenship Behavior and Procedure Justice. *Australian Journal Of Basic & Applied Sciences*, 5 (3): 492-499.

Dobrev, S. D. and Barnett, W. P. (2005). Organizational Roles And Transition To Entrepreneurship. *Academy Of Management Journal*, 48 (3): 433-449.

Erdoğan, M. Y. (2006). Yaratıcılık Değerlendirme Ölçeğinin Türk Kültürüne Uyarlanması. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, 7 (12): 61-79.

Erez, M. and Nouri, R. (2010). Creativity: The Influence of Cultural, Social and Work Contexts. *Management and Organization Review*, 6 (3): 351- 370 doi: 10.1111/j.1740-8784.2010.00191.x.

Filipkowski, A. (2011). Introducing Future Engineers to Sustainable Ecology Problems: A Case Study. *European Journal of Engineering Education*, 36 (6): 537-546.

Fillis, I. and Rentschler, R. (2010). The Role of Creativity in Entrepreneurship. *Journal of Enterprising Culture*, 18 (1): 49-81, doi:10.1142/S0218495810000501.

Ford, S., Garnsey, E., and Probert, D. (2010). Evolving corporate entrepreneurship strategy: technology incubation at Philips. *R&D Management*, 40 (1): 81-90.

Freedman, M. and Jaggi, B. (2011). Global Warming Disclosures: Impact of Kyoto Protocol Across Countries. *Journal of International Financial Management and Accounting*, 22 (1): 46-90.

Ghemawat, P. (2002). Competition and Business Strategy in Historical Perspective. *Business History Review*, 76 (1): 37-74, doi: <http://dx.doi.org/10.2307/4127751>.

Gibbs, D. (2009). Sustainability Entrepreneurs, Ecopreneurs and the Development of Sustainable Economy. *Greener Management International*, GMI 55: 63-78.

Guth, W. D. and Ginsberg, A. (1990). Guest editors' introduction: Corporate entrepreneurship. *Strategic Management Journal*, 11(4): 5–15.

Haberkorn, C. (2007). Transforming the Invisible: The Postmodernist Visual Artist as a Contemporary Mystic- A Review. *California Institute of Integral Studies*, Spring: 4-25.

Harbi, S. E., Anderson, A. R. and Ammar, S. H. (2010). Entrepreneurs and the environment: Towards a typology of Tunisian ecopreneurs. *International Journal of Entrepreneurship and Small Business*, 10 (2): 181-204.

Harryson, J. S. (2008). Entrepreneurship through Relationships- Navigatng from Creativity to Commercialisation. *R&D Management*, 38 (3): 290-310.

Hasırcı, D. and Demirkan, H. (2007). Understanding the Effects of Cognition in Creative Decision Making: A Creative Model for Enhancing the Design Studio Process. *Creative Research Journal*, 19 (2-3): 259-271.

Heavey, C., Simsek, Z., Roche, F. and Kelly, A. (2009). Decision Comprehensiveness and Corporate Entrepreneurship: The Moderating Role of Managerial Uncertainty Preferences and Environmental Dynamism. *Journal Of Management Studies*, 46(8): 1289-1314.

Ireland, R. D., Hitt, M. A., Camp, S. M. and Sexton, D. L. (2001). Integrating Entrepreneurship and Strategic Management Actions to Create Firm Wealth. *Academic of Management Executive*, 15 (1): 49- 63.

Ireland, R. D. and Webb, J. W. (2007). Strategic Entrepreneurship: Creating competitive advantage through streams of innovation. *Business Horizons* 50: 49-59.

Ireland, R., Covin, J. G. and Kuratko, D. F. (2009). Conceptualizing Corporate Entrepreneurship Strategy. *Entrepreneurship: Theory & Practice*, 33(1), 19-46.

Isaak, R. (2002). The Making of Ecopreneur. *Centre for Sustainability Management*, 38: 81- 91.

Johnson, D. (2001). What is innovation and entrepreneurship? Lessons for larger organizations. *Industrial and Commercial Training*, 33 (4): 135- 140.

Jorgenson, A. K. (2007). Do the Foreign Investments Harm the Air We Breathe and the Water We Drink?. *Organization & Environment*, 20 (2): 137-156, doi: 10.1177/1086026607302153.

Katsikis, I. N. and Kyrgidou, L. P. (2009). Entrepreneurship in Teleology: The Variety of the Forms. *International Journal of Entrepreneurial Behaviour & Research*, 15 (2): 209-231.

Keogh, P. D. and Polonsky, M. J. (1998). Environmental commitment: a basis for environmental entrepreneurship?. *Journal of Organizational Change Management*, 11 (1): 38-49.

Kimmel, C. E. and Hull, R. B. (2012). Ecological Entrepreneurship Support Networks: Roles and Functions for Conservation Organizations. *Geoforum*, 43: 58-67.

Kirkwood, J. and Walton, S. (2010). What motivates ecopreneurs to start business? *International Journal of Entrepreneurial Behaviour & Research*, 16 (3): 204-228.

Korres, G. M., Papanis, E., Kokkinou, A. and Giavrimis, P. (2011). Measuring Entrepreneurship and Innovation Activities in E.U. *Interdisciplinary Journal Of Contemporary Research In Business*, 3(3): 1155-1167.

Kumazawa, R. and Callaghan, M. S. (2012). The Effect of Kyoto Protocol on Carbon dioxide Emissions. *Journal of Economics and Finance*, 36: 201-210, doi: 10.1007/s12197-010-9164-5.

Linnanen, L. (2002). An Insider's Experiences with Environmental Entrepreneurship. *GMI* 38: 71-80.

Lordkipanidze, M., Brezet, H. and Backman, M., (2005). The Entrepreneurship Factor in Sustainable Tourism Development. *Journal of Cleaner Production* 13 (8): 787–798.

Luke, B., Kearins, K. and Verreynne, M. L. (2011). Developing a conceptual framework of strategic entrepreneurship. *International Journal of Entrepreneurial Behaviour & Research*, 17 (3): 314- 337.

Lumpkin, G. T. and Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1): 135–172.

Madjar, N. (2008). Emotional and informational support from different sources and employee creativity. *Journal Of Occupational & Organizational Psychology*, 81(1): 83-100.

Madjar, N. and Oldham, G. R. (2006). Task Rotation and Polychronicity: Effects on Individuals' Creativity. *Human Performance*, 19(2): 117-131. doi:10.1207/s15327043hup1902_2.

Martens, Y. (2011). Creative Workplace: Instrumental and Symbolic Support for Creativity. *Facilities*, 29 (1): 63-79, doi: 10.1108/02632771111101331.

Maslow, A. H. (1969a). The Farther Reaches of Human Nature. *International Journal of Transpersonal Psychology*, 1 (1): 1-9.

Maslow, A. H. (1969b). Toward a Humanistic Biology. *American Psychologist*, 24: 724-735.

Mednick, S. A. (1962). The Associative Basis of The Creative Process. *Psychological Review*, 69: 220-232.

Mieg, H. A., Bedenk, S. J., Braun, A. and Neyer, F. J. (2012). How Emotional Stability and Openness to Experience Support Invention: A Study with German Independent Inventors. *Creativity Research Journal*. 24 (2-3): 200-207, doi: 10.1080/10400419.2012.677341.

Mol, C.J. and Hurk, P. V. D (2006). Innovation is about survival. *Philips Research Password*, 27: 12-15.

Mrnarevic, P. (2011). Creativity- Vice or Virtue?: A Study of Different Visions of Creativity. *Political Thought: Croation Political Science Review*, 48 (4): 7-25.

Muñoz-Doyague, M. F., González-Álvarez, N., and Nieto, M. (2008). An Examination of Individual Factors and Employees' Creativity: The Case of Spain. *Creativity Research Journal*, 20 (1): 21-33. doi:10.1080/10400410701841716.

Murty, P. and Purcell, T. (2005). Discoveries Throughout Conceptual Design. *Key Centre of Design Computing and Cognition, University of Sydney, Australia*: 2-8.

Offin, P. T. (2010). A review of environmental entrepreneurship as an agenda for rural development: The Case of Ghana. *Journal of African Studies and Development*, 2 (2): 27- 34.

Öncü, T. (2003). Torrance Yaratıcı Düşünme Testleri-Şekil Testi Aracılığıyla 12-14 Yaşları Arasındaki Çocukların Yaratıcılık Düzeylerinin Yaş ve Cinsiyete Göre Karşılaştırılması. *Ankara Üniversitesi Dil ve Tarih Coğrafya Fakültesi Dergisi*, 43 (1): 221-237.

Orsato, R. J. (2006). Competitive Environmental Strategies: When Does it Pay to be Green? *California Management Review*, 48 (2): 127- 143.

Pastakia, A. (2002). Assessing Ecopreneurship in the Context of a Developing Country. *Centre for Sustainability Management*, 38: 93-108.

Pastakia, A. R. (1998). Grassroots Ecopreneurs: Change Agents for a Sustainable Society. *Journal of Organizational Change Management*, 11 (2): 157-173.

Pretorius, M., Millard, S. M. and Kruger, M. E. (2005). Creativity, Innovation and Implementation: Management Experience, Venture Size, Life Cycle Stage, Race and Gender as Moderators. *South African Business Management*, 36 (4): 55-68.

Raudsepp, E. (1979). How Creative Are You?. *Personnel Journal*, 58: 218-222.

Rivera, M. E. K. (2006). Rediscovering the Later Version of Maslow's Hierarchy of Needs: Self- Transcendence and Opportunities for Theory, Research, and Unification. *Review of General Psychology*, 10 (4): 302-317.

Roberts, D. and Woods, C. (2005). Changing the world on a shoestring: The concept of social entrepreneurship. *Business Review*, Autumn: 45- 51.

Rogers, C. R. (1954). Towards a Theory of Creativity." *ETC: A Review of General Semantics*, 11: 249-260.

Sánchez, J. C. (2011). Entrepreneurship: Introduction. *Psicothema*, 23 (3): 424-426.

Saraçoğlu, M., Duran, C. and Takın, E. (2010). Girişimcilikte Yaratıcılığın Üç Boyutu: Birey, Süreç ve Ürün. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 10 (2): 1-14.

Schaltegger, S. (2002). A Framework for Ecopreneurship. *Centre for Sustainability Management*, 38: 45- 58.

Schaltegger, S., Wagner, M. (2011). Sustainable Entrepreneurship and sustainability innovation: categories and interactions. *Business Strategy and The Environment*, 20 (4): 222- 237.

Schaper, M. (2002). The Essence of Ecopreneurship. *GMI*, 38: 26-30.

Schmelter, R., Mauer, R., Börsch, C., and Brettel, M. (2010). Boosting corporate entrepreneurship through HRM practices: Evidence from German SMEs. *Human Resource Management*, 49(4): 715-741.

Schoonhoven, C.B. and Romanelli, E. (2002). The entrepreneurship dynamic. *Academy of Management Review*, 23 (4): 622–624.

Shane, S. and Venkataraman, S. (2000). The Promise of Entrepreneurship as A Field of Research. *Academy of Management Review*, 25 (1): 217-226.

Stevenson, H. H. and Jarillo, J. (1990). A Paradigm Of Entrepreneurship: Entrepreneurial Management. *Strategic Management Journal*, 11(4): 17-27.

Stewart, W. H. S., Watson, W. E., Carland, J. C. and Carland, J. W. (1998). A Proclivity For Entrepreneurship: A Comparison of Entrepreneurs, Small Business Owners, and Corporate Managers. *Journal of Business Venturing*, 14: 184-214.

Summers, I. and White, M. D. E. (1976). Creativity Techniques: Toward Improvement of the Decision Process. *Academy of Management Review*, 1 (2): 99-107.

Tahereh, R. and Mahnoush, S. (2012). Creativity. *Australian Journal of Basic and Applied Sciences*, 6 (2): 25-28.

Tan, W. L., Williams, J. and Tan, T. M. (2005). Defining the ‘Social’ in ‘Social Entrepreneurship’: Altruism and Entrepreneurship. *International Entrepreneurship and Management Journal*, 1: 353-365.

Taylor, D. W. and Walley, E. E. (2002). Opportunist, Champions, Mavericks...? A Typology of Green Entrepreneurs. *Journal of Entrepreneurship and Small Businesses*, 1 (1): 56-69.

Thatcher, S. M. B. and Brown, S. A. (2010). Individual Creativity in Teams: The Importance of Communication Media Mix. *Decision Support Systems*, 49: 290-300.

Thompson, J. L. (1999). A Strategic Perspective of Entrepreneurship. *International Journal of Entrepreneurial Behaviour & Research*, 5(6): 279-296.

Thorgren, S., Örtqvist, D. and Wincent, J. (2009). A cause–effect study of inter-firm networking and corporate entrepreneurship: initial evidence of self-enforcing spirals. *Journal Of Developmental Entrepreneurship*, 14(4): 355-373.

Ulhøi, J.T. (2005). The Social Dimensions of Entrepreneurship. *Technovation*. 25 : 939–946.

Venetoulis, J. and Talberth, J. (2008). Refining The Ecological Footprint. *Environmental Development of Sustainability*, 10: 441-469 doi: 10.1007/s10668-006-9074-z.

Wackernagel, M., Onisto, L., Bello, P., Linares, A. C., Falfan, I. S. L., Garcia, J. M., Guerrero, A. I. S. and Guerrero, C. S. (1999). National natural capital accounting with the ecological footprint concept. *Ecological Economics* 29 (3): 375- 390.

Wiedmann, T. and Barrett, J. (2010). A Review of the Ecological Footprint Indicator—Perceptions and Methods. *Sustainability*, 2: 1645- 1693. doi: 10.3390/su2061645.

Williams, F. (1980). *Creativity Assessment Packet, Examiner's Manual*. Pro. Ed. Texas.

Yusuf, S. (2009). From Creativity to Innovation. *Technology in Society*, 31: 1-8.

Zahra, S. A. (1996). Governance, Ownership, and Corporate Entrepreneurship: The Moderating Impact of Industry Technological Opportunities. *Academy of Management Journal*, 39(6): 1713-1735.

Zahra, SA, I Filatotchev and Wright, M. (2009). How do threshold firms sustain corporate entrepreneurship? The role of boards and absorptive capacity. *Journal of Business Venturing*, 24(3): 248–260.

Zampetakis, L. A., Bouranta, N. and Moustakis, V. S. (2010). On the Relationship between Individual Creativity and Time Management. *Thinking Skills and Creativity*, 5: 23-32.

Zampetakis, L. A., Manios, T. and Moustakis, V. (2006). Greening the Entrepreneurship Syllabus: An Exploratory Approach. *Environmental Engineering and Management Journal*, 5 (2): 135-144.

Dissertations

Archer, R. G. (2009). *Enterpreneurship, Poverty Alleviation and the Natural Environment: Examining the Structure and Function or Green Microfinance*, (Unpublished PhD Dissertation), Virginia University.

Bender, M. T. (2006). *Resim- İş Eğitimi Öğrencilerinde Duygusal Zeka ve Yaratıcılık İlişkisi*. (Yayınlanmamış Doktora Tezi). İzmir: Dokuz Eylül Üniversitesi Eğitim Bilimleri Enstitüsü.

Çakar, U. (2007). *Ekolojik Örgüt Modeli Önerisi: Epistemolojik Yaklaşım*. (Yayınlanmamış Doktora Tezi). İzmir: Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü.

Erol, O. (2010). *Meslek Yüksekokulu Öğrencilerinin Bilgi ve İletişim Teknolojilerini Kullanma Sıklıkları İle Yaratıcılık Algıları Arasındaki İlişkinin İncelenmesi*. (Yayınlanmamış Yüksek Lisans Tezi). Isparta: Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü.

Güldaş, K. (2009). *Yönetici Hemşilerin Yaratıcılık Düzeyleri ve Liderlik Tarzlarının Belirlenmesi*. (Yayınlanmamış Yüksek Lisans Tezi). İstanbul: Haliç Üniversitesi Sağlık Bilimleri Enstitüsü.

Johnson, J. E. (2011). *Why Some Leaders Can Build New Organizations: Leadership, Individual Differences, and Gender in Entrepreneurship*. (Unpublished PhD Dissertation). The Pennsylvania State University The Graduate School College of Liberal Arts.

Kainrath, D. (2009). *Ecopreneurship in Theory and Practice- A Proposed Emerging Framework for Ecopreneurship*. (Published Master Dissertation). Umeå School of Business.

Öztürk, K. S. (2007). *Yaratıcı Düşünmeye Dayalı Öğrenme Yaklaşımının Öğrencilerinin Yaratıcı Düşünme ve Problem Çözme Becerilerine Etkisi*. (Yayınlanmamış Yüksek Lisans Tezi). Eskişehir: Osmangazi Üniversitesi.

Tunç, B. (2007). *İşletmelerde Yaratıcılık Yenilikçilik ve Girişimcilik Yönetimi*. (Yayınlanmamış Yüksek Lisans Tezi), İzmir: Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü.

Internet Sources

Boschee, J. and McClurg, J. (2003). *Toward a better understanding of social entrepreneurship: Some important distinctions*. <http://www.caledonia.org.uk> (18.04.2012).

Plsek, P. E. (1996). *Working Paper: Models for the Creative Process*. <http://directedcreativity.com/pages/WPModels.html>, (03.05.2012).

Volery, T. (2002). *Ecopreneurship: Rationale, current issues and future challenges*. http://www.igw.unisg.ch/rencontres/band2002/F_11_Volery.pdf (18.04.2012).

University Ranking with regard to Green Logic, <http://greenmetric.ui.ac.id/id/page/criteria> (20.12.2012)

APPENDICES

APPENDIX 1

Uygulanan Soru Formu / Applied Questionnaire

Sayın Giriřimci;

“Bireysel yaratıcılığın eko girişimciliğe etkisi” üzerine bir yüksek lisans tezi hazırlamaktayım. Geri Kazanım Grubu alanında çalışan bir girişimci olarak hazırladığımız soru formlarını doldurmanız çalışmamız için çok önemli bir katkı olacaktır. Soru formunu doldurmak yaklaşık olarak 20 dakika almaktadır. Değerli zamanınızı çalışmamıza ayırıp vereceğiniz bilgiler, çalışmamız için büyük bir önem taşımaktadır. Bu çalışma sonucunda elde edilecek bilgiler bilimsel amaçla kullanılacak olup cevaplarınız tamamen gizli tutulacaktır.

Çalışmama gösterdiğiniz değerli katkılardan dolayı şimdiden teşekkür eder, çalışmalarınızda başarılar dileriz.

Saygılarımla

Erhan AYDIN

İrtibat Adresi ve Telefonlar

Uşak Üniversitesi İktisadi ve İdari Bilimler Fakültesi

1 Eylül Yerleşkesi Uşak

Fax: 0276 221 21 32 Tel: 0276 221 21 33

I. BÖLÜM- KİŞİSEL BİLGİLER

Aşağıda tanıtıcı özelliklerinizi içeren sorular yer almaktadır. Size uygun gelen seçeneği (X) işareti koyarak belirtiniz.

1. Cinsiyetiniz:

☐ Erkek

☐ Kadın

2. Yaşınız: _____

3. Doğum Yeriniz: _____

4. Medeni Haliniz:

☐ Evli

☐ Bekâr

5. Mesleğiniz: _____

6. Eğitim Düzeyiniz:

☐ İlkokul ☐ Ortaokul ☐ Lise ☐ Üniversite ☐ Lisansüstü

7. Kaç Yıldır Çalışma Yaşamı İçindesiniz: _____

8. Firmanızdaki Çalışan Sayısı: _____

9. İşletme Yaşı: _____

II. BÖLÜM: EKOİRİŞİMCİLİK ÖLÇEĞİ						
(1) Kesinlikle Katılmıyorum (2) Katılmıyorum (3) Kararsızım (4) Katılıyorum (5) Kesinlikle Katılıyorum						
1	Doğal çevre benim için çok önemlidir.	1	2	3	4	5
2	Bu alanda bir girişime başlamak her zaman istediğim bir şeydi.	1	2	3	4	5
3	Yaptığım bu işin doğal çevrede oluşturacağı olumsuz etkiyi minimum düzeye indirmek benim için yasal bir zorunluluktur.	1	2	3	4	5
4	Ekolojik Kültürü yaymak için çevre kuruluşlarının harcadığı çaba çok önemlidir	1	2	3	4	5
5	Yaptığım bu işin doğal çevrede oluşturacağı olumsuz etkiyi minimum düzeye indirmek benim için çevreye karşı bir görevdir.	1	2	3	4	5
6	Yaptığım bu işin doğal çevrede oluşturacağı olumsuz etkiyi minimum düzeye indirmek benim için kurumsal bir yüküdür.	1	2	3	4	5
7	Arkadaşlarım ve ailem çevreye karşı ilgisizdir.	1	2	3	4	5
8	Doğal çevreyle ilgili sosyo- ekonomik faaliyetleri etkileyen bilgilere erişim (bir girişim oluşturma olanağı, hibe, rekabet, bu alandaki mal ve hizmetler için talep) kolaydır.	1	2	3	4	5
9	Bu faaliyet alanında yapılacak olan yatırımlara yönelik teşvikler potansiyel eko girişimcilerin ilgisini çekmektedir.	1	2	3	4	5
10	Çevre kuruluşlarından alınan yardımlar yararlıdır (Daha önceden herhangi bir yardım kuruluşundan yardım talep etmediyseniz bu maddeyi geçiniz.)	1	2	3	4	5
11	Kısa vadede (5 yıl içinde) Türkiye’de ekolojik ürünlere yönelik artan bir talep olacaktır.	1	2	3	4	5
12	Bu iş alanında faaliyet göstermemde tecrübelerimin büyük bir etkisi vardır (Bu alanda daha önceden bir tecrübeniz yoksa bu soruyu geçiniz).	1	2	3	4	5

13	Sektörümdeki işletmeler kar elde etmektedir.	1	2	3	4	5
14	Bu işletmenin yaptığı faaliyet öncelikle çevrenin korunmasını amaçlamaktadır.	1	2	3	4	5
15	İşletmemi kurmamda, geçmişte çevreye yönelik faaliyetlerle ilgilenmemin etkisi vardır.	1	2	3	4	5

III. BÖLÜM : “NE KADAR YARATICISINIZ?” ÖLÇEĞİ						
(1) Kesinlikle Katılmıyorum (2) Katılmıyorum (3) Kararsızım (4) Katılıyorum (5) Kesinlikle Katılıyorum						
1	Belirli bir sorunu çözerken her zaman doğru işlemleri takip ettiğim konusunda büyük ölçüde emin olarak çalışırım.	1	2	3	4	5
2	Cevabını alamayacağımı umduğum soruları sormak boş yere vakit kaybıdır.	1	2	3	4	5
3	Sorun çözmede adım adım mantıklı aşamaların en iyi yöntem olduğuna inanırım.	1	2	3	4	5
4	Zaman zaman topluluk içinde bazı insanları şaşırtacak kadar değişik fikirler ortaya atarım.	1	2	3	4	5
5	Başkalarının benim hakkımdaki düşünceleri konusunda oldukça fazla kafa yorarım.	1	2	3	4	5
6	İnsanlık için özel şeyler yapabileceğime inanıyorum.	1	2	3	4	5
7	Benim için doğru olanları yapmak, başkalarının onayını kazanmaktan daha önemlidir.	1	2	3	4	5
8	Olaylar karşısında emin davranmayan kişilere karşı saygımı yitiririm.	1	2	3	4	5
9	Güç problemlerin çözümü ile bir süre uğraşabilirim.	1	2	3	4	5
10	Sırasında bazı konulara kendimi fazlasıyla kaptırırım.	1	2	3	4	5
11	Çoğunlukla en iyi fikirler özellikle meşgul olmadığım zamanlarda aklıma gelir.	1	2	3	4	5
12	Bir sorunun çözümüne yaklaştığımda önsezilerime ve doğruluk veya yanlışlık hislerime güvenirim.	1	2	3	4	5
13	Sorun çözdüğüm zamanlar, sorunun analiz aşamasında daha hızlı, elde ettiğim bilgiyi sentezleme aşamasında ise daha yavaş çalışırım.	1	2	3	4	5
14	Bir şeyler biriktirme ile ilgili uğraşları severim.	1	2	3	4	5
15	Hayal alemine dalmak, bir çok önemli projenin ortaya çıkmasını sağlar.	1	2	3	4	5
16	Eğer iki meslek arasında seçim yapmam istenseydi, bir kaşif yerine bir tıp doktoru olmayı tercih ederdim.	1	2	3	4	5

17	Aynı toplumsal sınıf ve aynı meslek grubundan olan kişilerle daha kolay anlaşabilirim.	1	2	3	4	5
18	İleri düzeyde estetik duyarlılığına sahibim.	1	2	3	4	5
19	Sorun çözünde önseziler güvenilmez rehberdir.	1	2	3	4	5
20	Başkalarına düşüncelerimi beğendirmekten ziyade, yeni fikirler ortaya çıkarmayı severim.	1	2	3	4	5
21	Kendimi yetersiz gördüğüm alanlardan kaçınmaya çalışırım.	1	2	3	4	5
22	Bana göre bilginin kaynağı içeriğinden daha önemlidir.	1	2	3	4	5
23	“Eğlenceden önce iş” kuralını uygulayan insanlardan hoşlanırım.	1	2	3	4	5
24	Başkalarının gösterdiği saygıdan çok insanın kendisine olan saygısı daha önemlidir.	1	2	3	4	5
25	Kusursuzluk peşinde kosan kişilerin, pek akıllı olmadığı düşüncesindeyim.	1	2	3	4	5
26	Başkalarını etkilemeyi gerektiren işleri severim.	1	2	3	4	5
27	Her şeye bir yer bulunması ve her şeyin yerli yerinde olması benim için önemlidir.	1	2	3	4	5
28	Fazlası ile ilginç fikirler üretmek isteyen kişiler pratik değillerdir.	1	2	3	4	5
29	Hiçbir çıkış yolu olmasa da yeni düşüncelerle dolu olmayı severim.	1	2	3	4	5
30	Bir soruna belirli bir yaklaşımın yarar sağlamayacağını anladığımda yöntemimi rahatlıkla değiştirebilirim.	1	2	3	4	5
31	Cevabı olmayan sorular sormaktan hoşlanmam.	1	2	3	4	5
32	İlgilerim uğruna mesleğimi değiştirme yerine, mesleğim uğruna ilgilerimi değiştiririm.	1	2	3	4	5
33	Bir sorunu çözememek, zaman zaman yanlış soruların sorulması yüzündendir.	1	2	3	4	5
34	Zaman zaman sorulara pratik çözümler bulabilirim.	1	2	3	4	5
35	Kişinin yanlışlarını analiz etmesi boşuna zaman kaybıdır.	1	2	3	4	5
36	Yalnızca düzensiz bir şekilde düşünenler benzetme ve analizlere başvururlar.	1	2	3	4	5
37	Yakalanmadığı sürece, her zaman bir dolandırıcının zekâsına hayran kalmışımdır.	1	2	3	4	5
38	Sık sık pek anlayamadığım ve henüz açıklayamadığım bir sorun üzerinde çalışmaya baslarım.	1	2	3	4	5
39	Sık sık insanların, yolların ve küçük şehirlerin isimlerini unuturum.	1	2	3	4	5
40	Başarının yolunun çok çalışmaktan geçtiği inancındayım.	1	2	3	4	5
41	İyi bir grup üyesi olarak kabul edilmek benim için önemlidir.	1	2	3	4	5
42	İçimden geçenleri kontrol altında tutmasını bilirim.	1	2	3	4	5
43	Sorumluluk duygusuna sahip bütünüyle güvenilir bir kişiyim.	1	2	3	4	5
44	Kesin olmayan ve sezilmesi güç konulardan hoşlanmam.	1	2	3	4	5

45	Grup ile çalışmayı tek başına çalışmaya tercih ederim.	1	2	3	4	5
46	Birçok kişinin sorunu, olay ve olguları çok ciddiye almaktan kaynaklanır.	1	2	3	4	5
47	Sorunları bir kenara atmayarak, sık sık onların üzerinde çalışırım.	1	2	3	4	5
48	Ulaşmayı tasarladığım hedeflerim uğruna çabuk elde edebileceğim bir kazancı ya da rahatlığı kolaylıkla bir kenara atabilirim.	1	2	3	4	5
49	Bir üniversite profesörü olsaydım teoriye dayalı dersler yerine uygulamalı ders vermeyi tercih ederdim.	1	2	3	4	5
50	Yaşamın gizemi ilgimi çeker.	1	2	3	4	5