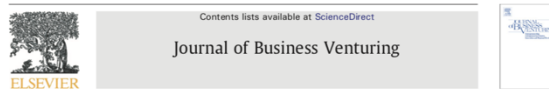




UNIVERSITAT ROVIRA I VIRGILI

# THE ROLE OF ENTREPRENEURIAL AND SUSTAINABLE ORIENTATION ON SUSTAINABLE ENTREPRENEURSHIP

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## The influence of sustainability orientation on entrepreneurial intentions – Investigating the role of business experience

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### ABSTRACT

Do individuals who are concerned by issues of sustainability also exhibit stronger entrepreneurial intentions? Given that existing imperfections in the market create numerous opportunities for entrepreneurship connected with sustainable development, adding individual sustainability orientation to models of entrepreneurial intention could increase their explanatory power. Based on survey data collected from engineering and business students and alumni of three universities, we provide evidence that entering sustainability orientation into the equation is actually meaningful. However, our findings suggest that the positive impact of sustainability orientation vanishes with business experience. Consequently, we suggest measures to nourish an evidently existing potential for sustainable entrepreneurship.  
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### 1. Executive summary

The emerging stream of academic literature on sustainable entrepreneurship adds a new dimension to the general promise of entrepreneurship. No longer is entrepreneurship supposed to merely result in economic success: sustainable entrepreneurs manage to the “triple bottom line” by balancing economic health, social equity and environmental resilience through their entrepreneurial behavior. Sustainable entrepreneurship is thus clearly associated with the promise of more traditional concepts of entrepreneurship, but also brings additional potential both for society and the environment.

With this paper we contribute to the emergent stream of literature on this important topic in one particular aspect. Above all, we are interested in individuals who are concerned with environmental and societal issues; individuals who are sustainability-oriented and thus could potentially be more interested in supporting initiatives and forming businesses that support the idea of sustainability. In other words, we aim to answer the question of how sustainability orientation and entrepreneurial intentions are related in practice. Our paper, as a relatively rare exception uses large-scale survey data to provide empirical insights into this question. In doing so, and by being rooted in entrepreneurship theory and theorizing on sustainable development, it links debates on entrepreneurship for sustainable development with mainstream theories of entrepreneurship and at the same time provides a balance to the wealth of conceptual models on sustainable entrepreneurship.

Embedding our empirical analysis in entrepreneurship theory, we hypothesize a positive relationship between an individual's sustainability orientation and entrepreneurial intention. However, based on the literature on organizational legitimacy and empirical findings from research on business ethics, we hypothesize as well that business experience negatively impacts on this relationship. Based on data collected from students and alumni from science and engineering programs plus students from business programs at three universities, we apply ordinal probit models and find support for these hypotheses. Our ordinal probit models suggest that engineering students with a stronger sustainability orientation are more likely to intend to become self-

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## 1. Introduction

The objective of the essay is analysing the use of sustainable business management as a new entrepreneurial method to invest in both existing and future markets. The research is based on "*The influence of sustainability orientation on entrepreneurial intentions — Investigating the role of business experience*", written by Andreas Kuckertz and Marcus Wagner in 2010. Based on the literature on organizational legitimacy and empirical findings from research on business ethics, Kuckertz and Wagner hypothesize a positive relationship between an individual's sustainability orientation and entrepreneurial intention, and a negative relationship between this relationship and the business experience. Their document is based on data collected by students and alumni of science and engineering programs and students of business programs in three universities. The models used suggest that engineering students with a stronger sustainability orientation are more likely to want to become entrepreneurs. At the same time, this association becomes insignificant when comparing the sample of engineering students with the sample of business students and a sample of former students. Apparently, entrepreneurial experience destroys the positive relationship between sustainability orientation and entrepreneurial intention, and this has important implications for education and entrepreneurship policy. The main research questions to which this document attempts to answer are: What does influence entrepreneurial intentions when an individual wants to invest in a new business? Are entrepreneurial guidelines of young entrepreneurs oriented towards sustainability? To what extent does sustainability orientation and entrepreneurial intention influence Sustainable entrepreneurial intentions? Starting from these issues, the main focus of the work will be the analysis of "the orientation towards sustainable entrepreneurship".

## 2. Entrepreneurial Intention definitions

The intentions of future entrepreneurs become essential to understand which orientation markets they will take in the future and how they will develop their business according to the sustainability concept. There are many definitions associated with the concept of entrepreneurial intention. However, none of the existing definition can be considered as the absolute one. This is explained by the fact the entrepreneur's intentions can be influenced by different factors; every hypothetical definition is right for a certain type of factors taken into consideration. In fact, if one factor changes, the definition of entrepreneurial intentions also change; otherwise, if there was a universal definition of Entrepreneurial Intentions, this would not be consistent with the considered variables

that change from time to time. The most classical entrepreneurship definition is provided by Schumpeter (1934), who considers the entrepreneur as a person who introduces new products and processes by identifying new markets and sources of the supply and taking advantage as a first mover for having discovered a new market niche (Jayeoba, 2015). More recent studies, instead, have an even broader concept of entrepreneurship; for example, Tijani-Alawiye (2004) thinks entrepreneurship as a good mean to develop small business and achieve socially useful goals such as job creation; same definition for Allen (2006), who considers entrepreneurship as a way to exploit opportunities that are geared to the professional and business growth (Jayeoba, 2015). Shankar (2012), identifies four categories of entrepreneurship: entrepreneurs who have become such because they have been offered the chance to become entrepreneurs; entrepreneurs out of necessity, mostly when they have realized how entrepreneurship can be a supplement family income; entrepreneurs who have become such by choice, by following their passions; finally, entrepreneurs who have become such because entrepreneurship was the only chance to support a family. The latter category may fall into the second category because it is in line with the same decision-making principles (Jayeoba, 2015). Therefore, according to Gartner (1985), entrepreneurship is motivated by social, cultural, economic, political and educational aspects that are probably different from non-entrepreneur's background; according to this, Watson, Hogarth-Scott and Wilson (1998) have found that mostly personal reasons are the causes to drive individuals to entrepreneurship (Johara, Yahya, Tehseen, 2017). Thus, if on one hand Morrison (1999) describes the figure of the entrepreneur as intelligent, effective risk manager and as a person that has basic trader's, by stating that all these requirements are necessary to become an entrepreneur, on the other hand, moving towards economic and financial aspects, for Lee and Peterson (2000) an entrepreneur should also motivated by financial rewards, career and social achievement to start a profitable business (Johara, Yahya, Tehseen, 2017).

### 3. Factors influencing business intentions

In a world afflicted by overpopulation and by the incessant use of its resources, the companies play their negative role about the dangerous condition in which the earth is. There is a need to change the way to think about business, since this is often associated with the exploitation of resources, without caring at the consequences and looking for alternative solutions. None seems to be worried about the effects of own actions that cause pollution and waste of resources most of the time. Why is that? Why do companies continue to pollute and waste resources without any kind of limits?

The answer is to be found within social factors; probably the awareness on such a profound theme is still far away from us. Hence, the importance of entrepreneurial intentions which are crucial for what the new entrepreneurial activities are going to be in the future. According to Kuckertz and Wagner, Entrepreneurial intentions are different for each individual and they depend on the type of background, culture and origin country of each person. More specifically, Hofstede (1991) defines culture as a “collective programming” by distinguishing a category of people from another (Juan et al.,2012). Each category is characterized by different values, principles and beliefs that are very different among categories. The combination of these values and principles can influence entrepreneurial intentions in different ways. For example, according to Lent et al., (2000), culture affects environmental intentions through social norms that affect in turn personal environment and decisions about career choices; similarly, Krueger (2000) states that culture mostly influences subjective norm in TPB model (Juan et al.,2012). Moreover, there is also a clear distinction between Western culture and Eastern culture in terms of uses, habits, beliefs and lifestyles. Hence, the distinction between individualism culture, for what concern Eastern countries, and collectivism cultures, for what concern Western countries (Juan et al.,2012). In the first case people tend to rely only on themselves to pursue their goals since they will be the only to benefit from the achieved results. Individualist countries are also oriented towards the satisfactions of personal needs: for example, values as, personal financial security can encourage entrepreneurial activities. In fact, in individualistic societies the need to be different from others and to achieve success is more felt than collectivistic societies. In collectivist societies, in fact, people tend to achieve group goals: they try to understand if the need for an individual a collective necessity is; thus, if this need may satisfy that need in a wider perspective. This means that people in individualistic society are more motivated toward self-enhancement and to became entrepreneurs. Nevertheless, within a group loyalty and achievement of objectives are rewarded, not to mention that personal satisfaction due to the success of the goals set would be much stronger since they would benefit a large group of people by increasing self-esteem and appreciation within a company. Noteworthy, the explanation of these two types of society (individualism and collectivism) in a very famous book called “Shantaram”, written by Gregory David Roberts in which it could really understand the difference between collectivism and individualism approaches. Gregory talks about India, which is one of the most densely populated countries. He says that what allows Indians to survive with each other is tolerance. In particular, the book describes the scene of a packed train; it was so full that people were forced to stand on top of each other. He underlines that in a such situation like that, none

complained because solidarity among people overpowered any kind of annoyance or impatience such situations created. In individualist countries, a situation like the one just mentioned would have sparked indignation among people and everyone would have quarrelled among themselves to get a seat. This because a person who lives in an individualistic environment, in which individual decision-making processes and independent actions are well rooted in each individual, will be more likely to be directed towards entrepreneurial intentions, rather than an individual who lives in a collectivist society in which the determining factors are not self-reliance, autonomy, self-sufficiency and diversity (Ozaralli, 2016).

Therefore, after giving a definition of the concept of entrepreneurial intention, now we will try to understand how this can connect to the concept of sustainability and give light to sustainable entrepreneurship.

### 3. Sustainable entrepreneurship

Sustainable entrepreneurship became world-wide in 1980, through the UN's Brundtland Report with the title of "Our Common Future". Sustainability concept was taking hold with every criteria that had to be satisfied like a balance between economy, social and ecology aspect and the split between the economic growth and the exploitation of non-renewable resources.

The first literature about the Sustainable entrepreneurship was only oriented through the environment; it explained the role of the "*envirocapitalists*" that are entrepreneurs that develop the environment by saving endangered species, develop natural habit and so on. But sustainable entrepreneurship does not concern only the environment. For example, many studies have also focused on social expectations of sustainable entrepreneurship like eco-entrepreneurship. Here, the distinction between incumbent and entrants. More specifically, according to Kuckertz & Wagner, we cannot compare incumbents that are companies that slowly are becoming sustainable by changing their production processes, from those companies that have already emphasized the respect for environment and that offer already sustainable products and services. But the common denominator reconstituted in the orientation towards sustainability is at least the same. Sustainable entrepreneurship is also concentrated on how to access innovation according to Desa and Kotha (2006) and on the analysis of non-profit social venture. According to other studies, instead, sustainable entrepreneurship takes advantage from economic opportunities that it is possible to recognize in market failures. Kuckertz & Wagner show the example of the energetic market; it presents inefficiencies because there are possibilities to develop the wellness of some future

participants without reducing that of the existing ones. A sustainable entrepreneur immediately recognizes these inefficiencies and exploits them unlike an entrepreneur who is oriented towards economic development and does not recognize these opportunities but prefers business more profitable. Only a sustainability-oriented entrepreneur can recognize sustainable market opportunities that arise; that is why, according to the two writers, there could be positive relationship between sustainable orientation and entrepreneurial intention. However, they state that everyone who are oriented to sustainability and recognize untapped opportunities in the market, may be more likely to become entrepreneurs, first of all, for asserting their values, and then for taking advantage from economic benefits that derive from it. For every other entrepreneurs, these opportunities either are not recognized and not identified as real opportunities. However, noteworthy is the influence of the company experience on Sustainability Orientation; in fact, through research on university students and current entrepreneurs or management, Kuckertz and Wagner state that greater the business experience is, lower sustainable orientation is. This can be explained through two hypotheses: the first hypothesis states that individual's sustainability orientation is not strong and rooted enough; the second, instead, states that the creation of sustainable companies is not supported by local governments. Because of this sustainable business is not profitable enough to sustain business expenses.

#### 4. Implications for society

Environmental problems are recognized by everyone, beyond cultural, environmental and political differences. Only those who recognize the problem, however, can benefit and enter the business of sustainable entrepreneurship. However, even if there is a significant focus on environmental problems, there are just few entrepreneurial intentions to facilitate and provide the necessary tools to start a sustainable business; this is explained by the fact that, despite Sustainability Orientation is catching on, its recognition is still in an immature phase. Therefore, there are still many entrepreneurs who cannot recognize the opportunities derived this challenge. This is also due to the insignificant impact that propensity towards innovation has towards sustainable incorporation, despite this market already shows a lot of market segment that have not been discovered yet. This happens because, where both results cannot be obtained, generally an entrepreneur choose to achieve profit rather than sustainability, when the aim should be to solve environmental problem through entrepreneurship and, at the same time, follow economic benefits. When this dilemma comes out, the entrepreneur has to decide which choice between entrepreneurship and

sustainability to prioritize. Often, ethical considerations can positively impact Sustainability decisions, but it does not always happen unfortunately.

## 5. Discussion

From needs arise solutions; in this case from the need to find a solution to environmental problems comes Sustainable Entrepreneurship.

The goal of Sustainable Entrepreneurship is to mediate between desire for profit and respect for the surrounding environment. As mentioned above, Kuckertz and Wagner's research shows that attitudes towards entrepreneurship are significantly associated with all champions with a greater probability to behave in an entrepreneurial way. Therefore, both students and alumni with a positive attitude towards entrepreneurship are more likely to become self-employed. Their paper also shows that engineering students with a stronger sustainability orientation are actually more likely to want to become self-employed. However, this effect wears off completely when inspecting the business student and the sample of alumni. In light of this, what measures can we take so as not to waste the obvious potential among the students? First of all, governments could encourage the creation of new ideas for new generations giving imputes to each of us to have the possibility to create business aimed to improve lifestyles and impact as little as possible the surrounding environment. Each of us needs to understand the true value of current problems and that, in case of a new activity that want to be started, decisions should be taken with conscience and ethics. To this end, communication channels such as education, have to facilitate and provide more information about Sustainability Entrepreneurship and demonstrate how this orientation is not opposed to the profit one, but, on the contrary, that they can be smoothly intelligently combined. By investing in sustainability field, in fact, an individual could achieve very profitable results since this undeveloped market is a growing up. Through right incentives and the development of new and interesting ideas, starting a new business could be profitable and socially useful. It is important to understand that altruism combined with entrepreneurship could make possible that the company satisfies both priorities: the first satisfied priority concerns the worker because through work it is also socially accepted within a company by obtaining a monetary remuneration; the second satisfied requirement is the respect of the surrounding and gratitude towards the environment that hosts us. The biggest challenge is to share this thought globally and make it feasible through a radical change in the consciences of politicians and governments.



## 6. Conclusions

Those who have entrepreneurial intentions are more predisposed to start a sustainable entrepreneurship because they are able to recognize market opportunities within the green sector. At the same time, their entrepreneurial intentions will fade with the increase of work experience, because they realize the impossibility of combining profit and sustainability in one goal. This is because currently there are no means to start a really profitable company but completely sustainable. The problem could be alleviated by the development of government policies and actions aimed at achieving green goals through effective communication. But although the sustainable sector is growing, the road to achieving this goal still seems long and uphill.

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