



# Unveiling the Determinants of Green Entrepreneurship: An Exploratory Study in the Tunisian Context

Houda Nouicer Tira<sup>1</sup>, Imen Fessi<sup>2</sup>, Tamer M. Abdelghani<sup>3</sup>, Abu Elnasr E. Sobaih<sup>4\*</sup>

<sup>1</sup>Faculty of Economic Sciences and Management of Tunis, University of Tunis, Elmanar, Tunisia; tirahouda@gmail.com (H.N.T.).

<sup>2</sup>Faculty of Economic Sciences and Management of Nabeul, University of Carthage, Carthage, Tunisia; fessi.imen@yahoo.fr (I.F.).

<sup>3</sup>Social Studies Department, Faculty of Arts, King Faisal University, Al-Ahsa 31982, Saudi Arabia; tabdelghani@kfu.edu.sa (T.M.A.).

<sup>4</sup>Management Department, College of Business Administration, King Faisal University, Al-Ahsa, Saudi Arabia; asobaih@kfu.edu.sa (A.E.E.S.).

**Abstract.** This study explores the determinants of green entrepreneurship among Tunisian Eco-entrepreneurs. These determinants are approached from the angle of Ajzen's theory of planned behavior (1991) through the factors of entrepreneurial attitude, subjective norms and perceived control of behavior. The research explores the reasons, which lead entrepreneurs to choose the ecological concept. A qualitative study was conducted via semi-structured interviews with a group of 22 eco-entrepreneurs. The study was based on voluntary respondents chosen by non-probability sampling. Thematic content analysis method was used to analyze the collected data and identify the main determinants. The results of this study revealed that green values are key determinant and explanatory of the favorable attitude towards green entrepreneurship. Contrary to the studies of traditional entrepreneurship in which the pressure of the social environment does not play a determining role and does not affect the decision to undertake in the green, whereas a strong feeling of perceived self-efficacy determines and encourages this direction. This study allows on a practical level through an understanding of attitude, subjective norms and perceived control of behavior, to understand what drives or hinders the orientation towards green entrepreneurship. Thus, the actors involved in entrepreneurship in Tunisia can better design programs and action plans to strengthen and increase commitment in this promising sector.

**Keywords:** Determinants of entrepreneurship, Green entrepreneurship, Green transformation, Theory of planned behavior, Tunisia.

## 1. INTRODUCTION

In recent years, entrepreneurship has been recognized as an important mechanism for job creation, innovation and competitiveness (Sobaih and Elshaer, 2023; Barbara-Sanchez and al., 2022; Herman, 2018). In this context, a new way of entrepreneurship is the creation of companies that respect the environment (Walley and Taylor, 2002). As a result, green entrepreneurship is emerging as a solution to growing environmental problems caused by climate change, resource scarcity and energy needs (OECD, 2011; Aliedan et al., 2023).

People who seize the opportunities associated with the field of green business (Bruton et al., 2010) and who engage in a business model offering products or services that respect the environment are designated by green entrepreneurs or eco-entrepreneurs (OECD, 2011). Therefore, eco-entrepreneurs become key players in the implementation of the principles of sustainable development (Hall and., 2010; Aliedan et al., 2023). Moreover, as is often argued, the entrepreneurial act is not a spontaneous act and many others factors can be at the origin of the effective commitment in the creation of a company.

The choice to become an entrepreneur and to operate specifically in the green field could be explained as being the result of a particular intention of the individual or even as a planned behavior. In this sense, Ajzen's theory of planned behavior (1991) constitutes a favorable theoretical analytical framework that is often used to explain the determinants of entrepreneurial intention (Liñán and al., 2011). Therefore, the determinants of green entrepreneurship could be approached from the angle of the three factors distinguished by the Azjen's model (1991), which includes entrepreneurial attitude, subjective norms and perceived entrepreneurial self-efficacy. The entrepreneurial attitude according to Ajzen (1991) is the positive and passionate perception that can influence the intention to create a business. Generally, the more favorable the attitude, the more likely the behavior is to be performed. Subjective norms refer to perceived social pressure and its impact on the decision to engage in a given behavior. Thus, depending on the social environment, the pressures can become an incentive or an obstacle to the development of an entrepreneurial career (Liñán and al., 2011). Perceived behavioral control describes the feeling of self-efficacy, in other words the perception that the individual may have regarding the performance of his behavior (Ajzen, 1991). This performance increases when individuals perceive that they have more resources and confidence (Lee and Kozar, 2005).

With the issues discussed above in mind, we have chosen to explore the determinants of green entrepreneurship in the Tunisian context. Indeed, in parallel with what is observed all over the world (Demirel and al., 2019), green entrepreneurship is experiencing strong enthusiasm in Tunisia and it is increasingly popular. Faced with a phenomenon of unemployment, which is taking on very significant proportions, and numerous social, economic and environmental challenges, the Tunisian government has been oriented in recent years towards green entrepreneurship in order to exploit the significant potential of opportunities that it represents. The objective is to stimulate a new entrepreneurial dynamic in various booming sectors of activity such as agro-ecology, environmental industries, ecological tourism, renewable energies, green chemistry and eco-

construction. As a result, a battery of measures is planned (Ben Hadj Youssef and Dziri, 2012) and incentive training and programs are designed. It is specifically dedicated to the initiators of ecological entrepreneurial activities. Moreover, despite its importance, the subject remains little explored in Tunisia. The review of the literature reveals only studies dealing with the question of entrepreneurial motivation in general (Baccari, 2006-2013; Choukir and Hentati, 2013; Touzani and al., 2015), and a limited number of studies addressed the determinants of green entrepreneurship (Aliedan et al., 2023).

Therefore, and in order to fill this gap, the objective of this article is to explore the determinants of green entrepreneurship among Tunisian eco-entrepreneurs. The study of these determinants will contribute on a theoretical level to a better understanding of the explanatory factors underlying green entrepreneurial orientation, and on a practical level to guide Tunisian policy makers to the design of targeted programs capable of strengthening and increase engagement in this sector.

This article is structured around a first part, which sheds theoretical light on the particularities and characteristics of green entrepreneurship. This first part also intends to clarify the determinants of eco-entrepreneurship with regard to Ajzen's theory of planned behavior (1991). A second part, which will be dedicated to the presentation of the methodology and the discussion of the results, which are based on semi-structured interviews with a sample of 21 Tunisian green entrepreneurs. A general conclusion will complete this research with attention to its limitations, implications and future directions.

## 2. THEORETICAL FRAMEWORK

### 2.1. Green Entrepreneurship: Migration Towards an Environmental Conception of Entrepreneurship

The concept of green entrepreneurship was introduced into management research from the 1990s and has resulted in many names such as eco-entrepreneurship, green entrepreneurship, sustainable entrepreneurship or ecological entrepreneurship (OECD, 2011). The relatively recent nature of the concept explains the lack of a commonly acceptable definition by researchers (Demirel and al., 2019).

Paradoxically, although entrepreneurship is widely recognized for the importance of its economic and social role (Dean and McMullen, 2007), it is also widely blamed for the many negative impacts it generates on society, especially those related to sustainable development (SD) goals. Thus, since the 90s a contemporary approach to development has appeared referring to sustainable development, thus ensuring a balance between environmental, social and economic objectives. It is supported by various educational and information programs aimed at raising awareness of ecological sustainability issues (Pachecho and al, 2010). It is in this vein that green entrepreneurship has experienced a real expansion (Wennekers and Van Stel, 2017; York et al., 2016) by becoming one of the assets of the sustainable development policies adopted by many countries in the world. (Zeng and al., 2022; Wei and al 2022).

Creative by nature, green entrepreneurship is considered as the ability of an entrepreneur to come up with ingenious and stakeholder-approved ideas for environmental issues (Demuth, 2014). This type of entrepreneurship is part of the requirements of SD, highlighting the company as a social and economic actor having a positive impact on the environment and society and implementing projects that are both sustainable and profitable. Moreover, previous work by Schumpeter (1934), Dean and McMullen (2007) showed that green entrepreneurs are considered as opportunists who seek innovations for the well-being of the planet.

Cohen and Winn (2007) defined green entrepreneurship as the process of creating products (goods or services) contributing to the sustainable development of a country. Similarly, Silajdzic and al. (2015) assume in their work that green entrepreneurship is only the set of activities aimed at solving environmental problems and challenges. In the same vein, Anghel and Anghel (2022) have defined green entrepreneurship in their work as all business activities intended to generate profits by developing actions to protect the environment. Integrating into a logic of green entrepreneurship implies, according to Flagstad and Johnsen (2022), the implementation of a specific strategy combined with a culture and an environment favoring this orientation (Bratton, 2018; Norton, Tahir and al., 2020).

### 2.2. Determinants of Green Entrepreneurship: Theoretical Framework

In order to study the foundations of the concept of eco-entrepreneurship, it is important to identify the reasons and determining factors that lead entrepreneurs to choose this type of entrepreneurship. With this in mind, several studies have attempted to explore the reasons that lead entrepreneurs to choose or not to choose to engage in green businesses, from the angle of various factors, such as financing and support initiatives from state (Liargovas et al., 2017), the impact of coercive and normative norms (Bernal and al., 2022), crowdfunding methods (Predkiewicz and Kalinowska-Beszczynska, 2021) and regional specificities (Demirel et al., 2019).

As part of this research, we choose to refer to Ajzen's theory of planned behavior (1991). In fact, as Yi (2020) confirms, green entrepreneurship is both intentional and planned behavior, which particularly requires the initial phase of developing a certain level of intention to become an eco-entrepreneur. In this sense, the theory of Ajzen (1991) distinguishes three fundamental determinants of any planned behavior. The first determinant is related to the attitude and it reflects the positive or negative appreciation that a person may have toward the behavior he plans. The second determinant designates the subjective norms that refer (as explained by Iakovleva and al.2011)

to perceived social pressures that are likely made to influence the decision to perform or avoid a behavior desired by a person. A third determinant, called perceived behavioral control or personal self-efficacy, refers to the individual's perception of his ability to carry out the planned behavior (Ajzen, 1991).

It is important to emphasize that several reasons justify the use of Ajzen's theory (1991). One of the first reasons is that Ajzen's model (1991) can easily correspond to situations where the behavior is intentional, such as for entrepreneurship (Bourguiba, 2007). Thus, within the framework of a study on the determinants of green entrepreneurship, and on the basis of this theory, it is possible to refer to the first determinant to explain an individual's attitude towards ecological entrepreneurship. The second determinant is to understand the impact of his environment on his decision to undertake in the green field. The third determinant is to explain his own perception of his capacities to undertake and succeed in the field of green. A second reason relates to the validity of Ajzen's theory (1991) demonstrated in several studies on entrepreneurial behavior (Veciana et al., 2005; Van Gelderen et al., 2008; Sommer and Haug, 2011; Chowdhury et al., 2012; Koubaa and Sahibeddine, 2012), orientation towards green entrepreneurship (Tkachev and Kolvereid, 1999; Krueger et al., 2000; Zhao et al., 2005; Gelderen et al., 2008; Liñán et al., 2011; Ramayah et al., 2012).

In the perspective of these studies, Koe et al. (2012) added to the three determinants relating to entrepreneurial attitude, subjective norms, perceived entrepreneurial self-efficacy and a fourth determinant related to personality traits. In the same vein, Nguyen (2018) showed through a qualitative study conducted with 15 Vietnamese entrepreneurs, that the three dimensions of Ajzen's model (1991) are decisive in the entrepreneurial process. The same author also highlighted other emerging factors that revolve around motivation. As Nguyen (2018) explains, motivation manifests itself through three factors. First, contextual factors: which refer to the favorable business opportunities offered by the environment such as the simplicity of legal procedures, incentive programs and state incentives. Second, push/pull factors: these can explain the triggering of the entrepreneurial adventure. Indeed, some people find themselves involved in the entrepreneurial process either because they feel obliged by necessity (push factors), or because they are pushed by an opportunity (pull factors). Third, factors related to the desire for transformation: in this case, Nguyen (2018) explains that some entrepreneurs are dissatisfied with the situation of their company, and wish to transform it from a simple economic agent aiming to increase profits to a company, with a positive impact, recognized by society.

For their part, the work of Nuringsih and Puspitowati (2018) on the main determinants of eco-entrepreneurship conducted with 400 student entrepreneurs, showed the validity of Ajzen's theory (1991) in several contexts (American, Asian European, African Norwegian, Finland, Sweden, United States and United Kingdom, France, Netherlands, South Africa, Greece or Malaysia). The authors also highlighted key determinants. First, structural support: which refers to socio-cultural, economic, political, technological factors as well as government regulations, which strongly determine the success of the entrepreneurial process (Denanyoh and al., 2015). Second, formal networking: every entrepreneur is required to maintain business relations with financial institutions; suppliers, customers. This type of networking is very important and decisive for eco-entrepreneurs (Isaak, 2002; Gerard and Saleh, 2011). Third, informal networking: this involves family support, friends, relatives or even subjective standards as developed by Ajzen (1991). Fourth, green values: these are attitudes, motivations, perceptions and behaviors centered on the protection of the environment. Green values are one of the motivators of green entrepreneurship and a determinant key of entrepreneurial success (Shabeeb Ali et al., 2023; Nuringsih, 2020).

In the same vein of eco-entrepreneurship, Bourdin and al. (2022) have shown, through a study of 30 Algerian entrepreneurs, that green values represent the main determinant of entrepreneurial activity. According to these authors, the values guide, direct and help the entrepreneur. Bourdin and al. (2022) also show that knowledge, administrative and legal regulations as well as financial support are determinants of entrepreneurial activity.

YI et al. (2022) concluded through a study involving 191 employees working in companies in the consumer electronics, information software and hardware, photo electronics, communications, biomedicine, food, textile, electrical, machinery, chemical, or other sectors in Taiwan that environmental leadership, culture, and creativity are determinants of green entrepreneurship. In a recent study, Safitri et al. (2024) demonstrated that personality traits, academic support, and innovation capability are significant determinants of green entrepreneurship, as evidenced by research conducted among 300 Indonesian university students. Furthermore, Ninik (2024) conducted a study involving 158 women employed in Indonesia's small and medium enterprises (SMEs) sector, revealing that self-efficacy and entrepreneurial motivation are the most significant determinants of green entrepreneurship. Overall, the synthetic review of the determinants of entrepreneurship (as described in Table 1) shows that the majority of works have adopted Ajzen's model (1991) either explicitly from the development of the three relative dimensions entrepreneurial attitude, subjective norms, and perceived entrepreneurial self-efficacy; or implicitly without resorting to the distribution of the model. For example, the determinants relating to training, knowledge and understanding of entrepreneurship mentioned by Ashraf and al. (2020) refer to the entrepreneurial attitude. Similarly, subjective norms have been widely used and perceived in the work of Herman (2019) through entrepreneurial family origin. The dimension of entrepreneurial self-efficacy is also reflected in the work of Sandybayev (2017), Caliendo and Kritikos (2008) who highlight motivational traits as well as cognitive and social skills.

**Table 1:** Summary review of the determinants of entrepreneurship.

Reference	Determinants	Target	Finding
Safitri et al. (2024)	1) Personality traits, 2) Academic support, 3) Innovation capability	300 Indonesian university students	Determinants of green entrepreneurship: 1) Green values, 2) The entrepreneurial attitude, 3) Subjective standards, 4) Perceived entrepreneurial, 5) self-efficacy,
Ninik (2024)	1) Self-efficacy 2) Entrepreneurial motivation	158 women employed in Indonesia's small and medium enterprises (SMEs) sector	
Alshebami et al. (2023)	1) Green mindfulness 2) Spiritual intelligence 3) Environmental self-identity	202 students at university in Saudi Arabia	
Aliedan et al. (2023)	1) Attitude 2) Subjective norms 3) Perceived behavioral control 4) Green consumption commitment 5) Religiosity	550 fresh agricultural and food sciences graduates in public KSA universities	
Shabeeb et al. (2023)	1) Self-efficacy, 2) Attitude, 3) Green consumption commitment	higher education students	
Bourdin et al. (2023)	1) Green values 2) Financial support 3) Academic training 4) Administrative and legal regulations	33 Algerian eco-entrepreneurs	
Yu et al. (2022)	1) Environmental leadership 2) Culture, 3) Creativity	191 employees working in companies in the consumer electronics, information software and hardware, photo electronics, communications, biomedicine, food, textile, electrical, machinery, chemical, or other sectors in Taiwan.	
Ashraf et al. (2020)	1) Social determinants: 2) Family support, 3) Family financial assistance, 4) Previous business experience 5) Training, knowledge, and understanding of entrepreneurship.	Entrepreneurs between 32 and 55 years old, with at least ten years of experience in the business world.	
Doanh and Tomasz (2019)	1) Perceived entrepreneurial self-efficacy ; 2) The subjective standard 3) The entrepreneurial attitude 4) Perceived behavioral control	2218 student entrepreneurs	
Herman (2019)	1) Entrepreneurship training 2) The entrepreneurial family origin 3) Entrepreneurial personality traits	138 entrepreneurial engineers	
Nguyen (2018)	1) The subjective standard 2) The entrepreneurial attitude 3) Perceived behavioral control	20 student entrepreneurs belonging to the start-up club at the university	
Nuringsih and Puspitowati (2017)	1) Educational support, 2) Structural support, 3) Formal networking, 4) Informal networking, 5) Green value, 6) Previous experience.	400 student entrepreneurs	

### 3. METHODOLOGY

To meet the objective of our research, which is to identify the determinants of the commitment of Tunisian entrepreneurs to green entrepreneurship, we conducted a qualitative study. This is justified by the exploratory nature of our research, which contributes to understanding the essence and purpose of a given phenomenon (Kief and Zardet, 2013; Mucchielli, 2007). In addition, for data collection, we favored the method of semi-structured interviews allowing the interviewee to express themselves freely on a set of themes prepared in advance.

Moreover, as we have already specified, this study targets a very specific population, that of Tunisian eco-entrepreneurs. In this specific context, we have focused on entrepreneurs who have already created their businesses in one of the areas of green entrepreneurship. For better representation, we have voluntarily selected eco-entrepreneurs who operate in various sectors of activity. It should be noted that in Tunisia, the most representative sector of green entrepreneurship is that of waste management, which represents 50% of environmental companies. The organic farming sector and crafts are also emerging. Furthermore, the determination of the size of the sample was guided by the principle of semantic saturation (Romelaer, 2005), when there is redundancy of similar themes in a certain number of interviews. The sample of eco-entrepreneurs was selected on a non-probability basis from heterogeneous sources (public and private bodies). For the conduct of the interviews, we used the interview guide, which is a particularly suitable tool for exploring entrepreneurial behavior (Diakité, 2004).

In this context, as recommended by Romelaer (2005), the interview guide must be based on specific themes on which the researcher will follow up with the interviewees. Thus, we have structured our interview guide around the three categories of determinants that we have deduced from the literature and on which we would like the respondent to express himself/herself in depth (See appendix 1).

The average duration of the interviews is almost one hour (varying between 50 minutes to one hour and 12 minutes). All interviews were recorded and transcribed. By the end, the study was completed after 22 interviews conducted with a diverse sample in terms of age, level of education and sector of activity. Without pretending to generalize, the material collected seems adequate to answer our research question.

For data analysis, we used the thematic content analysis method. As Mucchielli (2012) specifies, content analysis consists of reducing the data collected on the basis of themes and sub-themes to then perform a statistical analysis of their occurrence. To do this, we used Nvivo software, which is commonly used in management sciences to categorize and give meaning to the data collected (Krief and Zardet, 2013). Before moving on to the presentation of the results, some characteristics of the demographics of the interviewees are described in Table 2.

**Table 2:** Description of sample characteristics.

N	Activity sector	Company surveyed	Interviewee	Gender	Duration
E.1	Eco-Service	Production of artisanal products based on Alfa	General director	Female	1h30mn
E.2	Eco-Service	Production of accessories, bags and pouches in margoums	Founder	Female	1h25mn
E.3	Eco-Service	Artisanal production of soaps based on natural products	Founder	Female	1h
E.4	Eco-Service	Carpooling mobile app	Founder	Male	1h30mn
E.5	Eco-Service	Carpooling mobile app	Associated	Male	1h35mn
E.6	Eco-Service	Recycling second-hand clothes for women	Founder	Female	
E.7	Eco-Service	Landscape architecture	General director	Male	
E.8	Eco-Service	Production of certified extra virgin organic olive oil	Founder	Male	
E.9	Eco-Service	Production of certified extra virgin organic olive oil	Co-Founder	Female	
E.10	Eco-Service	Production of cosmetic products based on natural products (Argan oil and Aloe vera)	Founder	Male	
E.11	Eco-Service	Production of cosmetic products based on natural products (Argan oil and Aloe vera)	Founder	Male	
E.12	Eco-Industry	Health and environment friendly cleaning products.	Founder	Male	
E.13	Eco-Industry		Co-Founder	Male	
E.14	Eco-Agriculture	Distillation of essential oils and aromatic and medicinal plants	Founder	Male	
E.15	Eco-Agriculture		Co-Founder		
E.16	Eco-Agriculture	Artisanal cheese dairy	General director	Male	
E.17	Eco-Agriculture	Waste recovery; agriculture and environment	Agronomist	Male	
E.18	Eco-Technology	Supervision of water consumption by a web and mobile application	Founder	Male	
E.19	Eco-Technology	Software development that offers Smart Cities products and services	Entrepreneur	Male	
E.20	Eco-Technology		Associated		
E.21	Eco-Technology	Digitalization of the management of electronic devices for individuals and businesses	Founder	Male	
E.22	Eco-Tourism	Promotion of rural areas and raising campers' awareness of environmental preservation.	Founder	Male	

## 4. RESULTS

As part of this part, we will present the results obtained after analyzing the interviews conducted with Tunisian eco-entrepreneurs. We will analyze the sub-categories of each theme as well as significant verbatims corresponding respectively to the entrepreneurial attitude, the subjective norm, and the perceived control of behavior, in order to identify the explanatory factors of the orientation of this category of entrepreneurs towards the ecological field.

### 4.1. The Entrepreneurial Attitude

At a first level, we sought to understand the attitude of respondents towards eco-entrepreneurship. In this context, the analysis of the interviews reveals a positive attitude on the part of the majority of the interviewees with regard to the entrepreneurial career in the ecological field. This observation is illustrated by the main verbatim statements transcribed below (Table 3).

The interviews analyzed make it possible to identify certain explanatory factors of the positive attitude expressed by the interviewees with regard to green entrepreneurship. This is attributable at first sight to a strong sensitivity for everything related to ecology and to the prevalence of green values.

Thus, the preference to undertake in the green is explained by the need to respond to a personal attachment, to the ecological field and to a concern to preserve the environment (17/22). In this vein, note that a significant number of responses (15/22) converge in the direction of a negative perception of traditional entrepreneurship,

which is considered to be a field detrimental to nature.

Another reason is related to the search for financial interest insofar as a fairly large number of interviewees (14/22) believe that green entrepreneurship makes it possible, under certain conditions, to ensure, like other areas of entrepreneurship, an interesting financial income and consequently, a financial autonomy which remains essential for the viability of the project.

To a lesser extent, some eco-entrepreneurs interviewed explain their attraction to eco-entrepreneurship by the fact that this choice allows them to accomplish themselves, to innovate and to benefit from a certain social recognition.

**Table 3.** Verbatim on Entrepreneurial Attitude.

Sub themes	Comment
Green Values and Sensitivity to the Environment	<p>"There is nothing better than sensible work, what can be said when it is the entrepreneur who creates his project and who himself becomes a creator of value, and fulfills a mission"</p> <p>"Giving meaning to one's work is a means of personal and professional satisfaction."</p> <p>"By conviction, I know what I am doing, green represents for me our values and what we have believed in since our youngest age".</p> <p>"Eco-entrepreneurship is ecologically responsible projects, which preserve and protect nature, which is extremely threatened"</p> <p>"We provide answers to problems, a solution to preserve the ecosystem..."</p> <p>"The fact of contributing to the maintenance of what remains of the resources of this planet gives me great pride"</p> <p>"Helping the planet be better preserved for our children and all of humanity is very important."</p> <p>"Green entrepreneurship allows us to integrate environmental and social issues within our companies and thus make them new pillars accompanying the economic pillar".</p>
Financial Interest	<p>"It's a chance for me to maintain the land as well as possible, while having an economically viable business."</p> <p>"Doing business in this field also allows you to earn enough money"</p> <p>"I think it's a sector that pays off and allows you to live comfortably like any other area of traditional entrepreneurship"</p> <p>"Once the Project is up and running, There are no more Financial difficulties"</p> <p>"There is a strong demand for organic products and this is an area that often brings new things"</p> <p>"There is great potential in the ecological field"</p> <p>"There is a trend for the organic products market"</p>
Self-Achievement	<p>"the perception of the value of the work accomplished is a vector of motivation for me and therefore of success"</p> <p>"Through this project, I realize my dream because I am doing something different"</p> <p>"I chose this field because it corresponds to my training and my studies and it allowed me to use my knowledge and knowledge and better master the vagaries of my job..."</p>
Innovation	<p>"The world of classic business focused on performance and essentially monetary profit has shown its limits, green is the trend, it is innovation"</p> <p>"It's a field in which we bring novelty, new ideas that are both useful and economical"</p> <p>"You have to be creative to find the idea that works. »"</p>

#### 4.2. Subjective Norms

Subjective norms refer, as we have already explained, to perceived social pressure and its impact on the decision to adopt a given behavior. Thus, the entourage can constitute an incentive or an obstacle to the development of an entrepreneurial career in the green. The answers as to the opinion of people with regard to an entrepreneurial career in the green, point to a positive opinion of those around them. Such a finding shows that there is an awareness of environmental concerns and a change in mentalities in favor of this new category of entrepreneurs (Table 4).

The positive opinion of the social environment is explained by the fact that green entrepreneurship is considered as an alternative to find solutions to problems of shortage of material and financial resources. In other words, a large proportion of the eco-entrepreneurs interviewed believe that their decision to undertake in the green field is not dependent on the positive or negative perception of those around them. In other words, even a negative opinion of relatives will not have deterred them from carrying out their activities in the ecological field.

**Table 4:** Verbatim on Subjective standards.

Sub themes	Excerpts from Verbatim
Opinion of those around you regarding green entrepreneurship	<p>“We were lucky to be surrounded by people who are attached to the same values as us. So the idea of creating a green business was very well received and encouraged. »</p> <p>“Positive opinion, because there is a growing awareness of the threats hanging over the environment and therefore of all actions aimed at preserving it. »</p> <p>“The entourage in my personal environment is two-fold: people who don't see the point of what I do, they aren't convinced, moreover, they tell me it's good to do the ecological, the social but what matters is the profit to be able to continue, and others who consider green entrepreneurship very noble. »</p>
Influence of the social environment	<p>“I am lucky that those around me are very sensible, and very interested in this area of greenery, moreover, my husband is also convinced that we must take care to preserve the environment”</p> <p>“My project is a personal challenge, I think that whatever my family's opinion, I was going to start, but little by little and over time, seeing the dynamics around my project, they began to convince themselves by the project »</p> <p>“Honestly, I don't think they influenced my decision because we believed in our project from the start and we were ready to embark on this adventure with or without their encouragement. We therefore believe that they did not influence our decision in any way.”</p> <p>“Personally, my husband supported me a lot and it is very important to have support, as well as my parents who encouraged me a lot”</p> <p>“None of my close entourage worries me, some do not understand, their unfavorable perception generally remains a question of culture”</p> <p>“It is an important opinion insofar as it can become an important pressure group pushing in the same direction of preserving the environment; little by little, this opinion could be shared by a majority. »</p> <p>“Yes, some families or friends can be very pessimistic about launching a project, especially if the theme of the project in question is out of the ordinary and the idea behind is so innovative. So, yes, they can create a certain pressure and push the concerned person to slow down his momentum”.</p>

### 4.3. Perceived Behavioral Control

By exploring the determinant of perceived control of behavior, we wanted to understand the feeling of ease or difficulty of carrying out the entrepreneurial activity by the respondents, in other words the perception that each entrepreneur may have regarding the performance of his behavior and the success of his project on various financial, strategic, managerial and administrative aspects. In this context, the interviews reveal a high sense of personal self-efficacy. Eco-entrepreneurs believe they have the ability to make their project a success. In addition, a significant number of interviewees (16/22) believe that they have the personal qualities and skills necessary to manage the project.

Similarly, more than half of the respondents conceive that they are able to accomplish administrative procedures more or less easily (Table 5).

Moreover, in terms of financial self-efficacy, the interviews show a low feeling of efficiency in obtaining financial resources, particularly from the banks which remain insensitive to the purpose of these projects and which continue to process them by distrust like traditional entrepreneurs. This situation evokes among eco-entrepreneurs a feeling of lack of credibility, and difficulties in accessing lines of credit.

With regard to managerial self-efficacy, a large proportion of the answers converge in the direction of a mastery of managerial activity insofar as the interviewees declare that they carefully choose employees who share their objectives and their orientations. Consequently, the respondents judge that they have the necessary effectiveness to energize the group and motivate it. On the other hand, the eco-entrepreneurs surveyed show a low level of strategic entrepreneurial self-efficacy, as they struggle to express a clear futuristic vision for their projects. They say they have more or less effective control of their relationships with customers and the various stakeholders such as suppliers and financing structures. Thus, they are unable to effectively apprehend the risks that may hinder their entrepreneurial adventure in the future.

**Table 5:** Verbatim on perceived control of behavior.

Sub themes	Excerpts from Verbatim
Personal self-efficacy	"Through our project, we aim to go very far, we are aiming for responsible farmers, we believe in it one thousand percent, it will take longer than classic entrepreneurship, but I am patient" "I will succeed without a doubt, otherwise I would have given up, it is true that there are difficulties but the fact that you feel that you are doing a noble job is very encouraging" "I am accompanied, I consult, I am in continuous training all the time," "I am convinced that success comes down to us and our way of seeing things" "My training as an architect helps me enormously, I am gifted in graphic design and communication" "I followed a training course to have more knowledge in entrepreneurship and then I followed an incubation program to have the necessary skills in design thinking, accounting, legislation, resource mobilization, impact assessment and in different areas related to entrepreneurship »
Administrative entrepreneurial self-efficacy	"I apply the procedure according to the law in force, in short we adapt, we train, and we inform ourselves, we try to be accompanied by organizations and experts" "This part in particular, is managed and learned as you go along, you have to get as much information as possible from accountants, lawyers, the API, finance revenue managers, The national business register ... Each of these profiles has specific knowledge that does not identify all facets of the administrative process. It is by throwing yourself into the adventure of administrative paperwork that you learn, and there are still gaps to be filled". "I am oriented assisted by specialists in the field to be able to manage"
Strategic self-efficacy	"We test, we get informed, we hire the people who most respect our ethical charter, who respect and understand what we do" "We have tried and we are still trying to have our own particularities that differentiate us from competitors. This is the best way to have a viable and sustainable business and to be able to face competitors who enter the market with more resources". "We are a multidisciplinary group. Everyone gives the most in their field."
Managerial self-efficacy	"My principle for success is to clarify relationships with the people I work with by involving them in my goal and training them" "I have no worries about my management skills, I am a good communicator..." "I work a lot in a team, I consider it important that the people I work with are involved, and make them aware of the interest of this project, sometimes you can have the solution of a simple worker rather than an engineer in the field »
Financial self-efficacy	"It is a part in its own right which is not negligible and which can be learned. We always separate personal expenses from business expenses. You have to have separate accounts and have a budget tracker. We try to keep track of each transaction to have an overview" "You have to balance budget constraints and the need to invest." "I try not to count on state subsidies and programs, because really it remains theoretical and the aid is very limited."

## 5. DISCUSSIONS

To understand the determinants of entrepreneurship, we applied the theory of planned behavior of Ajzen (1991) stipulating that before any decision preceding a given behavior, a cognitive and emotional process takes place and it is influenced by the attitude towards the action, subjective norms and perceived behavioral control. The analyzed results revealed a positive attitude of eco-entrepreneurs and a sensitivity to the environment. This attitude is explained by the prevalence of green values constituting key determinants.

These results are in congruence with the work of Kirkwood and Walton (2010) who argue that one of the first distinctive and closely related motivations of the eco-entrepreneur is green value. Similarly, our results are in parallel with the findings of Issak (2002) and Walley and Taylor (2002) who consider that eco-entrepreneurs enter environmentally friendly markets not only to make profits but especially because they have strong green values. In other words, entrepreneurs choose green because they do not agree to undertake business that is harmful to the environment. In the same line of ideas, Linnanen (2002) explains that ethical reasoning is very present among eco-entrepreneurs and goes far beyond the desire for profit. In their study of the factors influencing the successful implementation of sustainable practices, Kraus and al. (2017) argue that at an individual level, sustainable entrepreneurs tend to be based on the will to act sustainably, while individual values among mainstream entrepreneurs include but are not limited to sustainability. While among traditional entrepreneurs there is a strong orientation towards profit maximization, eco-entrepreneurs are recognized for a less materialistic attitude and highly environmentally responsible values (Santini, 2017)

However, ethical values are not the only determinants among the eco-entrepreneurs interviewed. In fact, their favorable attitude is also determined by the search for financial interest because they believe that the green sector represents a profitable market, given that it is growing (Schaltegger, 2002) and that it gives competitive advantage thanks to the positive reputation of the socially responsible company (Kirkwood and Walton, 2010). The favorable attitude of eco-entrepreneurs is also associated with the desire to want to change the world for the better through sustainable actions (Cohen and Winn, 2007) and with the values of self-improvement and self-transcendence that are at the origin of all eco-entrepreneurship practices (Gunawan and al., 2020).

On the other hand, the results of the study do not seem to support the logic according to which the intention to undertake in the green is totally dependent on social and environmental pressures. In fact, it cannot be said that subjective norms are determinative in a general sense. Thus, some entrepreneurs confirm the importance of

the entourage and its influence on the success of the entrepreneurial process. This is consistent with the results of Issak (2002) and Gérard and Saleh (2011) who highlighted in their work the importance of the social environment. They also showed that the adhesion of the relational network (family, friends, relatives, etc.) constitutes a catalyst for the good management of a company that respects its environment. In the same vein, Linan and Chen (2006) as well as Ismail and al. (2009) have shown that the support of the entourage is decisive in the success of the entrepreneurial affair.

On the other hand, some green entrepreneurs explain that the negative opinion of people who are important to them towards the fact that they embark on green entrepreneurship does not matter and does not upset their choice. In fact, even in the case where the entourage showed expressed pressure with regard to their activity, the eco-entrepreneurs could free themselves from this opinion and remained convinced of the usefulness of their project. A strong belief in their personal mastery serves as an indicator of abilities and therefore allows them to build a strong belief in self-efficacy. This is indeed what our results have shown us about the judgments that eco-entrepreneurs make of their perceived behavioral control. In fact, the eco-entrepreneurs interviewed showed a high sense of personal self-efficacy.

In other words, green entrepreneurs strongly believe in their possibilities and see the difficulties of green entrepreneurship as challenges to be overcome rather than threats to be avoided, because they have the confidence that they can exert a certain control over themselves, which increases the interest they find in their activities. In fact, as Kefi (2010) points out, the determinant of perceived behavioral control plays an important role insofar as the intention to act of an individual can be constrained by the belief in these own capacities.

This finding is in line with Bandura's social learning theory (1986), according to which self-efficacy beliefs are the key factor in human action. In fact, self-efficacy does not only mean having social and cognitive aptitudes and skills, but above all having the belief of being able to use them to produce performance in various situations (Lecomte, 2004). In other words, when a person does not believe in his own success in an area, he will not try to provoke a behavior there. In this sense, Lecomte (2004) explains that the behavior and emotional states of any individual are better predicted by the combined influence of the feeling of self-efficacy and the receptivity of the environment. This leads us to consider that eco-entrepreneurship is determined by both skills and beliefs of efficiency, combined with a receptive and favorable environment.

## 6. CONCLUSION

We started from the idea that the cognitive and emotional mechanisms explaining the behavior of green entrepreneurs are yet to be explored (Demirelet al., 2019). This is how we have shown on the basis of Ajzen's theory of planned behavior (1991) and via qualitative research, that the commitment of Tunisian entrepreneurs towards the ecological field is determined by their favorable attitude thanks to green values they carry, by the subjective norms that favor without conditioning their commitment and by the perceived behavioral control according to which personal self-efficacy is predictive and constitutes a preponderant factor of this commitment. The managerial implications of this study are important for all the actors involved in entrepreneurship in order to help them put in place a real strategy and an action plan promoting eco-entrepreneurship in Tunisia.

Although the country has put in place policies and strategies to encourage green entrepreneurship activities, factors such as lack of funding, institutional barriers, external competition, and lack of environmental and social awareness pose challenges that affect the promotion of green entrepreneurship. Therefore, thanks to a differentiated understanding of the determinants of green entrepreneurship, it is suggested to policymakers to develop appropriate and targeted policies to increase the number of eco-entrepreneurs and leverage the impact of these eco-entrepreneurs on sustainable development. This consists of joining the education system to the practice of green entrepreneurship in order to cultivate an ecological spirit and anchor green values from a young age. Therefore, our research aims to strengthen the communication of the advantages of green entrepreneurship so that those around them become more aware of the potential of green.

To this end, decision-makers are called upon to open dialogue for a better understanding of the potential and benefits of green entrepreneurship so that it is not simply designated as a political instrument but also to encourage a positive perception of the society.

### 6.1. Furthermore, Our Exploratory Research Inevitably has Potential Weaknesses

First, we can notice that the relevance of our results could be limited due to the limited number of eco-entrepreneurs who participated in this study. Second, it could be said that we have deliberately chosen to learn from entrepreneurs who are already "on board", although it may seem interesting to learn more about entrepreneurs who have not yet started, but who intend to engaging in an activity of an ecological nature. We sought to understand the personal perception of the eco-entrepreneurs interviewed, which may lead us to social desirability bias. This translates into responses from respondents that tend to conform with perceptions considered socially desirable, and avoid statements perceived as socially inappropriate (Santini, 2020). A future avenue of research would be to study how the decision-making of eco-entrepreneurs varies across cultures and locations. A replication of this research would make it possible to further generalize the results and develop contrasts on certain cultural drivers of engagement in this field. Green entrepreneurship is an ever-evolving field

and requires a multidimensional approach to encourage its growth and development. All actors (governments, businesses and civil society) must work closely together to create an enabling environment for green entrepreneurship, in order to ensure a sustainable future for the coming generations.

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### Author Contributions:

Conceptualization, H.N.T., I.F., T.M.A. and A.E.E.S.; methodology, H.N.T., I.F., and A.E.E.S.; software, H.N.T., and I.F.; validation, H.N.T. and I.F.; formal analysis, H.N.T., and I.F.; investigation H.N.T., I.F.; resources, A.E.E.S.; data curation, H.N.T., and I.F.; writing—original draft preparation, H.N.T., I.F., T.M.A. and A.E.E.S.; writing—review and editing, H.N.T., I.F., and A.E.E.S.; supervision, A.E.E.S.; project administration, A.E.E.S.; funding acquisition, A.E.E.S. All authors have read and agreed to the published version of the manuscript.

### REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational and Human Decision Processes* 50 (2), 179-211.
- Aliedan, M. M., Alyahya, M. A., Elshaer, I. A., & Sobaih, A. E. E. (2023). Who is going green? Determinants of green investment intention in the Saudi food industry. *Agriculture*, 13(5), 1047.
- Alshebami, A. S., Alholiby, M. S., Elshaer, I. A., Sobaih, A. E. E., & Al Marri, S. H. (2023). Examining the relationship between green mindfulness, spiritual intelligence, and environmental self-identity: unveiling the path to green entrepreneurial intention. *Administrative Sciences*, 13(10), 226.
- Alshebami, A. S., Alholiby, M. S., Elshaer, I. A., Sobaih, A. E. E., & Al Marri, S. H. (2023). Examining the relationship between green mindfulness, spiritual intelligence, and environmental self identity: unveiling the path to green entrepreneurial intention. *Administrative Sciences*, 13(10), 226.
- Anghel, G.A. & Anghel, M. A. (2022). Green Entrepreneurship among Students—Social and Behavioral Motivation. *Sustainability*, 14, 8730.
- Ashraf, M. F., Mahmood, B. & Ch, A. (2020). A Qualitative Analysis of Social Determinants of Entrepreneurship Success (Thematic Analysis). *Journal of Business and Social Review in Emerging Economies*, 6, 379-390.
- Baccari, E. (2006). Les motivations entrepreneuriales des jeunes entrepreneurs tunisiens: étude exploratoire, 8ème Congrès de l'Association Internationale de recherche en entrepreneuriat et PME à Fribourg, Suisse.
- Baccari Jamoussi, E. (2013). Les motivations des jeunes entrepreneurs tunisiens: étude comparative avec leurs similaires d'autres pays. *Journal of Global Management Research*, 53- 60.
- Bandura, A. (1986). *Social foundations of thought and action: a social cognitive theory*, Englewood Cliffs, NJ: Prentice-Hall.
- Barba-Sanchez, V., Mitre-Aranda, M. & del Brío-Gonzalez, J. (2022). The entrepreneurial intention of university students: An environmental perspective. *European research on management and business economics*, 28, 100184.
- Ben Hadj Youssef, A. & Dziri, M. (2012). L'entrepreneuriat vert : mécanismes de mise en œuvre et motivations en Tunisie (cas d'un pays émergent). *Vie & sciences de l'entreprise*, 191-192, 59-77.
- Bernal, P., Dominguez, B. & Montero, J. (2022). When are entrepreneurs more environmentally oriented? An analysis of stakeholders' pressures at different stages of evolution of the venture", *Business Strategy and the Environment*, 31(3), 828-844.
- Bourguiba, M. (2007). *De l'intention à l'action entrepreneuriale: approche comparative auprès de TPE françaises et tunisiennes*. Université de Nancy 2, Nancy.
- Bourdin, S., Chenane, A. & Mohand Said, A. (2023). Motivations et difficultés des éco-entrepreneurs en Algérie : le rôle des dispositifs publics d'accompagnement. *Innovations*, De Boeck Université, 70, 209-239.
- Bratton, A. (2018). The role of talent development in environmentally sustainable hospitality. *Worldwide Hospitality and Tourism Themes*, 10(1), 69-85.
- Bruton, G. D., Ahlstrom, D. & Li, H. L. (2010). Institutional theory and entrepreneurship: Where are we now and where do we need to move in the future?. *Entrepreneurship Theory and Practice*, 34, 421-440.
- Caliendo, M. & Kritikos, A. (2008). Is Entrepreneurial Success Predictable? An Ex-Ante Analysis of the Character-Based Approach. *Kyklos*, 61, 189-214.
- Camelia Safitri ; Hari Mulyadi ; Nani Sutarni & Muhamad Arief Ramdhany.(2010). Key Drivers of Green Entrepreneurship Intentions. *Shaping Sustainable Futures*
- Cohen, B. & Winn, M. (2007). Market Imperfections, Opportunity and Sustainable Entrepreneurship. *Journal of Business Venturing*, 22(1), 29-49.
- Choukir, J. & Hentati, M. (2013). Entrepreneurship Motivation: Tunisian Case. *American Journal of Industrial and Business Management*, 3(8), 746-753.
- Chowdhury, M., Alam, Z. & Arif, M. I. (2013). Success Factors of Entrepreneurs of Small and Medium Sized Enterprises: Evidence from Bangladesh. *Business & Economic Research*, 3(2), 38-52.
- Dean, T. & McMullen, J. (2007). Toward a theory of sustainable entrepreneurship: Reducing environmental degradation through entrepreneurial action. *Journal of Business Venturing*, 22(1), 50-76.
- Demirel, P., Li, Q.C., Rentocchini, F. & Tamvada, J.P. (2019). Born to be green: new insights into the economics and management of green entrepreneurship. *Small Business Economics*, 52(4), 759-771,
- Demuth, A. (2014). Green Entrepreneurship: A promising path towards a sustainable future in Tunisia and elsewhere. *Internationale Zusammenarbeit (GIZ) GmbH*, 4-51.
- Denanyoh, R., Adjei, K., & Nyemekye, G.E. (2015). Factors That Impact on Entrepreneurial Intention of Tertiary Students in Ghana. *International Journal of Business and Social Research*, 5(3), 19-29.

- Diakite, B. (2004). *Facteurs socioculturels et création d'entreprise en Guinée: étude exploratoire des ethnies peule et soussou*. Doctoral thesis. Université Laval Québec.
- Doanh, D. & Tomasz, B. (2019). Entrepreneurial self-efficacy and intention among vietnamese students: a meta-analytic path analysis based on the theory of planned behavior", *Procedia Computer Science*, 159, 2447-2460.
- Flagstad, I. & Johnsen, S. Å. K. (2022). The psychology of green entrepreneurship: Founder-driven development of green climate in small-scale companies. *Cogent Business & Management*, 9(1), 2079245.
- Gerard, P., & Saleh, K.E. (2011). Impact of some contextual factors on entrepreneurial intention of university students. *African Journal of Business Management*, 5(26), 10707-10717.
- Gunawan, A.A., Van Riel, A., & Essers, C. (2021). What drives ecopreneurship in women and men? A structured literature review. *Journal of Cleaner Production*, 280, Part 1, 124336.
- Hall, J.K., Daneke, G.A. & Lenox, M.J. (2010). Sustainable development and entrepreneurship: past contributions and future directions. *Journal of Business Venturing*, 25(5), 439-48.
- Herman, E. (2018). Innovation and entrepreneurship for competitiveness in the EU: an empirical analysis. *Proceedings of the International Conference on Business Excellence, Sciendo*, 12(1), 425-435.
- Herman, E. (2019). Entrepreneurial Intention among Engineering Students and Its Main Determinants. *Procedia Manufacturing*, 32, 318-324.
- Iakovleva, T., Kolvereid, L. & Stephan, U. (2011). Entrepreneurial Intentions in Developing and Developed Countries. *Education + Training*, 53, 5, 353-370.
- Isaak, R. (2002). The Making of the Ecopreneur. *Greener Management International*, 38, 81-91.
- Ismail, M., Khalid, S.A., Othman, M., Jusoff, H., Abdul, R.N., Kassim, K.M. & Zain, R.S. (2009). Entrepreneurial intention among Malaysian undergraduates. *International Journal of Business Management*, 4(10), 54-60.
- Kefi, H. (2010). Mesures perceptuelles de l'usage des systèmes d'information : application de la théorie du comportement planifié. *Humanisme et Entreprise*, 297, 45-64.
- Kirkwood, J. & Walton, S. (2010). What motivates ecopreneurs to start businesses? *International Journal of Entrepreneurial Behavior & Research*, 16, 3, 204-228.
- Koe, W.L., Sa'ari, J.R., Majid, I.A. & Ismail, K. (2012). Determinants of Entrepreneurial Intention Among Millennial Generation. *Procedia - Social and Behavioral Sciences*, 40, 197-208.
- Koubaa, S. and Sahib Eddine, A. (2012). L'intention entrepreneuriale des étudiants au Maroc: une analyse PLS de la méthode des équations structurelles. Actes du 11ème. Brest: CIFEPME.
- Kraus, S., Burtscher, J., Niemand, T., Roig-Tierno, N. & Syrjä, P. (2017). Configurational Paths to Social Performance in SMEs: The Interplay of Innovation, Sustainability, Resources and Achievement Motivation. *Sustainability*, 9(10), 1828-1844.
- Krief, N. & Zardet, V. (2013). Analyse de données qualitatives et recherche-intervention. *Recherches en Sciences de Gestion*, 95, 211-237.
- Krueger, N., Reilly, M.D. & Carasrud, A.L. (2000). Competing models of entrepreneurship intentions. *Journal of Business Venturing*, 15, 411-432.
- Lecomte, J. (2004). Les applications du sentiment d'efficacité personnelle", *Savoirs*, 5, 59-90.
- Lee, Y. & Kozar, K. (2005). Investigating factors affecting the anti-spyware system adoption. *Communications of the ACM*, 48, 8, 72-77.
- Liargovas, P. & Apostolopoulos, N. (2017). Taxes as barriers to sustainable economic prosperity: the case of Greece in Taxation in Crisis. Palgrave Macmillan, Cham.
- Liargovas, P., Apostolopoulos, N., Pappas, I. and Kakouris, A. (2017). *SMEs and green growth: the effectiveness of support mechanisms and initiatives matters*. In Renko, S. and Pestek, A. (Eds), *IJEER Green Economy in the Western Balkans*, Emerald Publishing, Bingley, pp. 79-108.
- Liñán, F. and Chen, Y.W. (2006). Testing the Entrepreneurial Intention Model on a Two-Country Sample. *Documents de Treball, Universitat Autònoma de Barcelona, Departament d'Economia de l'Empresa*, 7/06.
- Liñán, F., Rodríguez-Cohard, J. & Rueda-Cantuche, J. (2011). Factors Affecting Entrepreneurial Intention Levels: A Role for Education. *International Entrepreneurship and Management Journal*, 7, 195-218.
- Linnanen, L. (2002). An Insider's Experiences with Environmental Entrepreneurship. *Greener Management International*, 38, 71-80.
- Maisaroh, Hunik Sri Runing Sawitri, Nor Hanuni Ramli. (2022). Green Entrepreneurship Behavior: A Literature Review. *Jurnal Analisis Bisnis Ekonomi* 20(1), 31-49
- Melay, I., o'dwyer, M., Dwyer, N.A., Kraus, S. & Gast, J. (2017). Green entrepreneurship in SMEs: A configuration approach. *International Journal of Entrepreneurial Venturing*, 9(1), 1-17.
- Mucchielli, A. (2007). Les processus intellectuels fondamentaux sous-jacents aux techniques et méthodes qualitatives. *Recherches Qualitatives*, m3, 1- 27.
- Ninik Sri Rahayu. (2024). Assessing the determinant factors affecting green entrepreneurial intention among female entrepreneurs in Indonesia. *Cogent Business & Management*, 11:1, 2378919. Doi:10.1080/23311975.2024.2378919
- Nguyen, C. (2018). Demographic factors, family background and prior self-employment on entrepreneurial intention - Vietnamese business students are different: why?. *Journal of Global Entrepreneurship Research*, 8(10), 1- 17.
- Nuringsih, K. and Puspitowati, I. (2017). Determinants of Eco Entrepreneurial Intention Among Students: Study In The Entrepreneurial Education Practices. *Advanced Science Letters*, 23(8), 7281-7284.
- Nuringsih, K., Nuryasman, MN. & Jenifer. (2020). Role of Green Entrepreneurship in Raising the Effect of Green Value toward Sustainable Development. *International Journal of Economics, Business, and Entrepreneurship*, 3(2), 117-131.
- OECD (2011). *Measuring green entrepreneurship at a Glance*, OECD Publishing. <http://www.oecd.org/science/inno/48350231.pdf>
- Pacheco, D., Dean, T. & Payne, D. (2010). Escaping the Green Prison: Entrepreneurship and the Creation of Opportunities for Sustainable Development. *Journal of Business Venturing*, 25(5), 464-480.
- Paillé, P. & Mucchielli, A. (2012). *Chapitre 11 - L'analyse thématique*", Dans : Paillé, P. and Mucchielli, A. (Dir), *L'analyse qualitative en sciences humaines et sociales*. Paris: Armand Colin, « Collection U pp. 231-314.
- Predkiewicz, K. & Kalinowska-Beszczynska, O. (2021). Financing eco-projects: analysis of factors influencing the success of crowdfunding campaigns. *International Journal of Entrepreneurial Behavior and Research*, Vol. 27 No. 2, pp. 547-566.
- Ramayah, T., Lee, J. & Lim, S. (2012). Sustaining the environment through recycling: An empirical study. *Journal of environmental management*, 102, 141-7.
- Romelaer, P. (2005). *Chapitre 4. L'entretien de recherche*", Dans P. Roussel & F. Wacheux (Dir). *Management des ressources humaines: Méthodes de recherche en sciences humaines et sociales*, Louvain-la-Neuve: De Boeck Supérieur, 101-137,
- Sandybayev, A. (2017). *Entrepreneurial Motivations as Determinants of Youth Entrepreneurship Challenges: A Case of Business College in UAE*, International Conference on Education and Workplace Development at HCT Abu Dhabi's Women's College, UAE, 14(1), ISSN: 2330-1236.

- Santini, C. (2017). Ecopreneurship and Ecopreneurs: Limits, Trends and Characteristics. *Sustainability*, 9(4), 492.
- Santini, C. (2021), *The Good Entrepreneur: Mapping the Role of Entrepreneurship in Society*. 1<sup>st</sup> ed., Palgrave Macmillan.
- Schaltegger, S. (2002). A Framework for Ecopreneurship: Leading Bioneers and Environmental Managers to Ecopreneurship. *Greener Management International*, 38, 45-48.
- Schumpeter, J.A. (1934). *The Theory of Economic Development*. Cambridge: Harvard University Press.
- Shabeeb Ali, M.A.; Ammer, M.A.; & Elshaer, I.A. (2023). Born to Be Green: Antecedents of Green Entrepreneurship Intentions among Higher Education Student. *Sustainability*, 15, 6668.
- Silajdzic, I., Kurtagić, S. & Vucijak, B. (2015). Green entrepreneurship in transition economies: A case study of Bosnia and Herzegovina. *Journal of Cleaner Production*, 88, 376-384.
- Sobaih, A. E. E., Hasanein, A., Gharbi, H., & Abu Elnasr, A. E. (2022). Going green together: effects of green transformational leadership on employee green behaviour and environmental performance in the Saudi food industry. *Agriculture*, 12(8), 1100.
- Sobaih, A. E. E., & Elshaer, I. A. (2023). Risk-taking, financial knowledge, and risky investment intention: expanding theory of planned behavior using a moderating-mediating model. *Mathematics*, 11(2), 453.
- Sommer, L. & Haug, M. (2011). Intention as a cognitive antecedent to international entrepreneurship-understanding the moderating roles of knowledge and experience. *International Entrepreneurship and Management Journal*, 7(1), 111-142.
- Szirmai, A., Naudé, W. and Goedhuys, M. (2011). *Entrepreneurship, innovation, and economic development*. Oxford University Press, New York.
- Tahir, R., Ireland, J. & Waqar, M. (2021). Networking evolution and entrepreneurial success: an exploratory study of female entrepreneurs in Pakistan. *International Journal of Business and Globalisation, Inderscience Enterprises Ltd*, 29(2), 163-177.
- Tkachev, A. & Kolvereid, L. (1999). Self-Employment Intentions among Russian Students. *Entrepreneurship & Regional Development*, 11(3), 269-280.
- Touzani, M., Jlassi, F., Maalaoui, A. & Bel Haj Hassine, R. (2015). Contextual and cultural determinants of entrepreneurship in pre- and post-revolutionary Tunisia: Analysing the discourse of young potential and actual entrepreneurs. *Journal of Small Business and Enterprise Development*, 22(1), 160-179.
- Van Gelderen, M., Brand, M., Van Praag, M., Bodewes, W., Poutsma, E. & Van Gils, A. (2008). Explaining entrepreneurial intentions by means of the theory of planned behaviour. *Career Development International*, 13(6), 538-559.
- Veciana, J.M., Aponte, M., and Urbano, D. (2005). University Students' Attitudes Towards Entrepreneurship: A Two Countries Comparison. *International Entrepreneurship and Management Journal*, 1(2), 165-182.
- Walley, E. E. & Taylor, D. W. (2002), "Opportunists, champions, mavericks? A typology of green entrepreneurs", *Greener Management International*, 38, 31-43.
- Wei, X., Liu, X., & Sha, J. (2019). How does the entrepreneurship education influence the students' innovation? Testing on the multiple mediation model. *Frontiers in Psychology*, 10, 1557.
- Wennekers, A.R.M. & van Stel, A.J. (2017). Types and roles of productive entrepreneurship: A conceptual study, In *the Wiley Handbook of Entrepreneurship*, 37-69.
- Yu-Shan Chen, Yi-Hsiung Lin & Yi-Ju Lai, (2022). The determinants of green entrepreneurship: The perspectives of leadership, culture, and creativity. *Business Strategy and the environment*, <http://wileyonlinelibrary.com/journal/bse>.
- Yi, G. (2020). From green entrepreneurial intentions to green entrepreneurial behaviors: The role of university entrepreneurial support and external institutional support. *International entrepreneurship and management journal*, 1(17).
- York, J. G., O'Neil, I. & Sarasvathy, S. D. (2016). Exploring environmental entrepreneurship: identity coupling, venture goals, and stakeholder incentives. *Journal of Management Studies*, 53(5), 695-737.
- Zhao, H., Seibert, S. & Hills, G. (2005). The Mediating Role of Self-Efficacy in the Development of Entrepreneurial Intentions. *The Journal of applied psychology*, 90(6), 1265-72.
- Zhang, W., Li, Y., Zeng, Q., Zhang, M. & Lu, X. (2022). Relationship between Entrepreneurship Education and Entrepreneurial Intention among College Students: A Meta-Analysis. *International Journal of Environmental Research and Public Health*, 19(19), 12158.