

# **Study of a serial mediation model to link green entrepreneurial motivation and green entrepreneurial behavior of students at the University of Sfax**

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## **ABSTRACT**

Today, Tunisia is charting a path toward green growth by implementing high-ambition strategies characterized by the adoption of new educational, social, economic, and financial programs that advance the Sustainable Development Goals. This study examined the effect between green entrepreneurship incentives and entrepreneurial behavior. The study investigated the moderating effects of green entrepreneurial purpose and university curriculum support on the connection between green entrepreneurial motivation and entrepreneurial action. Using a targeted sampling technique, 240 students from various university levels at the University of Sfax were included in the population. With SPSS 20, a structural equation model was created. A confirmatory factor analysis was employed to evaluate the hypothetical model's fit quality. The findings show a favorable correlation between university courses, green entrepreneurial behavior, and incentives. Additionally, the university curriculum modifies the association between green entrepreneurial motivation and entrepreneurial conduct, and green entrepreneurial purpose moderates the relationship between the two.

## **KEYWORDS**

Green entrepreneurial motivation, green entrepreneurial intent, entrepreneurial behavior, university curriculum, green entrepreneurship.

## Introduction

One of the roles of the university is the ability to prepare students to acquire knowledge, skills and attitudes to meet the demands of the current labor market Espiritu, et al., 2012. Therefore, one of the challenges of higher education is to meet the needs generated by the changes taking place in our society. In this way, it is essential to provide students with comprehensive development in their training, training to deal with the challenges and adversities that arise in the practice of the profession such as the challenges and objectives included in the 17 Sustainable Development Goals of Agenda 2030. Over the past two decades, since the United Nations World Conference on Sustainable Development (Rio+20, 2012), the theme of the green economy and its implications for sustainable development has prompted some researchers to reflect deeply on the global movement towards sustainable development. The move towards a "green economy" for a fairer and more sustainable economy is generating broad engagement around the world. Universities, both at national and international level, and various scientific and academic entities have become aware of the need to promote entrepreneurship at university level. UN .2015 recommends the need to introduce and develop sustainability in university education.

The term 'green entrepreneurship' is linked to the concept of a green economy. Launched in late 2008 with the support of UNEP (United Nations Environment Program), the Green Economy Initiative provides countries with analysis and advice on reforms and investments needed to green key economic sectors. The choice of this theme was not accidental. It fits perfectly into the current context of our country, the debate on a new development model. Tunisia is, like every country in the world, charting its path to green growth by implementing an ambitious strategy that includes new educational, social, economic and financial programs to advance attaining the goals of Sustainable Development.

This respect, the Tunisian university plays a very important role in the field of entrepreneurship and the creation of young women entrepreneurs following the university program. Yet promotion of green entrepreneurship remains inadequate, owing to many problems, such as programming and incentives. To this end, we try to address our research problem “how university curriculum support and green entrepreneurial intent moderates the relationship between green entrepreneurial motivation and entrepreneurial behavior”

To answer our problem, our article will therefore be structured in two parts. The first is a theoretical analysis of green entrepreneurship and research assumptions. As for the second, a

quantitative and qualitative empirical study where we answer the problem of research and validation of research hypotheses followed by a conclusion and recommendations.

## Literature

To better solve our problem, it is first of all a question of defining and understanding the meaning of certain basic concepts, namely: sustainable development and green entrepreneurship, including the selection of definitions that reflect our vision of research.

Having appeared since 1987, sustainable development is a concept that has emerged from a long process of reflection and debate around a model of development that is both quantitative and qualitative, built on three pillars: ecological, economic and social Lévêque et al., 2008. The United Nations (2012) defines sustainable development as meeting the needs of current generations without compromising the capacity of future generations. Fernández 2017 believes that sustainable development is a process of economic and social progress, and even personal in harmony with environmental resources, it involves political, economic, fiscal and industrial factors.

The United Nations (UN) over the past decade has held meetings with the highest representatives of nations and promoted programs to contain the causes of change, including the Rio+20 Earth Summit in 2012 and the document "Transforming our world: the 2030 Agenda for Sustainable Development", approved in September 2015. In this development agenda, they propose 17 goals and 169 goals to be achieved by 2030.

Thus, "sustainable development" is development that respects "economic efficiency", "social equity" and "respect for the environment" Poisson Haro, 2011. It is based on three pillars:

- ❖ The economic pillar, achieving the objectives of economic growth and efficiency;
- ❖ The social pillar, aimed at meeting human needs and the objectives of justice and social cohesion, including health, housing, consumption, education, employment, culture, etc.
- ❖ The Environmental Pillar, which aims to conserve, improve and enhance the environment and natural resources in the long term.

The term green entrepreneurship is associated with the concept of the green economy. The first definition of a green economy, or green growth, was developed by the United Nations Environment Program (UNEP) in 2011, is an economy that aims to improve human well-being and social equity while significantly reducing environmental risks and resource scarcity. The goals of this economy (UNEP, 2011): ensure economic sustainability, combat poverty by

creating jobs in new sectors, and conserve the natural capital that supports human activities.

Green entrepreneurship was first defined in 1990, the definition of green entrepreneur was introduced and an effort was made to define its characteristics. According to Hall, 2013, the term "green entrepreneurship" was first used in Gustav Berle's book "The Green Entrepreneur: Business Opportunities That Can Save the Earth and Make You Money" 1991. Berle's definition is succinct, poetic, morally focused, and perhaps accurate: "Green entrepreneurship is accepting the responsibility to create the future we envision." Sustainable entrepreneurship, according to Gibbs, 2009, is based on Schumpeter's fundamental concept of "creative destruction," and it is capable of changing the existing business model, which depletes natural resources without replacing them or giving them enough time to replenish themselves naturally. Green entrepreneurship has the potential to become the driving force behind the development of a new global sustainable system in all three aspects - environment, economy and society. Green entrepreneurs are agents of change who erase traditional production processes, products, market structures, and consumption patterns in favor of new, superior ecological goods and services. According to Tien et al., 2020, Green Entrepreneurship is conceived as an emerging concept, Pakura, 2020 that is gaining momentum as it is considered one of the biggest drivers of economic green. Green entrepreneurship plays an increasingly important role in protecting the environment Yi, 2020 and is seen as a response to the environmental threats facing today's society Haldar, 2019b.

## **1. Green entrepreneurial motivation:**

Green motivation can be defined as a green entrepreneur's commitment to creating green value and making a profit. Some eco-entrepreneurs aim to increase profits, while others seek to maximize green value, and some choose to combine the two Tromps, 2015. The motivation of green entrepreneurship is to make money by solving environmental problems.

Research by Bernauer, et al., 2006 and Abras sart & Aggeri, 2007 shows typological considerations for the motivation of green entrepreneurship. Eight subsequent proposals were formulated incorporating literature and field observations.

The first reason is to respond to the legal pressure while benefiting from the state of control determined by the proposal of a set of solutions in relation to the realization of green innovations that favor the initiation of innovative projects that take into account respect for the natural

heritage and also the realization of financial gains, the second reason is economic, which confirms the proposal is that entrepreneurs use eco-innovation to seize opportunities and do business and that entrepreneurs use eco-innovation to save money like solar energy and the circular economy. Thirdly, one of the important reasons that expresses the need to initiate projects with an eco- systemic objective is the response to the expectations of customers envisaged by the Entrepreneurial Proposal is the implementation of green innovations to meet the needs of green customers, the production of ozone- friendly goods and the use of eco-innovations by entrepreneurs to meet the needs of economical consumers, the use of appliances with lower energy consumption. Also, the last two suggestions Entrepreneurial implement eco-innovation to protect the environment and Entrepreneurs to get out of unemployment implement eco-innovation in their outlook.

The motivation to undertake an innovative project that safeguards the framework of respect for the ecosystem is accompanied by a paradigm shift in consumer preference for more environmentally friendly products, as well as increased attention to environmental issues related to pollution and global warming. In addition, changing consumption patterns through environmental education and increased awareness have led to the emergence of green markets, creating new avenues for green entrepreneurship and empowering aspiring green entrepreneurs through social, environmental and economic goals Dutta, 2008. Verstraete & Fayolle, 2005 summarizes the relationship between the innovation paradigm and the opportunity paradigm by showing the relationship between different entrepreneurial paradigms such as:

Innovation can respond to the design possibilities offered by the market.

Innovation can respond to the socialization process of new technologies, organizations or business methods, leading to the introduction of new products and services and the emergence of new organizations in markets and industries.

Entrepreneurship education is the combination of concepts, knowledge and understanding related to entrepreneurship, delivered to students interested in the subject, with the aim of improving their skills and expertise in the field Wardana et al., 2020, Anjum, et al., 2021. These educational programs allow students in continuing education to broaden their understanding based on opportunities and market forces so that they can fully understand their own strengths and weaknesses Donald et al., 2019. Due to the effectiveness and importance of educational programs involving entrepreneurship training, researchers express satisfaction and confidence in the legitimacy of the evolution of students' respective financial, social and environmental

capacities (UNESCO, 2009). In addition, when these students are teaching at educational institutions and universities, they need the help and support of universities and their respective administrations, in addition to the programs and tasks related to the courses they are enrolled in. Hameed et al., 2021. This assistance and support includes the creation and development of new businesses and environmental initiatives that can provide new employment opportunities and contribute to poverty reduction Bergmann, et al., 2016; Etzkowitz, 2004. On the other hand, the offer of training in entrepreneurship also contributes to the evolution of individual capacities and behaviors in the face of entrepreneurship Robichaud, et al., 2001.

## **2. Moderating role in support of university education:**

According to Wong et al 2014, university education in entrepreneurial studies has a decisive positive impact on student entrepreneurship. This successful program has had a significant positive impact on students. We offer educational institutions a productive approach to influence student entrepreneurship and enhance entrepreneurship through active participation programs. Support for university education can stimulate rapid growth and create value by seizing opportunities for bold responsibility and solving entrepreneurial puzzles by developing environmentally friendly products Dodgson, et al. 2020. Following the analytical results of quantitative research, students see environmental entrepreneurship as very important, but their main concern is profit. Training and seminars are organized to familiarize yourself. El moukhtar, et al., 2022

Higher education must evolve in a representative manner, restructuring colleges to accommodate new professions and sectors that are essential to sustainability. Environmental entrepreneurship skills are required to shape this process, and training through courses in environmental entrepreneurship will benefit them in the future. 2020 Dodgson et al.

Suwartha, et al 2013, show the university's positioning is a comprehensive statement that it is the university's responsibility to motivate and help students to envision their own environmentally friendly businesses after graduating from university. According to Anderson et al., 1992 found two main areas of support that help to realize the entrepreneurial role of universities: one generally concerns organizational responsibilities and the other concerns support to enterprises and actions of other enterprises. This is achieved by providing a basis for encouraging entrepreneurs, developing technology parks and establishing innovative areas.

Ginanjar 2016, show that education is an essential element in fostering entrepreneurship among university students. Support for higher education is therefore important and positive for student entrepreneurship and subsequent action, especially when It is founded on experiential learning since it gives students real-world exposure that helps them comprehend the implications of entrepreneurship.

The creation of new businesses is greatly facilitated by universities and their assistance and support to better meet needs and maximize profits at the lowest environmental cost Bergman, et al., 2016; Etzkowitz, 2004. In fact, universities have been recognized as sources and resources for developing the ecological concerns of Hameed students, et al., 2021. Beyond this, supporting universities also increases the level of sustainability of the market by providing incubators, green start-ups and sustainable knowledge transfer Anjum, et al, 2021; Wagner and all, 2021 and Yi, 2021. the success of any business depends largely on the knowledge and expertise of individuals; therefore, green university support for students also expands the green understanding of potential entrepreneurs Rideout & Gray, 2013. On the other hand, for an individual starting a new business, a sufficient level of motivation is considered a component. Anjum, et al., 2021; Jwara & Hoque, 2018. Entrepreneurs' motivation keeps them intact from the formulation of business strategy to execution for startups to become sustainable Collins et al., 2004; Krueger, et al., 2000. Therefore, when entrepreneurs have a high level of motivation, they are more likely to develop the capacity to protect and conserve ecosystems and the environment Rekha, et al., 2015; Van der Zwan, et al., 20000 012 According to Zulfiqar., & Thapa, 2018, Although the development of green entrepreneurs is not now prioritized in political or academic discourse, this generation believes that it can significantly improve society if given the chance.

### **3. Green entrepreneurship intent and green entrepreneurship behavior:**

Entrepreneurial action is defined as "the combination of ideas, capital and resources, and creative and empowerment factors" Borasi, et al., 2010. Useful tools to promote the green economy include green entrepreneurship Alwakid, et al., 2020. Green entrepreneurs are concerned with protecting and restoring the environment. According to the International Labor Organization (ILO) 2015, green entrepreneurs are green entrepreneurs by offering green products and services, implementing six more environmentally friendly production methods and increasing demand for green products and services. 'A green entrepreneur is someone



who is committed to making their business green and adopting green production technologies, or who is actually starting a green business by participating in green production.' OECD 2011, Previous studies have focused on entrepreneurial intentions Jena, 2020; Sharahiley, 2020; Vamvaka, et al., 2020, and only a few have investigated intentions to become a sustainable green entrepreneur Middermann, et al., 2020 and become a green entrepreneur Wang and Peng, 2020. This study proposed a holistic model to determine the factors driving students to become environmentally conscious entrepreneurs.

In the literature on green entrepreneurship, intent to act green is the most important confounding predictor of ecological behavior Miller et al., 2017. According to Bae, T.J et al., 2014, intentions and actions are the best predictors of planned actions. Researchers have identified an intent-based model that explains the entrepreneurial paradox and provides evidence of why people act in an entrepreneurial manner Kautonen, T et al., 2015, Fayolle, et al., 2015. In addition, the theory of planned behavior (TPB) Ajzen, 1991, the Hofstede national culture model, 2011, and cognitive knowledge of the metacognitive theory of Schraw & Dennison, 1994; Schraw & Moshman, 1995, were used to explore the factors underlying green entrepreneurial intentions. A previous study explained that TPB can conceptualize the creation of new businesses through Maheshwari intentionality, 2021. The TPB approach predicts entrepreneurial intentions Engle, et al., 2008; Liñán & Chen, 2009; Naushad, 2018 and because of its broad applicability, has been used in previous entrepreneurial studies to explain and predict Henley behavior, et al., 2017; Dao, et al., 2021; Haddad, et al., 2021; Maheshwari, 2021. It posits that entrepreneurial intentions can be predicted by motivation and its three distinct concepts, including behavioral attitudes, subjective norms, and perceived behavioral control.

The measure of attitude toward behavior is based on his opinion Ajzen, 1991. The more positive the attitude towards behavior, the stronger the entrepreneurial intent is Fayolle and Gailly, 2015; Zapkau, et al., 2015; Fietze & Boyd, 2017.

Subjective norms (SN) indicate the perceived social pressures in the decision to adopt or not adopt a particular behavior. More subjective standards that support individuals' efforts to become entrepreneurs strengthen their entrepreneurial spirit Fayolle & Gailly, 2015; Fietze & Boyd, 2017; Esfandiar, et al., 2019. Only two studies have examined students' intentions for green entrepreneurship Yi, G. 2020, no other research has been done in this regard, and the current literature does not contain any studies on global green entrepreneurship. Perceived Behavioral Control (PPC) is the perceived ease or difficulty in performing a particular behavior

Ajzen, 1991. Positive entrepreneurial self-efficacy improves individual entrepreneurship Fietze & Boyd, 2017 ; Esfandiar, et al., 2019 ; Nowiński, et al., 2019 ; Schmutzler, et al., 2019. Perceived controllability, on the other hand, is an individual's perception that he or she has sufficient control over the resources required to successfully meet an Ajzen challenge, 2002. The more positive the perception of having sufficient control over the resources needed to meet the challenges, the stronger an individual's willingness to pursue an entrepreneurial career is Fayolle and Gailly, 2015; Tounés et al., 2018. Zhou et al. (2018) assert that the idea of planned behavior makes it abundantly evident that purpose significantly influences subsequent entrepreneurial action in a positive way. The process of personal growth is characterized by studies on entrepreneurial behavior as a conscious and intentional decision to establish a new business 2014 Schlaegel et al. On the other hand, green entrepreneurship is a methodical and planned process that involves a number of steps and a specific set of green entrepreneurial objectives in order to become a green entrepreneur.

### **Research methodology:**

The research elements of our study are divided into four groups based on assumptions: one represents green entrepreneurial intent with seven items, the other is green entrepreneurial behavior with three items.

The third is support for university education in five items.

The fourth is the motivation of green entrepreneurship participation of five items. (See Table 1).

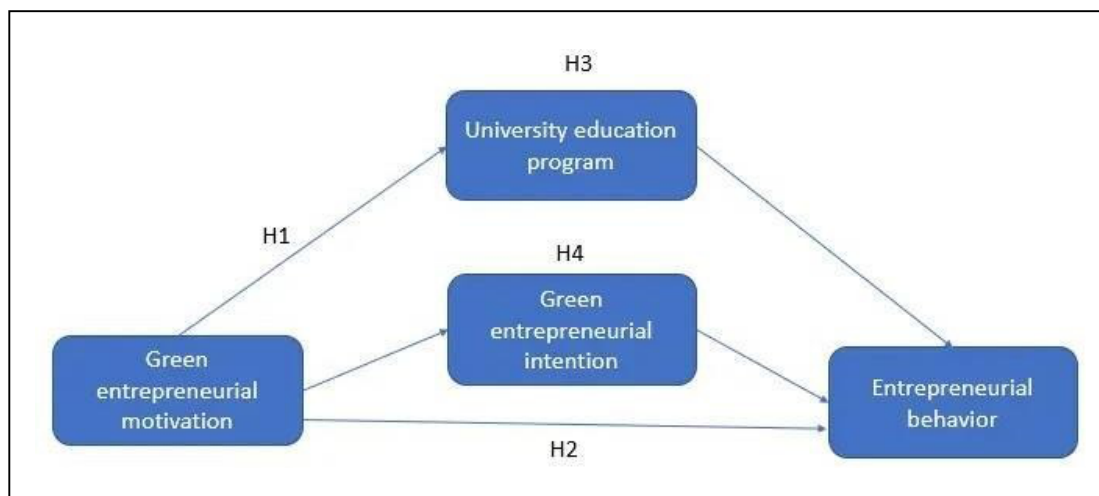
**At this level, it is worth recalling the hypotheses of our research, namely:**

❖ **Hypothesis 1:** Green entrepreneurial motivation is positively correlated with the university curriculum

❖ **Hypothesis 2:** Green entrepreneurial motivation has a positive effect on green entrepreneurial behavior

❖ **Hypothesis 3:** The university curriculum adjusts the relationship between green entrepreneurial motivation and green entrepreneurial behavior.

❖ **Hypothesis 4:** Green entrepreneurial intent moderates the relationship between green entrepreneurial motivation and green entrepreneurial behavior.

**Figure:** conceptual model.

### 3.1. The study sample:

Our sample defines the population to which the survey relates. It is important to note that the study focuses on the influence of green entrepreneurship intent on entrepreneurial behavior. The association between university students' intentions and actions related to green entrepreneurship is mediated by their passion for green entrepreneurship.

Our research, based on a sample of 240 students, seeks to test the influence of green entrepreneurship intent on entrepreneurial behavior. And seeks to explore the moderating role of green entrepreneurial motivation and its effects on entrepreneurial behavior.

### 3.2. Data analysis methods:

We used "SPSS 20" software to analyze collected data. First, a major component analysis will be conducted. The reliability of the measurement scales will then be checked through the Cronbach alpha coefficient.

Second, regression analysis was used. It is a statistical method based on the study of the correlation between variables. In the simplest cases, the linear relationship between an independent variable and a dependent variable is investigated.

In addition, the linear regression analysis describes the variations in the exogenous and endogenous variable. In addition, for the acceptance threshold of the Cronbach coefficient, as

specified in the previous section, in view of the exploratory nature of the research. However, some ordinal or Likert scales, as in this study, are most often considered Likert scales.

**Table 1.** Results of the ACP analysis.

Variables	KMO index	Meaning of Bartlett	Alpha Cronbach
ENI	0,825	0,000	0,879
VEC	0,954	0,000	0,778
SEA	0,729	0,000	0,879
MEV	0,742	0,000	0,883

SPSS output

#### 4. Analysis and interpretation of linear regression results:

##### 4.1. Validation of H1 assumption:

**Hypothesis H1: Green entrepreneurial motivation is positively correlated with the university curriculum**

**Table 2.** The effect of green entrepreneurial motivation on entrepreneurial education

Independent Variable	Constant	MEV	T	Gis	R2	F	Gis
MEV	4,375	0.608***	4,375	0,000	0.699	108.11	0,000

SPSS output

\*\*\*1% significance level, \*\*5% significance level, \*10% significance level

The table above shows that the model is significant at the threshold of 1% ( $F=250.11$ ). Secondly, green entrepreneurial motivation seems to have a positive and significant impact on entrepreneurial education at the 1% threshold ( $t=4,375$ ). So our first hypothesis is validated

### **H1: Green entrepreneurial motivation is positively correlated with the university curriculum (Validated)**

This result confirms that the estimated model is statistically significant, implying that entrepreneurial motivation contributed 69.9% of entrepreneurial education. The study by Grinevich,

V. et al., 2019 can be considered as a guideline for this study on how to perform regressions with the variable entrepreneurial motivation.

University students from Ghana are chosen for the Kohoutek study, J., et al., 2017. Participants in higher education institutions are people who work in knowledge-based centers that give students access to resources for research and career training, encouraging green entrepreneurship and innovation. Education institutions are knowledge-based organizations that foster green entrepreneurship and innovation by giving students access to resources for research and career training.

Wardana et al., 2020, Anjum et al., 2021 show that entrepreneurship education is the combination of concepts, knowledge and understandings specifically related to entrepreneurship, which is given to students interested in the subject in order to improve their skills and expertise in the subject. These educational programs allow students pursuing their studies to broaden their understanding based on market opportunities and benefits so that they can fully understand their strengths and weaknesses (Donald et al., 2019). Because of the effectiveness and importance of educational programs involving entrepreneurship training, researchers have shown satisfaction and confidence in legitimacy that transform students' respective capacities for financial, social and environmental sustainability (UNESCO, 2009).

Similarly, the Delmar & Wiklund study, 2008, reported that new generations are more aware and concerned about ecological well-being, which motivates them to take environmental initiatives by diligently discharging their environmental and social responsibilities.

#### 4.2. Validation of H2 assumption:

**Hypothesis H2, states that the motivation of green entrepreneurship has a positive impact on entrepreneurial behavior.**

**Table 3.** Impact of green entrepreneurship motivation on entrepreneurial behavior.

Independent Variable	Constant	MEV	T	Gis	R2	F	Gis
ENI	1,634	0.334***	5.958	0,000	0.558	92.57	0,000

SPSS output

\*\*\*1% significance level, \*\*5% significance level, \*10% significance level

#### **H2: Green entrepreneurial motivation has a positive effect on green entrepreneurial behavior. (Validated)**

Referring to the regression results presented below, the motivation of green entrepreneurship has a positive impact on entrepreneurial behavior.

Actually, with ( $T=5.958$ ;  $p=0.000$ ), the estimated coefficient for this association is equal to (0.334). Thus, intention and action are the most reliable indicators of planned behavior, in line with the findings of Bae et al. (2014). Researchers found models based on purpose to explain the entrepreneurial conundrum and presented data supporting the reasons behind people's adoption of entrepreneurial conduct. In 2015, Liñán and Fayolle. Intention is defined as “the willingness of an individual to accept entrepreneurial behavior as a desire to develop a new business” by Bae et al. (2014) when the concept of planned behavior is used. Ajzen, all 2018. The greater the purpose to convey, the more probable it is that the obligation will be fulfilled. The theory of planned behavior, in fact, demonstrates that intentions have a significant positive influence on subsequent entrepreneurial activity (Shinnar et al., 2018). The more someone plans to embrace entrepreneurial behavior, the more likely they are to do so (Kautonen et al., 2015). Research on entrepreneurial behavior explains a person's development process as a conscious and intentional choice to establish a new business. In 2010, Shirokova et al.

#### 4.3. Multiple regression validation with moderating variables:

**Table 4.** Multiple regression results with moderating variables.

Independent Variables	Entrepreneurial behavior
Motivations for Green Entrepreneurship X University Education Program	0,550 (0.140)
Motivations for Green Entrepreneurship X Green Entrepreneurial Intentions	0,240 (0.004)
R <sup>2</sup> R <sup>2</sup> Adjusted F-value	0.73 0.65 9.06***

SPSS output

\*\*\*1% significance level, \*\*5% significance level, \*10% significance level

This research revealed that the university curriculum is positively associated with green entrepreneurial behavior while the interaction effect between entrepreneurship motivations and green entrepreneurial behavior is not significant. This unexpected result can be explained by the mediating role of the university education program.

Moreover, researchers are now paying more attention to understanding the importance of university curricula. In order to foster innovation and entrepreneurship, funding for higher education is essential since it may help to define the parameters and attract the talent that will lead to a rise in the number of new green ideas. This will also be benefited from keeping the transactions flowing, giving college students additional chances to invest in venture capital, and encouraging the expansion of businesses engaged in green entrepreneurship Dodgson & Gann, 2020.

Elmoukhtar, et al., 2022 show that students think green entrepreneurship is very important based on analysis from a quantitative study. But the gains of self-reliance and self-fulfillment remain their primary goal. This validates the negative sign between Motivations of

entrepreneurship and green entrepreneurial behavior, hence among their suggestions, they propose the setting up of training and seminars so that they can familiarize themselves with this new concept.

**H3: The university curriculum adjusts the relationship between green entrepreneurial motivation and green entrepreneurial behavior. (Validated)**

On the second moderation, entrepreneurial intent and green entrepreneurship motivation, our results showed that the interaction of green entrepreneurship motivation with entrepreneurial behavior has a very significant positive effect.

Regarding the variable of the relationship between green entrepreneurial motivation, we found that it has a positive and significant effect that is changed due to the presence of mediation of entrepreneurial intent. The results found show that the entrepreneurial motivation is positive and significant at a level of 1%, with  $p=0.004$  and consequently hypothesis 4 is also confirmed. According to Amankwah & Sesen (2021), green entrepreneurial behavior and entrepreneurial motivation are positively correlated. Stated differently, the study examined the connection between the intention and actions of green entrepreneurship. The study investigated how students' intentions and actions related to green entrepreneurship on Ghanaian university campuses are influenced by their support for higher education and their dedication to environmentally friendly consumption. The results indicate that the green entrepreneurship intent had a positive influence on green entrepreneurial behavior through higher university education had a greater effect. The results of the Qazi et al. study, 2020, revealed that personality traits are positively and significantly associated with green entrepreneurial intent, but that risk-averse students show insignificant results towards green entrepreneurial intent. Moreover, academic support for green entrepreneurship translates into a positive intention for green entrepreneurship. Environmental values also strengthen the association.

**H4: Green entrepreneurial intent moderates the relationship between green entrepreneurial motivation and green entrepreneurial behavior. (Validated)**

**Discussion of the results**

Motivation for green entrepreneurship has a positive impact on green entrepreneurial behaviour (hypotheses 1 and 2 confirmed). Simply put, the more people are motivated by green entrepreneurship, the more likely they are to engage in environmentally friendly entrepreneurial activities. The results of this study show that green entrepreneurial motivation has a positive



influence on entrepreneurial behaviour. This means that the more someone is motivated by ecology to set up a business, the more likely they are to adopt entrepreneurial behaviours such as: researching market needs for green products and services, developing innovative green products and services, and setting up green production and distribution processes. These results are consistent with those of other studies, which have shown that motivation is an important factor in the development of entrepreneurial behaviours. People who are motivated by a goal are more likely to take risks, overcome obstacles and succeed.

Tunisia faces a number of environmental challenges, including pollution, desertification and climate change. In this context, green entrepreneurship is a promising solution for contributing to the country's sustainable development. Green entrepreneurial motivation is an important factor in the development of green entrepreneurship in Tunisia. It can be reinforced by university training and green entrepreneurial intent.

The university curriculum plays a positive role in green entrepreneurial behaviour (hypothesis 3 confirmed). This means that university programmes that encourage green entrepreneurship can help students develop the skills and knowledge needed to create eco-responsible businesses. The university plays a moderating role in the relationship between green entrepreneurial motivation and entrepreneurial behaviour. This means that the effect of motivation on behaviour depends on the university education received. If the university offers programmes geared towards green entrepreneurship, then motivation will have a greater impact on student behaviour. It is possible to explain this result by the fact that green entrepreneurship programmes provide students with the knowledge and skills they need to set up a green business. They also enable them to develop their network and meet green entrepreneurs who can inspire and support them.

Green entrepreneurship programmes can provide Tunisian students with the knowledge and skills they need to set up a green business. They can also help them develop their network and meet green entrepreneurs who can inspire and support them. A number of universities in Tunisia offer green entrepreneurship programmes. However, these programmes are still few and far between. The intention to go green strengthens the link between motivation and behaviour (hypothesis 4 confirmed). In other words, when people have both a strong motivation and a clear intention to create a green business, they are more likely to take action. Green entrepreneurial intention also reinforces the effect of motivation. This means that if someone already has the intention to create a green business, their motivation to take

action will be even stronger. This result can be explained by the fact that intention is a manifestation of motivation. When someone intends to do something, they are more likely to take action to achieve it.

Entrepreneurial intention is a person's desire to set up a business. People who already intend to set up a green business are more likely to do so, as they are already motivated and committed to doing so. In Tunisia, a number of young Tunisians are interested in green entrepreneurship. However, they still face a number of obstacles, such as a lack of funding, regulation and support.

### **Implications for universities and entrepreneurs**

The results of this study have important implications for universities and entrepreneurs.

For universities, these results encourage them to give more importance to green entrepreneurship in their programmes. This can be done by offering specific courses and training, inviting green entrepreneurs to share their experience, and encouraging students to develop projects in this field. Universities can also work with green businesses and organisations to develop specific training and mentoring programmes. This will enable students to acquire the skills and knowledge they need to set up a green business and benefit from the support of experts in the field.

For entrepreneurs, these results show that it is important to strengthen their motivation and their green entrepreneurial intention. This can be done by learning about environmental issues, setting ambitious goals, and surrounding themselves with other like-minded entrepreneurs and mentors. Entrepreneurs can also take part in specific training and mentoring programmes for green entrepreneurs. This will enable them to acquire the knowledge and skills they need to succeed in this field.

In conclusion, this study shows that green entrepreneurial motivation is an important factor in the development of entrepreneurial behaviour. University and green entrepreneurial intention also play an important role in this relationship. These results encourage universities to become more involved in promoting green entrepreneurship, and entrepreneurs to strengthen their motivation and intention to bring their projects to fruition.

## Conclusion:

As consumer demand for green goods and services has increased, eco-responsible behavior has become a global need for entrepreneurs. Undoubtedly, the University of Tunisian plays an important role in promoting entrepreneurship and creating entrepreneurial profiles. However, its actions in favor of green entrepreneurship are still insufficient. The choice of subject is not accidental. It fits perfectly into the current context of our country, characterized by discussions around a new development model.

Our work will focus on the reasons for the limited development of green entrepreneurial culture in terms of motivation and behavior, the involvement of training and education institutions, in particular the university, in an entrepreneurial dynamic, and finally the strategy to be adopted for the promotion of culture and entrepreneurial training and the green entrepreneurial intention among young students at the University of Sfax through a quantitative analysis of a sample of 240 of all levels and specializations. By examining university support and green entrepreneurial intent, which act as moderators of the relationship between green entrepreneurial motivation and entrepreneurial behavior, we hope to add to the body of work that already examines this relationship. The results show significant and positive associations between the hypotheses proposed. Specifically, green entrepreneurial intent and that the university curriculum moderates the relationship between green motivation and entrepreneurial behavior variables. The results of this research provide valuable information to policy makers and practitioners who wish to encourage green entrepreneurial activities through the proposal to organize training and seminars to familiarize them with this new concept. Universities must improve the quality of entrepreneurship education, which requires higher sustainability targets. These goals must be consistent with the sustainable development goals proposed by the United Nations. In addition, institutions should increase the level of support and support by offering green and environmentally friendly initiatives and start-ups. On the other hand, universities should properly integrate the use of technology into their university programs so that students can develop their technological skills. Finally, universities should also develop students' mental capacities, thereby encouraging, developing, and promoting their motivation and commitment to the environment accordingly

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## Annexe

**Table 1.** Search items elaborate by author

The dimensions	The items	Authors
<b>Green Entrepreneurship Intentions</b>	<p>green entrepreneur is my dream job, and I will stop at nothing to achieve it.</p> <p>I'll work hard to launch and manage my green business.</p> <ul style="list-style-type: none"> <li>- I'm determined to create a green company in the future. I have given starting a green business a lot of thought.</li> <li>- I would have done anything to become a green entrepreneur while I was an undergraduate.</li> </ul> <p>As a professional executive, I will engage in the promotion of social companies and contribute to their operations. Getting ready for my college studies</p>	<p>Liñán and Chen 2009 and Hsu and Wang 2018</p>
<b>Green Entrepreneurship Behavior</b>	<ul style="list-style-type: none"> <li>- During your study, did you create a green business plan?</li> <li>- The idea of developing environmentally friendly products/services.</li> <li>- Seeking external funding for green entrepreneurship.</li> </ul>	<p>Kautonen et al. (2015), Shirokova et al. 2016 and Neneh 2019</p>

<p><b>University Education Program</b></p>	<ul style="list-style-type: none"> <li>- There is a green entrepreneurship course offered by my university.</li> <li>Students at my university are encouraged to launch environmentally conscious enterprises.</li> <li>- My university is working on green entrepreneurship-related projects.</li> <li>- The state gives students the resources, both material and political, to launch their own companies.</li> <li>You believe that university courses are advancing green entrepreneurship skills to launch a company</li> </ul>	<p>Adapted from Yi 2020</p>
<p><b>Motivations for green entrepreneurship</b></p>	<ul style="list-style-type: none"> <li>- Create products that respond to legal pressures and benefit from state advantages: We would like to establish green products in the future.</li> <li>- Implementing green innovations that will positively influence the economic benefits of the business</li> <li>- I motivate others to make environmentally friendly products that meet customer demand</li> <li>- I am an advocate for products of an ecological (ethical) nature</li> <li>Green entrepreneurship is an area that can improve my current situation</li> </ul>	<p>Rennings and Zwick 2001, Taylor and Walley 2004, Bernauer et al 2006 and Abrassart et Aggeri 2007</p>