



Article

Assessing the Impact of Entrepreneurial Education on Entrepreneurial Intentions among Romanian Doctoral Students and Postdoctoral Researchers

Roxana Hatos ¹, Smaranda Cioban ², Gyarmati Bea ², Anca Dodescu ^{3,*} and Adrian Hatos ²

- Faculty of Economic Sciences, University of Oradea, 1 University Street, 410087 Oradea, Romania; roxanahatos@gmail.com
- Doctoral School of Sociology, Faculty of Social Sciences, University of Oradea, 1 University Street, 410087 Oradea, Romania; smaranda.cioban@gmail.com (S.C.); bgyarmati.psiholog@gmail.com (G.B.); ahatos@gmail.com (A.H.)
- Department of Economics and Business, Faculty of Economic Sciences, University of Oradea,
 University Street, 410087 Oradea, Romania
- * Correspondence: otiliaanca.dodescu@gmail.com; Tel.: +40-75-210-0800

Abstract: In the context of the intensely debated topic of the impact of entrepreneurship education on students' entrepreneurial intentions, the current paper presents findings of the entrepreneurial intentions of a group of doctoral students and postdoctoral researchers from different fields of study enrolled in the SmartDoct project—an entrepreneurship education project co-financed through the European Social Fund and implemented by the University of Oradea, Romania, between 2019 and 2022. Our paper investigates individual-level determinants of the intention to become an entrepreneur, grounding in the social-cognitive, planned behaviour, and human capital theories. Using content analysis of semi-structured interviews, the paper offers insights into the narratives related to the entrepreneurial intentions of doctoral and postdoctoral researchers, including relevant suggestions regarding the impact of gender, field of study, perceived influence of behavioural control, social norms concerning social support, and of the role models. Our results document the capacity of entrepreneurial programmes to encourage business initiation via stimulating entrepreneurial selfefficacy, the importance of perceived behavioural control on explaining entrepreneurial intention, and the value of social support and of role models, as well as the salience of the gender and field of study in explaining the net effect of entrepreneurial training in the case of students enrolled in advanced research programmes.

Keywords: entrepreneurial intention; entrepreneurship education; higher education; employability; SmartDoct project



Citation: Hatos, R.; Cioban, S.; Bea, G.; Dodescu, A.; Hatos, A. Assessing the Impact of Entrepreneurial Education on Entrepreneurial Intentions among Romanian Doctoral Students and Postdoctoral Researchers. Sustainability 2022, 14, 8369. https://doi.org/10.3390/su14148369

Academic Editors: Nnamdi O. Madichie and Paul Agu Igwe

Received: 6 May 2022 Accepted: 5 July 2022 Published: 8 July 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

Entrepreneurial intention is a fast-developing field of research. Since the publishing of Shapero's theory of an entrepreneurial event 30 years ago [1,2] followed by Bandura's social cognitive theory [3], Bird's theory of implementing entrepreneurial ideas [4], and Ajzen's theory of planned behaviour [5], a growing number of studies using entrepreneurial intention models as a theoretical framework explain the relationship between entrepreneurial intention and entrepreneurial behaviour [6–10], entrepreneurial intention being considered 'the single best predictor' of entrepreneurial behaviour [11]. In modelling the students' entrepreneurial behaviour, a growing number of studies support the major role of entrepreneurship education [12–34].

The topic of entrepreneurial intention is currently very important for Romania. Less than one in ten adults intend to start a business in Romania in the next three years [35]. The context in which Romanians' entrepreneurial intentions are formed comprises a series of contradictions.

Sustainability **2022**, 14, 8369 2 of 22

According to the World Bank (WB) (2020) [36], despite its average performance in the ease of doing business (ranks 55th out of 190 countries), Romania shows poor performance in 'starting a business' (ranks 91st out of 190 countries). According to the Organisation for Economic Co-operation and Development (OECD) (2020) [37], the business entry rate in Romania has been above the European Union (EU) average, despite less favourable framework conditions for entrepreneurship than the EU average. According to the Global Entrepreneurship Monitor (GEM) 2021/2022 Report [35], even though 49.1% of Romanian adults identify good opportunities to start a business in their area, 48.3% consider the fear of failure would prevent them from actually initiating a new business. Interestingly, variables attempting to capture the perception of the COVID-19 impact suggest that Romanian entrepreneurs are less constrained by the economic challenges of the pandemic than others, 42.2% of GEM respondents consider that starting a business in 2021 is more difficult than a year before, one of the lower rates among peer economies [35].

The lack of personal connection to entrepreneurs and the lack of confidence in their own ability to start a new business negatively influence Romanians' entrepreneurial intentions [35]. The GEM variables attempting to measure the attitudes and perceptions regarding entrepreneurship are lower than the global average; proof for this could be the small rate of Romanians who 'know someone who has started a new business' (37.7%), or that of the ones who consider that 'it is easy to start a business' (27.0%) [35]. Romanians' confidence in developing a business has been affected in recent years by the fact that, usually, new businesses do not survive to the next stage of entrepreneurial activity. This fact is highlighted by the relatively low established business ownership rate (4.1% in 2021) compared to the relatively strong total early-stage entrepreneurial activity (9.7% in 2021) [35]. The low established business ownership rate negatively impacts the general population's assessment of the viability of entrepreneurship and also the aspiring entrepreneurs who need models from the local entrepreneurial ecosystem.

One out of two Romanian adults regarded themselves as having the skills and knowledge to start a business; the GEM Report's expert ratings of the entrepreneurial framework conditions highlighted that the lowest scores obtained by Romanian respondents is on 'Entrepreneurial Education at School' (2.5), which placed our country as the 11th among 19 peer economies, and 'Research and Development Transfers' (2.7), which placed it 18th among 19 peer economies [35].

Although their role as key factors of sustainable long-term economic growth [38] is widely acknowledged, entrepreneurship and innovation are not generally defined as a 'third mission' of most higher education institutions in Romania. Moreover, entrepreneurship education does not cover all faculties, programmes, and cycles of study in Romania; access to entrepreneurship education is often limited to economics or business programmes and students' entrepreneurial intentions are relatively low [39]. On the other hand, the current available literature does not provide data on the engagement in entrepreneurial education of Romanian higher education graduates.

In this context, over the last three years, entrepreneurship education has been generally encouraged and supported in the Romanian higher education system at a national level by the Ministry of Education and through the European Social Fund in a project-based manner. As a result, a range of cross-campus entrepreneurship opportunities have been developed in Romania to boost students' entrepreneurial intentions.

The starting point of the present study is the SmartDoct project, 'High quality programmes for doctoral and postdoctoral students at the University of Oradea for the increase of relevance in research and innovation, in the context of the regional economy', co-financed by the European Social Fund through the Human Capital Operational Programme 2014–2020 and implemented by the University of Oradea in partnership with the Bihor County Employment Agency between 2019 and 2022. The project aimed to increase the relevance of research and innovation in the context of the local and regional economy by enhancing the number of doctoral and post-doctoral graduates of the university who find a job or start their own business, prioritising economic sectors with competitive potential,

Sustainability **2022**, 14, 8369 3 of 22

identified according to the National Competitiveness Strategy 2014–2020, and areas of smart specialisation, according to the National Strategy for Research, Development and Innovation 2014–2020. The target group of the project consisted of 80 doctoral students and 35 postdoctoral researchers from the University of Oradea. Project participants attended an entrepreneurial training programme, mentoring sessions with specialists in entrepreneurial education, career counselling, a business plan competition, and workshops on integrating the horizontal and secondary themes proposed by the European Commission into their business plans and academic research.

Thus, our main goal is to understand the impact of an entrepreneurial education programme on doctoral students' and postdoctoral researchers' intentions to become entrepreneurs in Romania and, more specifically, to assess the value of peculiar theories in helping to understand the impact of entrepreneurial education on entrepreneurial intention, as well as the way in which this effect is influenced by specific characteristics of the students, such as gender, cycle, and field of study.

Our previous empirical research among Bachelor students based on Ajzen's theory of planned behaviour [5] confirms a positive relationship between students' antecedents and entrepreneurial intentions which is more powerful than the one between students' experiences and entrepreneurial intentions [40], the highest contribution to building students' entrepreneurial intentions being attributable to students' entrepreneurial antecedents [41]. However, entrepreneurial education programmes with a target group of doctoral students and postdoctoral researchers are not very common either in the Romanian context or in the literature.

2. Literature Review

Starting from the fundamental theories, i.e., the theory of an entrepreneurial event [1,2] and the theory of implementing entrepreneurial ideas [4], and, as a result of the confluence of prominent social psychology theories, the social cognitive theory [3] and the theory of planned behaviour [5] on the one hand, and the prominent human capital theory [42] adapted by entrepreneurship researchers [43–47] on the other hand, research of entrepreneurial intentions has got a fertile theoretical framework [6–8,48].

Although it is an evolving field of research, there is no uniform approach to defining entrepreneurial intention, the term being used to cover different situations or concepts such as the desire to own a business, career orientation, vocational aspirations, nascent entrepreneurs, outlook on self-employment, etc., [7,49].

A basic definition of entrepreneurial intention belongs to Pillis and Reardon (2007) [10]: 'the intention to start a new business'. Thompson (2009) [49] proposed a more nuanced definition, claiming that the lack of a clear definition determined large differences in its measurement from the individual cognitions, personality traits, personal circumstances, environmental conditions, etc. According to Thompson (2009) [49], entrepreneurial intention is defined as 'a self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future. That point in the future might be imminent or indeterminate and may never be reached' [49].

Despite theoretical gaps, there is solid evidence in the literature to consider entrepreneurial intention a strong sign of entrepreneurial potential [50]. Many studies employing entrepreneurial intention as a proxy for future entrepreneurship behaviour claim that entrepreneurial intention is the best predictor for the decision to become an entrepreneur [8–12], even the 'single best predictor' [11] of entrepreneurship behaviour.

Regarding students' entrepreneurial intention, Bandura's social cognitive theory [3] and Ajzen's theory of planned behaviour [5] have served as key theoretical foundations for developing various models that incorporate the impact of antecedents on students' intentions to become entrepreneurs. In the case of students, entrepreneurial intention is widely applied as an indicator of the impact of entrepreneurial education [19–21,50].

The socio-cognitive models have been frequently used to analyse students' perceptions of formal learning in entrepreneurship courses and their level of entrepreneurial

Sustainability **2022**, 14, 8369 4 of 22

self-efficacy in relation to the study engagement, and have been proven to provide empirical support for a positive impact on students' entrepreneurial intentions in formal entrepreneurship education [19,27,28,51]. Zhao et al. (2005) [51] argue that pedagogical methods in entrepreneurship academic courses are related to all four stages impacting self-efficacy's development, according to Bandura's social cognitive theory [3]: 'enactive mastery', 'role modeling and vicarious experience', 'social persuasion', and 'judgments of one's own physiological states'.

The planned behaviour models have been proven to be more appropriate for analysing the impact of entrepreneurial education on students' entrepreneurial intentions [12]. According to Ajzen's theory [5], the intention is a direct antecedent of real behaviour; the stronger the intention, the more successful the behaviour prediction or actual behaviour is [5]. The clear separation between attitudes, perceived behavioural control, and subjective norms in Ajzen's theory [5] better explains, in our opinion, that students' entrepreneurial intentions are formed through a complex process of antecedents (attitude, subjective norms, and perceived behavioural control towards entrepreneurship) and experiences (exposure to entrepreneurial models, work experience, and intuition of trigger events) [40]. Grounded in the theory of reasoned action (Ajzen, 2002) [52], along with elements from the social cognitive theory of Bandura, the theory of planned behaviour represents one of the main frameworks in explaining behavioural intentions in different domains. According to Ajzen, self-efficacy is a component of perceived behavioural control, along with controllability. Recent studies confirm this idea, arguing that perceived behavioural control consists of perceived self-efficacy and perceived controllability [53]. Newman et al. (2019) [54] support that self-efficacy is a mediator between entrepreneurial intention and entrepreneurial behaviour, encouraging action.

The most recent research in the area confirms these basic models. Liu (2022) [28] showed that entrepreneurial intention among students is positively correlated with entrepreneurial self-efficacy and study engagement. Nowiński et al. (2019) [21] show, in a research that compares students from four countries, that entrepreneurial self-efficacy mediates the effect of entrepreneurial education on entrepreneurial intentions. Similarly, Barba-Sánchez (2022) [19] highlights that a large part of the impact of entrepreneurial education on entrepreneurial intention is explained by perceived behavioural control.

The influence of other dimensions covered in the above-described theoretical models were also highlighted in recent research: Neneh (2020) [55] pinpoints the impact of entrepreneurial passion on entrepreneurial intention, which is mediated by the specific self-efficacy, and also to the importance of social support.

Furthermore, the human capital models based on Becker's theory of human capital [42] adapted by entrepreneurship researchers [22,43–47] are also appropriate for analysing the influence of entrepreneurship education on students' entrepreneurial intentions. Entrepreneurial knowledge and skills related to entrepreneurial education have been identified as important determinants for entrepreneurial success, based on the assumption that individuals with higher levels of knowledge, skills, education, and experience can achieve better results than those with lower levels [23,28,43,46,56]. Two additional variables of students' entrepreneurial intentions regarding human capital are widely discussed: the work experience and the role models [57,58].

The impact of entrepreneurship education on students' entrepreneurial intentions is intensely debated. Most studies on the impact of entrepreneurial education are based on the premise that starting a business is a consciously planned behaviour and capture the connection between attitudes, intentions, and behaviour in models that combine, in different proportions, individual-level determinants grounded in the above-presented theories and models. Usually, these studies are based on questionnaires that attempt to capture students' entrepreneurial attitudes and intentions before and after an entrepreneurial course, training, or programme. It is considered a successful entrepreneurial education intervention if students' attitudes and intentions have subsequently changed in a favourable way. There is also increasing qualitative evidence of the impact of entrepreneurship education

Sustainability **2022**, 14, 8369 5 of 22

programmes [16]. Numerous empirical studies have found that entrepreneurial education has a positive influence on students' entrepreneurial intentions [12–17,28,55], but there are also empirical studies that prove the opposite, claiming that entrepreneurial education reduces entrepreneurial intention, while increasing risk aversion [59,60]. According to Lakeus (2015), the methods used for assessing the impact of entrepreneurial education need to be refined, and "one possible avenue is to use mixed methods, i.e., a mix of quantitative and qualitative methods" ([61], p. 20). In addition, case studies and good practices are encouraged, being considered very relevant to decontextualise, compare, and produce generalisable knowledge and possibly new theory ([61], p. 22).

The proliferation of programmes of entrepreneurial education for tertiary level students has led naturally to a rapid increase in the number of empirical assessments of such interventions in the actual entrepreneurial intentions of students [18,21,22,24–26,62–72]. Despite the abundance of studies assessing the impact of entrepreneurial education programmes in higher education, there is a lack of empirical evidence or case studies about doctoral students' entrepreneurial intentions.

Another three possibly important predictors of intentions in our entrepreneurship research are gender, cycle, and field of study.

The various research on this topic have consistently highlighted that men display stronger entrepreneurial intentions than women, be that because business culture is one which is predominantly masculine [73], or because of traditional values according to which men are expected to deal with family businesses or with providing for their families [74]. A comparison of gender indicates that although women generally have lower entrepreneurial intentions and display lower levels of ESE, they benefit more than men do from entrepreneurship education [21].

Similar results are highlighted in the literature analysis by Robledo et al. (2019) [75] which states that males have a larger preference for entrepreneurship behaviour than women. Kolvereid (1996) [76], for example, using the theory of planned behaviour, concluded that gender influences self-employment intentions indirectly through its effect on attitude, subjective norm, and perceived behavioural control. Moreover, when planning the creation of a business, men and women are motivated by different values and drivers; according to Kirk and Belovics (2006) [77], women choose entrepreneurship to balance work and family, while men are driven by wealth creation.

One point which is very important in the context of our paper is that in studies, women decide to avoid entrepreneurship because of a lack of control and of self-efficacy [29,78–80].

The cycle of study could also be related to the strength of entrepreneurial intentions because transitions from one cycle to the other are not random, and at each level, the students who are weak in scholastic aptitudes are sorted out. Since scholastic/academic aptitudes are not a prerequisite of entrepreneurial success, one may hypothesise that the more advanced the cycle of study, the weaker the entrepreneurial intention, of course, if other resources are unchanged. However, this kind of cross-generation comparison has been rarely done and, when attempted, brought inconclusive results [30]. A proxy of the study cycle could be the age of students. Concerning age, the literature agrees that older people are less enthusiastic about setting up a business [31,32].

Although rather rarely investigated, the field of study appears as an obvious candidate as a predictor of entrepreneurial intention for no other reason than the entrepreneurial practice of specific professions having different likelihoods and, related to that, the feasibility of setting up a business not being the same across professions. These conclusions are found among the research empirically highlighting the importance of the field we have mentioned [33,34]. Others see no significant relationship [81].

In this context, our study, in the case of the University of Oradea, Romania, based on the perspective of doctoral students and postdoctoral researchers from different fields of study (biomedical sciences, engineering sciences, geography, economics, sociology, and history) demonstrates the positive effect that an entrepreneurship education programme has on the entrepreneurial intentions of those enrolled in the most advanced levels of

Sustainability **2022**, 14, 8369 6 of 22

study and research. Therefore, we have set up a mixed research approach focusing on individual-level determinants on the intention to become an entrepreneur grounded in social cognitive models, the model of planned behaviour, and human capital models. Based on the literature review and our previous research on students' perceptions of entrepreneurship, we formulated the following research questions, off which the first one addressed the correlation of some control characteristics of the students (gender, cycle, domain) while the other four questions tackled the focal issues of the current research:

- Q1: How do gender, the cycle of the advanced research programme (doctoral or postdoctoral), and the domain of the research programme influence entrepreneurial intention and its dynamics regarding entrepreneurial education?
- Q2: What is the perceived impact of entrepreneurial education on doctoral students' and postdoctoral researchers' entrepreneurial intentions?
- Q3: What is the relationship between perceived behavioural control and doctoral students' and postdoctoral researchers' entrepreneurial intentions?
- Q4: How do subjective norms influence doctoral students' and postdoctoral researchers' entrepreneurial intentions?
- Q5: What is the impact of role models on doctoral students' and postdoctoral researchers' entrepreneurial intentions?

3. Methodology

This study represents the results of a qualitative and quantitative content analysis of 18 semi-structured interviews conducted within the SmartDoct project target group. Thus, the research population was made up of 40 PhD researchers and 18 post-doctoral researchers involved in the SmartDoct project. The interviews took place online (ZOOM platform) between November and December 2020 and lasted for 40–45 min each. The interviewer was a PhD researcher in economic sciences, with expertise in entrepreneurship, and an expert in the SmartDoct project team. The questions addressed entrepreneurial education, attitudes, and intentions. They were analysed with QSR Nvivo and Gephi softwares, an open source software, version 0.9, released by gephi.org

The participants were selected through a theoretical sampling method based on the following variables: gender, study cycle (doctoral/postdoctoral), and PhD field. Regarding gender, the sample included an equal number of men and women (9). The interviewees were doctoral students (11) and postdoctoral researchers (7) from the following fields: sociology (2), history (1), geography (2), economics (1), medicine (8), and engineering sciences (4). Regarding their professional background, the majority of participants had no entrepreneurial experience (12) or had negative experiences (3). In addition, most of the interviewees were university teachers (9), medical professionals (7), or had management positions in their fields (5); this might have had an influence on their views about entrepreneurship. In reaching the sample, we followed the rule of theoretical saturation in qualitative research (Glaser and Strauss, 1967 [82]; Saunders et al., 2018 [83]): since samples in qualitative inquiries do not obey the rules of statistical representativity, and can grow without limit, the sample has reached its limits when additional cases add no more information to the existent coding scheme.

The interview guide comprised 7 main topics, namely: work and entrepreneurial experience; entrepreneurial intention; entrepreneurial knowledge; control beliefs and perceived behavioural control; role models; normative beliefs; and subjective norms. The questions corresponding to each theme can be found in the table below (Table 1):

Sustainability **2022**, 14, 8369 7 of 22

Table 1. Interview guide questions.

Theme	Questions
Work and entrepreneurial experience	Do you have work experience (full-time, part-time, internship)? How do you appreciate this experience? Do you have any entrepreneurial experience? If so, how do you appreciate that experience? Did you ever start a business? Do you have your own business (including with a family member)?
Entrepreneurial intention	What is the probability for you to become self-employed in the next five years? Did you ever have entrepreneurial intentions? How did the SmartDoct project influence your entrepreneurial intention?
Entrepreneurial knowledge	How did you assess your entrepreneurial knowledge before the project? What about after participating in the project?
Control beliefs and perceived behavioural control	How capable do you feel to start your own business? Do you think it would be easy to initiate a business and keep it on the market? Are you ready to start a business? What are your main entrepreneurial skills and how do you assess them?
Role models	Do you personally know entrepreneurs? What qualities do you appreciate in an entrepreneur? Do you have a role model? How much has the relationship with entrepreneurs influenced your intention to initiate a business?
Normative beliefs	Do you think that being an entrepreneur is a good career choice? What do you think are the advantages and disadvantages of this career?
Subjective norms	If he/she has a business: How did your close ones react when you started your business? If he/she does not have a business: How do you think your close ones would react if you decided to open a business?

The interview guide aims to describe a research model grounded on individual-level determinants of the intention to become an entrepreneur. The objective of the coding process was to reveal the main themes addressed from the participants' perspective and was carried out in three stages: open, axial, and selective thematic coding (methods described by Strauss and Corbin, 1990, [84]). In the first stage (open coding), the interviews were coded separately by 2 encoders, who obtained a percentage of agreement (inter-rater reliability—Kappa Coefficient) of approximately 0.7 (suggesting the existence of a high degree of agreement). Subsequently, the two encoders jointly performed the axial coding and the selective coding. The main dimensions that were set in the first phase of the study, based on the conducted literature review, are as follows: work and entrepreneurial experience; entrepreneurial intention; entrepreneurial knowledge; control beliefs and perceived behavioural control; role modelling; normative beliefs; and subjective norms. Starting from these dimensions, in the subsequent phases, we developed specific codes that mirror participants' perspectives. The final codes are: entrepreneurial vision; business initiation and intention; entrepreneurial skills; factors that lead to entrepreneurial success; and SmartDoct—an additional code added based on the obtained responses, which refers

Sustainability **2022**, 14, 8369 8 of 22

to the impact of the project on the participants. The main theoretical dimensions connect to the practical experiences with entrepreneurship that our respondents have.

Work and entrepreneurial experience dimension is significant in understanding entrepreneurial intention from both the theory of planned behaviour [5] and from the human capital perspective [42]. It refers to specific attempts to initiate and run a business, including positive and negative experiences.

Entrepreneurial intention is important from the perspective of the theory of planned behaviour [85] because it is one of the determinants of the decision and behaviour to start a business. Considering the assumptions of human capital theory [42,86,87], we also investigated how participants perceived the influence of the SmartDoct project on their intention to initiate a business.

According to human capital theory [86], *entrepreneurial knowledge* is an economic value of the employee and determines the ability to run a business. This code differentiates between the level of entrepreneurial knowledge of participants before and after attending the project's activities.

From the perspective of the theory of planned behaviour [5,88], control beliefs and perceived behavioural control are fundamental in anticipating the probability of starting a business. The concept of capability has also been incorporated into the social cognitive theory in the form of self-efficacy [3]. According to this theory, self-efficacy refers to a person's confidence in their ability to perform a behaviour. Thus, perceived behavioural control refers to the ease with which a person anticipates that he or she could run a business, considering all the aspects involved.

According to social cognitive theory [89], *role modelling* is a key element in the process of building knowledge and entrepreneurial capacity. Role models can be either members of one's social network, public figures, or professionals in the field. Proximity to adequate role models prepares the person for engaging in a business.

Normative beliefs refer to personal attitudes towards entrepreneurial careers and how they influence one's career choice. It is a fundamental variable of the theory of planned behaviour [5], affecting the probability of becoming an entrepreneur along with behavioural control and subjective norms.

Subjective norms concern a person's perspective on how significant others would evaluate the behaviour of starting a business. In this sense, the way the interviewee perceived social support would have an impact on their entrepreneurial intention.

During the coding process, we developed an analytical model of entrepreneurial intention, from the participants' perspective. In doing so, we looked at factors influencing entrepreneurial intention, participants' vision of entrepreneurship, the role of perceived entrepreneurial skills, and the impact of the SmartDoct project on participants' mindset. The model (Figure 1) allows the connection between the most present theoretical dimensions and our final codes.

The model reveals overlaps between key concepts. Thus, we notice that the information on the SmartDoct project can be traced back to the entrepreneurial education and perceived behavioural control codes, which highlight the benefits the project brought to the participants in terms of knowledge and awareness of the ability to start a business.

Factors that lead to entrepreneurial success are reflected in the discourse on perceived behavioural control and role models, suggesting that information on the main issues to consider when planning a successful business (financial opportunities, market awareness, business planning, areas that do not require very large investments) is the basis for building the capacity to start a company.

Business initiation and intention are present in all the main codes examined, revealing the complexity of the decision-making process of starting a business. This code refers to the last stage of the entrepreneurial ladder, described by van der Zwan (2010) [90]. This stage emphasises the presence of a process through which entrepreneurial intention leads to actual start-up activities [53].

Sustainability **2022**, 14, 8369 9 of 22

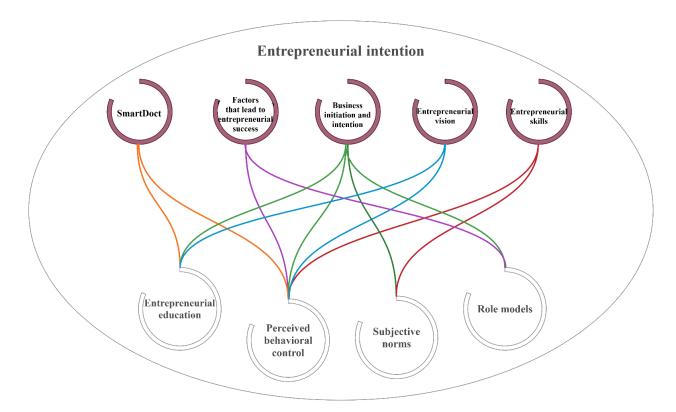


Figure 1. Analytical research model.

Entrepreneurial vision appears in the discourse of entrepreneurial education and perceived behavioural control, which shows the importance of entrepreneurial knowledge when effectively forecasting business, and the association between entrepreneurial capacity building and entrepreneurial vision.

Entrepreneurial skills are mainly mentioned in discussions of perceived behavioural control and subjective norms. Hence, the presence of an association between entrepreneurial competences and the support of others is noticeable. Additionally, people who perceive that they have strong entrepreneurial skills consider themselves more able to initiate a business.

Other relevant themes were observed in the participants' discourse. Hence, entrepreneurial vision includes experience in entrepreneurship, perceived advantages and disadvantages, and level of entrepreneurial knowledge. Business initiation and intention comprises cognitive (how research results can be translated into a business), emotional (willingness, motivation), and social elements (presence of entrepreneurs in close social environments). Entrepreneurial skills are a mixture of soft and hard skills that are characteristic to a successful entrepreneur, according to the participants. In close relationship to this are the factors that lead to entrepreneurial success, which assess the accuracy of the participants' estimate of their capability to run a business. This code is important from the perspective of the theory of planned behaviour [5,91,92], which states that perceived behavioural control anticipates one's probability to start a business, if that person understands what entrepreneurship implies. Our focus on the evaluation of the project's results has led to special attention to the discourse of the project's influence, embodied in the SmartDoct code.

4. Results

The research reveals gender-related influences regarding the perception of entrepreneurship. At the same time, it highlights the role of attending consistent entrepreneurial training on improving entrepreneurial self-efficacy and the positive effects of self-confidence, prior knowledge, perceived behavioural control, and social support on entrepreneurial intention. The added value of professional skills in relation to entrepreneurial

Sustainability **2022**, 14, 8369 10 of 22

intention is particularly noticeable for specific fields such as medicine, history, and engineering. The findings give support to the theories of planned behaviour and human capital. Next, we illustrate our results starting from the formulated research questions.

Q1: How do gender, the cycle of advanced research programme (doctoral or postdoctoral), and the domain of research programme influence entrepreneurial intention and its dynamics regarding entrepreneurial education?

There is a gender differentiation in the perception of entrepreneurship. On one hand, male participants focus on the skills and competences needed to run a business (financial forecasting, studying the competition and the market, funding opportunities): "Maybe experience matters and that's the most important thing, but I realised that along with experience there are other things that are important or maybe are equally important (...) we are talking about attitude, the way of involvement in projects and the energy one has, and I didn't think about these aspects before the project." (M., PhD student, economical sciences). On the other hand, women are more concerned with the subjective dimension (importance of optimism, motivation, commitment, communication, perseverance): "I think if you are committed enough and you have confidence in yourself and priorly you study the market, I think you will succeed." (F., PhD student, sociology); "Mentally and physically capable, 100% (...) I really think I have such a talent in this area, in the sense that even in the past when I was trying to make a small deal or a sale or get a referral, I always knew how to approach the problem and maybe you need some knowledge and a little bit of talent at this job, but I think I have some qualities in this area." (F., PhD student, biomedical sciences). The interviews also highlighted the fact that men pay more attention to the risks that can come with running a business, both in terms of its operation and of affecting family relationships: "You must have the idea, you have to calculate, to predict your expenses as well as possible(...) in addition to vision and business idea you need to have entrepreneurial experience and ideas (...) you predict, that you will have a development in a certain way, (...) but in reality you will run into all kinds of problems" (M., postdoc, biomedical sciences).

In considering the cycle of advanced research programmes, no significant differences are observed between doctoral and postdoctoral students. Both categories link entrepreneurial intention with their professional development, considering that they would be more willing to start a business after completing their studies: "At the moment, as I was saying, because I have not yet completed my professional training in the medical field, I can say that I could not get involved in a business, currently. But, in a few years, I will definitely feel capable, I even foresee developing and running a business in the medical field." (F., PhD student, biomedical sciences); "When I'm a specialist doctor and I won't be pressed by so many other obligations, I'll definitely look into the economic and financial needs of starting a business and other related aspects." (M., postdoc, biomedical sciences); "The moment I get to the point where I say: ok, I've reached my limit, I can't go any higher up the ladder, there's no reason for me to stay in an organisation where I think I've given everything I can in terms of capability, then obviously I'll focus on entrepreneurial work." (M., PhD student, economical sciences). However, doctoral students talked more about the level of entrepreneurial knowledge and skills, while postdoctoral students discussed more about the perceived behavioural control and the importance of role models, which may reflect a more clearly defined entrepreneurial intention among the latter: "If you want to become a business professional, you must have the knowledge. After that, in order to put it into practice, it's not enough to know a lot of theory, you need to have a bit of practical experience, i.e., to have been a practitioner." (F., postdoc, history).

The interviews revealed the specifics of entrepreneurial vision and intention, depending on the field of study. Participants from the engineering field were concerned about the level of entrepreneurial knowledge and skills and the extent to which the knowledge acquired through the project could help them value their research products: "The actual product would be the services provided by the laboratory, testing services. (...) from testing of new materials, new composite materials, prototypes of mechanisms including sensors, in biochemistry, pharmaceuticals, the laboratory having three or four machines (...). I had an idea of what it takes to get started. First you need to know if there is demand for the product, the service you offer. I

Sustainability **2022**, 14, 8369 11 of 22

had some general notions. What I lacked is related to salaries and cost estimation." (M., PhD student, engineering sciences); "Neither knowing the market, nor the technological flow and lacking the experience behind, it would not be as easy to start a business." (M., PhD student, engineering sciences). The situation is similar for participants studying history, who stress the importance of entrepreneurial knowledge alongside expertise in the field of study: "There are some fields which I think require a bit of professional maturity (\dots) you have a name and therefore you can add financial value. After all, in order to earn money from a business, you have to professionally evolve and get to a level of development." (F., postdoc, history). Both in the field of economics and geography, the focus is on perceived behavioural control and the level of entrepreneurial knowledge and skills. Studies in economics involve the acquisition of advanced knowledge of entrepreneurship and business plan development, which leads participants to feel prepared to start their own businesses in the future: "That was the added value in my business plan, the fact that I had to go back a bit, juggle with the numbers and see exactly if it adds up, and in case it doesn't how I can manipulate them so that the revenues are ok from this point of view" (M., PhD student, economical sciences). In the case of geography, interviewees identified the opportunity to develop a business in the field of tourism, acknowledging the importance of the skills acquired during the project: "The PhD thesis will help me in creating products for my future business, in my work as an entrepreneur. Related to the postdoctoral research (...) it involved a survey of what has been done so far in the area of climate research (...). There is a good chance that I will become an entrepreneur in the next period because based on my research related to tourist services and packages, I believe there is an acute need." (F., postdoc, geography). The main topic of discussion of the biomedical science participants is the perceived behavioural control. Similar to geography and economics, they emphasise the opportunity to start a business in their domain: "For this specialty you really don't need a huge investment, as it is a very common business (\ldots) the doctors I work with at the hospital, the vast majority of them have private practices as well." (M., postdoc, biomedical sciences). However, a fundamental difference is the perception they have over the process of initiating a business. In the case of medical specialists, setting up a private practice or clinic stems from their area of specialisation; for this reason, they find the idea of starting a business more accessible: "In the medical field, it is quite difficult to find only one role model, but rather associations, firms predominate, which actually imply a framework of several people who can implement such medical services." (F., PhD student, biomedical sciences). Alongside the above-mentioned domains, participants from the field of sociology are primarily interested in the importance of social patterns and context in the decision to develop a business, talking mostly about role models.: "I always keep an eye out for successful people, people better prepared than me (...) I looked at where they started from and in how many years they managed to bring the company to that level and I can say that each of them found the opportunity of the moment, so that they could build a business that eventually proved to be successful." (F., PhD student, sociology); "It is quite a delicate topic (working with addicts). Obviously, I could have simply made a stationary centre, as there are few in the country (...) what I did in the end was much closer to reality, I provided the basis to support that centre (so it was indirectly related to my subject) (...). In the long term it would have had a chance of success, but these settlements or centres are not, in fact, money-making businesses; it is an achievement if they are self-financing." (M., postdoc, sociology).

The insights gained revealed different profiles of entrepreneurs (soft- versus hard-skills oriented), domains that can be easily materialised into entrepreneurial initiatives, and the role of subject matter expertise that years of research provide.

Our analyses revealed significant differences in the perception of entrepreneurship and entrepreneurial intention among the categories of gender and the field of study, whereas differences between students enrolled in the two study cycles—doctoral and postdoctoral—are not that salient. Not only that, apparently, specialists in various areas tend to build on the specific skills of their field of expertise when a business is imagined, but, in their accounts, men and women tend to reproduce the stereotypes associated with their own gender categories in projecting entrepreneurship: men are more focused on skills and risk

Sustainability **2022**, 14, 8369 12 of 22

assessment while women tend to focus more on motivation, communication, and other variants of soft skills.

Q2: What is the perceived impact of entrepreneurial education on doctoral students' and postdoctoral researchers' entrepreneurial intentions?

Entrepreneurial education refers to training programmes, workshops, courses, and practical, hands-on experience in the business sector. One of the SmartDoct projects' goals was to enhance entrepreneurial knowledge and skills, and promote a positive attitude towards business. Participation in the project contributed to the formation of an entrepreneurial vision and had an impact on business motivation and intention.

Prior to attending the SmartDoct project, the interviewees stated that they had not received any entrepreneurial education, with two exceptions: one who took part in a project writing course and one who completed an introductory entrepreneurship course.

In order to assess the impact of entrepreneurship education on the entrepreneurial intention, we focus on the knowledge acquired through participation in the SmartDoct project, which included a comprehensive entrepreneurship training course. The course assignments included writing a business plan based on the participants' own academic research.

Among the perceived effects of taking part in the SmartDoct project, we mention: the confirmation of entrepreneurial intentions, the broadening of the scientific horizon in relation to entrepreneurship: "What was new about this project was precisely this idea of broadening the horizon (...) if you have an idea and you succeed or believe in it, you can get the necessary information so that you can put it into practice." (F., postdoc, biomedical sciences); rekindling entrepreneurial courage, confronting the fear of encountering potential failure in business development, and conceptualising a business and developing theoretical knowledge in the field of entrepreneurship with practical applicability in starting one's own business: "The project made me want to run a business in this field, it even became a goal for me." (F., PhD student, biomedical sciences).

According to their insights, the participants acquired skills on: writing a business plan, making financial projections, questioning long-term demand, market analysis, studying competition, estimating costs and salaries, accessing available financing opportunities, approaching potential clients, business management, communication, and teamwork. These were actually the contents covered by the entrepreneurial education programme of the project.

As a result of their participation and the information they acquired, the subjects increased their self-efficacy related to entrepreneurship. The majority of interviewees stated that they felt much more capable of starting and running a business than before this project. As such, the participants believed that entrepreneurship education had a positive effect on their entrepreneurial intentions, both in terms of knowledge and on a psychological level: "I can say that after this course I understand much more what the word or the field of entrepreneurship means, and it broadened my horizon a bit. I realised that you must have an idea, you must find certain start-ups or projects to get funding (...). The perspectives and the visions I have now are wider than before the project." (F., postdoc, biomedical sciences).

Illustrative for answering the above-mentioned research question is the statement: "I feel more empowered, I know more than I did a year ago, I am more confident in the very idea that I really want to develop something, to be an entrepreneur, to start a business (...) It gives you a little courage, maybe that courage you didn't have before, but somewhere it is an extra incentive: look, you can accomplish it!" (F., postdoc, geography).

Entrepreneurial training was designed to equip students above all with skills and knowledge for business planning. In our view, based on the interviews with our students, such a training can bolster their entrepreneurial intentions by improving their entrepreneurial self-efficacy—their self-assessed capacity to design and implement a business on rational bases—and, therefore, augmenting the motivation for starting and running a business. To put it more simply, students who attend a good entrepreneurial training

Sustainability **2022**, 14, 8369 13 of 22

session grow more confident in their entrepreneurial capacities and, as such, the likelihood of their starting an enterprise increases.

Q3: What is the relationship between perceived behavioural control and doctoral students' and postdoctoral researchers' entrepreneurial intentions?

In aiming to highlight the relationship between perceived behavioural control and entrepreneurial intentions, we refer to the main characteristics of a successful entrepreneur identified by the participants: "That half or maybe more of everything you do is based on positive thinking, confidence, perseverance, seriousness (...) If you've got to build something in one direction, don't go off track. Have confidence, fight, keep learning, grow in that direction and you will succeed out there." (F., postdoc, geography).

Most participants mentioned commitment, engagement, perseverance, leadership knowledge, self-confidence, risk management, and problem-solving skills, along with courage, as defining traits of a successful entrepreneur. Other aspects also noted in this regard were realism, vision, responsibility, entrepreneurial and professional knowledge, and interpersonal skills (communication, teamwork): "You have to trust yourself and what you can do, not the opinion of others (...) You can fight with the windmills or you can fight with everyone to prove, to prove to yourself first, that you are or that you are doing what you would like to do." (M., PhD student, economical sciences). In terms of self-efficacy, these respondents reported very good leadership and communication skills.

Furthermore, the analysis of the interviews shows that the participants who associate the profile of a successful entrepreneur with the factors listed above are seriously considering starting their own business in the following years: "You can't do entrepreneurship without knowing the field you want to manage, you want to master it, you want to control it" (M., postdoc, engineering sciences), and they are confident in their ability to do so: "I feel very capable and determined (...) I think I will do this in the future, because my husband is always teasing me and saying that I will be this energetic even in retirement and I should definitely open a business to stay active." (F., PhD student, sociology). Likewise, perceived behavioural control requires a prior knowledge of the main issues and implications of developing a business.

Interestingly, doctoral and postdoctoral students who associate entrepreneurship with behavioural control are more prone to initiate a business. In the absence of experimental data, one can merely suspect that such a correlation implies that the actual behavioural control stimulates entrepreneurial intention through the perception of control and the success of the enterprise through control itself. In any case, highlighting the importance of control—in its many operational forms, for example, commitment, perseverance, leadership, self-confidence, risk-management, and problem-solving skills—seems to be valuable in nurturing entrepreneurial intentions and success.

Q4: How do subjective norms influence doctoral students' and postdoctoral researchers' entrepreneurial intentions?

According to the theory of planned behaviour [5], subjective norms constitute the main determinants of entrepreneurial intentions. Subjective norms concern the perception of the support they would receive, especially from their significant others, in case of developing a business.

An important factor when thinking about starting a business is the certainty of having their family's support ("My husband would be delighted, I think"—F., postdoc, history), especially their partner's. Thus, the interviews reveal a distinction between emotional support (which most of them have), professional support (which only appears in the case of a few families, where there is already entrepreneurial experience or knowledge in the field), moral support (the participants consider that it is the duty of those close to them to support them in their projects), and financial support (the financial help they need when developing a business).

In order to feel prepared to start a business, participants emphasise the importance of a positive family climate and cohesion between family members, so that the time devoted to the business does not affect family relationships: "If you don't want to neglect your career, you

Sustainability **2022**, 14, 8369 14 of 22

neglect your personal life and obviously you need to have a bonded, supportive and understanding family." (M., PhD student, biomedical sciences).

This is followed by the support of friends, especially for those who lack family support: "My parents are elderly, I wouldn't benefit from their support. Even if they were younger, they didn't have this openness, they had a different mentality (...) It would be me, possibly my wife or friends, no way my family." (M., PhD student, engineering sciences). The support of friends or work colleagues plays an important role, particularly when they share the same interests and can discuss potential professional collaborations. This is reflected in the case of a participant interested in creating a medical prototype with colleagues from the university: "My family would support me. In my family we had a small company, my parents would support me. So would my friends or the researchers I collaborate with at the university. Being a team, we will strive to implement our idea." (F., postdoc, biomedical sciences).

Another issue raised by participants relates to the social pressure of running a business. They talk about the feeling of being constantly monitored and supervised, which contributes to their fear of failure: "My husband, my child, my sister, the people close to me who know me very well, the people I've worked with over the years, I think they'd all be, maybe they'd be paying more attention to me to see how I'm performing." (F., PhD student, sociology).

As expected, doctoral and post-doctoral students enrolled in entrepreneurship programmes underlined the importance of social support, but of social pressure as well, in starting and running a business. Significant others—family, friends, and colleagues—are expected to be supportive. In contrast, peer pressure can inculcate the fear of failure and, likewise, inhibit entrepreneurial intentions.

Q5: What is the impact of role models on doctoral students' and postdoctoral researchers' entrepreneurial intentions?

Role models play an important role in the decision of starting a business. Analysing the interviews, we observed the presence of entrepreneurs in the social network of many of the participants interested in starting a business. Most of them look for role models in their own field or in the media, among the great billionaires: Bill Gates, Donald Trump, Steve Jobs, and Richard Branson: "Yes, I have a role model (...) Steve Jobs. I think I've read everything there is to read about him. I totally agree with his approach (...) he always wanted to get the most out of the human resources he had, he found ways to make the most of their potential, but also, he was a visionary (...) the way he saw an opportunity in everything." (F., postdoc, geography); "I like people who are visionaries and I appreciate people who allow employees to create. (...) Richard Branson, the owner of the Virgin Group (...) I really like the way he thinks and the way he sees things." (M., PhD student, economical sciences).

The effect of role models on entrepreneurial intentions is more pronounced when they are from the same field: "I think they are very much anchored in the present, in what is required, in what the world needs. For example, I have a colleague that I appreciate, she is older, she could even be my mother and she is very well oriented, she always goes in the right direction (...) she is also a doctor and an entrepreneur. That's why she can also do her job, professionally, but at the same time she has somehow made it possible to combine the professional side with entrepreneurship, which at some point becomes a pleasure." (F., PhD student, biomedical sciences). Role models in the family and in proximity positively influence entrepreneurial intentions: "I stick to the example when I worked together with my father-in-law, now deceased, and we complemented each other very well. He was much older than me, obviously, and he had fantastic energy and it really didn't matter to us what day it was, what time it was, we were continuously working, and we had a lot of work to do; but maybe from him I learned something." (M., postdoc, sociology). Thus, participants value the dedication that another family member may bring development to the business, if necessary, and the integration of the business idea with professional activity. The story of a woman that managed to handle the business of her deceased husband, even if it was in a completely different field from hers, is illustrative from this aspect: "I have a cousin who, out of necessity, took over her husband's business (...). She was 38 years old when her husband died, and he owned a transport and truck service company. She has no knowledge in the

Sustainability **2022**, 14, 8369 15 of 22

field, absolutely none; he developed the business and she had to take it over (...) now she expanded the business: it's got a new building three times the area of the original one, the fleet of cars doubled or tripled, the addressability is much higher, so honestly, I think she would be my model of a successful entrepreneur." (M., postdoc, biomedical sciences).

Talking about their role models, participants emphasised that they saw the opportunity of the moment, valued their employees, were creative, innovative, full of optimism, courage, and enthusiasm, and demonstrated good leadership, communication, and autonomous decision-making skills. Entrepreneurial models are emulated by our subjects and picked from all the circles, including significant others, either from their social network or from well-known media stars. These models are perceived as being endowed with all the behavioural control capacities which soon-to-be entrepreneurs associate with business success.

5. Discussions

When discussing the results of our research one must bear in mind that the information gathered and analysed is of a qualitative sort: semi-structured interviews, in which subjective data containing self-perceptions and personal accounts were gathered, in contrast with the majority of articles to which we make references which use quantitative, often quasi-experimental, data. This approach is in line with Lakeus (2015) [61], who highlighted the relevance of qualitative methods and case studies in order "to decontextualize, compare, and produce generalizable knowledge" ([61], p. 22) and emphasised the need to improve the methodologies used to evaluate the impact of entrepreneurial education.

In general terms, the accounts of doctoral and postdoctoral students involved in an entrepreneurship training programme confirm the theses derived through previous research from the theory of planned behaviour. Business creation intention is bolstered by perceptions of strengthened behavioural control, in terms of Ajzen, which in turn is stimulated by increased entrepreneurial self-efficacy which has primarily gained from the knowledge and skills that are the direct added values of entrepreneurial education. Though we rely only on self-accounts, if we accept that entrepreneurial intention is the last subjective step one has to make before starting a business, another important lesson learned from our data is clear: well delivered entrepreneurship education modules are clearly effective as they support the increase in all the necessary dispositional prerequisites for starting a business. Our findings support prior empirical research findings that entrepreneurship education influences students' entrepreneurial intentions favourably [12–17,28,55].

Our results are the more relevant as they describe the impact of entrepreneurial education on a specific target group, very rarely investigated, doctoral and post-doctoral researchers. Oriented, according to a conventional perspective on their prospects, towards research careers in academia, these students, enrolled in highly advanced graduate programmes, seem to be highly responsive to the stimuli transmitted via entrepreneurship training. Even students from usually not very business-friendly domains, such as history or geography, started considering initiating a business after being thoroughly tutored into elaborating a business idea and a business plan relying on the topics and specific competencies in their field.

Comparing strictly our results with those from previous research on students' entrepreneurial intentions [18,21,22,24–26,62–72], it appears that the importance of perceived indicators of behavioural control attitudes is highly salient for declaring entrepreneurial intention. These findings are consistent with Zao et al. [51], Liu et al. [65], and Newman et al. [54]. The operational forms of behavioural control included in our coding scheme and found in our subjects' narratives—commitment, perseverance, leadership, self-confidence, risk-management, and problem-solving skills—are invoked frequently in association with the profile of a successful business owner, and such representations of entrepreneurship are correlated in their turn with entrepreneurial intention. Equally as important, our subjects consistently emphasise the importance of social support (subjective norms) and the relevance of role models, especially when they are closer to the individual considered, be

Sustainability **2022**, 14, 8369 16 of 22

it from the same network or at least from the same area of expertise. Our results further corroborate with Nowiński et al. [21] and Haddoud et al. [24].

However, the importance of behavioural control dimensions, as well as responses related to entrepreneurial attitudes, are not homogenous across the sample. The most interesting and relevant results of our analyses refer to the differences concerning these aspects between male and female students, or between students enrolled in different research domains or, less important, in the different cycles of study. Although explicit references to dimensions of behavioural control are important for everyone, behavioural control seems more valuable in the declarative form as a prerequisite for entrepreneurial success for female students, for those enrolled in post-doctoral research programmes (in contrast with doctoral students who emphasised entrepreneurial knowledge and skill), or for students enrolled in medical schools. As suggested, the contrast is with the importance of knowledge and skills and one can only suppose that gender, seniority—understood as the cycle of the research programme—and domain (though they can be confounded, as research domains are sometimes highly feminised or masculine) mediate the way the additional mastering of entrepreneurship is internalised and turn into motivation or an increased sense of control. In our opinion, at least two factors are behind this gendered specificity of skills and knowledge vs. behavioural control: (1) First, and most important, though easily overlooked, is the difficulty of setting up businesses in various areas of expertise which are also highly gendered. In the area of specialised medicine, running your own business is a norm as it is one of the most common forms of practice in Romania, so doing so is not so much a matter of risk taking as of commitment and energy. The more business-unfriendly domains, such as history, for example, require the improvement of entrepreneurial self-efficacy beforehand through familiarisation with the technical skills of setting up, planning, and running a business. The riskier a business is, which occurs in areas where self-employment is not the rule, the more one is expected to mitigate threats by the careful assessment of risks and improved mastery of entrepreneurship skills and knowledge. (2) The second factor, which is more easily evident and was already suggested, is the reproduction of gender stereotypes in the students' accounts. According to these cliches, women are more focused on communication, attitudes, and commitment, while men are supposedly more rational and calculated. These two hypothesised correlates of gendered perspectives on entrepreneurship could be contrasted with another one suggested in Section 4, in which we considered the existence of two specific potential entrepreneurs soft- vs. hard-skill-oriented ones.

All of the above-mentioned relationships are depicted in Figure 2 which adds, with dashed arrows, correlations that need further investigations. Given the specific social/networked context of gender and of professions, future research might explore the difference in the importance of role models and of social support for men vs. women and across various professional groups, respectively.

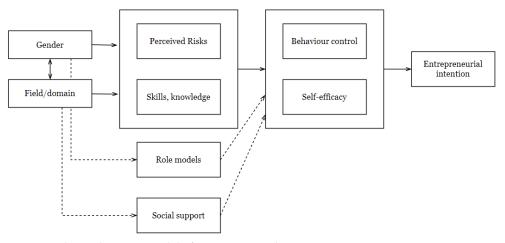


Figure 2. The explanatory model of entrepreneurial intention.

Sustainability **2022**, 14, 8369 17 of 22

Given the qualitative and limited nature of our investigation, the results cannot be but explorative and tentative. We did not use a control group in our research, neither interviews collected before the students went through the classes of business skills and knowledge; therefore, we cannot make strong statements as to what concerns the net effect of entrepreneurial training. Further investigations are required in order to enlighten the relationship between gender, the cycle of study, domain of study, and the impact of entrepreneurial training.

If one is to discuss the practical consequences of the research, Figure 2 makes it clear that technical-oriented entrepreneurship education merely acts directly upon the skills and knowledge dimension involved in the variations of entrepreneurial intentions. However, the impact on entrepreneurial behaviour control appears to be affected also by the career prospects of students, which defines the perceived risks of operating a business in their own areas of expertise. Beyond that, gender stereotypes could interfere on the route of planning a business, along with the perceived role models and social support. All these factors have to be taken into account when designing an appropriate and impact-maximising business education approach.

6. Conclusions

The impact of entrepreneurial training programmes is a valuable topic as entrepreneurship has a heightened attention in the current economic environment of significant hurdles and fierce global competition. This is even more apparent in the circumstances where highly-qualified specialists are concerned, as is the case of PhD and postdoctoral students, who are mostly expected to use innovation and creativity in their business endeavours.

The implementation of an entrepreneurial skills training programme with doctoral and postdoctoral students at the University of Oradea provided the opportunity to investigate the influence of the programme on the entrepreneurial intentions of the members of the target group using qualitative techniques. The theory-informed structured interviews with 18 students and their subsequent content analysis offer insights into the narratives related to the entrepreneurship of this highly-educated population, as well as suggestions regarding the impact of entrepreneurial training upon entrepreneurial intentions, the impact of gender, the cycle and field of study, and the perceived influence of behavioural control, social norms concerning social support, and of role models on entrepreneurial intentions.

One main caveat must be added to these conclusions: they do not imply factual causal relationships, but primarily perceived relationships, as they emerge from the narratives produced through individual interviews. Experimental studies are required to test if what is present in the ready-to-be entrepreneurs' accounts has a correspondence in the real world. It is hard to believe the contrary as some of the conjectures expressed by our subjects have the capacity of self-fulfilling prophecies. For instance, we have noticed that being simply a graduate of an entrepreneurial training programme increases entrepreneurial self-efficacy, thus augmenting the likelihood of starting a business.

This being said, it is noteworthy that accounts provided by members of different gender categories or fields tend to reinforce entrepreneurial visions that are stereotypical of their own group (men—skilled; women—communicative and emotional). Moreover, almost all the expectations based on the theories described in the beginning of the study were confirmed in the interviews: (1) entrepreneurial intention is apparently stimulated by entrepreneurial training; (2) associating entrepreneurial success with behavioural control supports business initiation intention; and (3) social support and role models are both important for having strong entrepreneurial intentions.

In our view, the main takeaways of our research rely on: (1) The capacity of entrepreneurial programmes to stimulate business initiation via stimulating entrepreneurial self-efficacy. (2) The importance of perceived and actual behavioural control on explaining entrepreneurial success and in motivating intention and success in business. Motivation for future and actual business-persons cannot evade the topic of control, and intervention and assistance for them should focus on, among other things, strengthening the perceived

Sustainability **2022**, 14, 8369 18 of 22

control. (3) The value of reflecting on the issues of social support and of role models when business initiatives are discussed and considered.

This paper contributes to the literature on students' entrepreneurial intentions providing qualitative-based suggestions for improving entrepreneurship education programmes for doctoral students and postdoctoral researchers. Our findings indicate that building entrepreneurial education programmes for PhD students and postdoctoral researchers is more effective than for other target groups, but creating a good programme is a challenging process that must be carefully tailored to gender and the field of study or research.

In order to help aspiring entrepreneurs, we advise universities to include cutting-edge action-based learning methodologies into their entrepreneurial education programmes, enabling PhD students and postdoctoral researchers to become proactive opportunity searchers. Working in multidisciplinary teams, taking part in real-world projects, and drawing inspiration from local entrepreneurial ecosystems through close collaboration with non-academic stakeholders are all advantages for students interested in a career in entrepreneurship (especially private businesses and business support structures, such us business incubators, business accelerators, technological transfer centres, scientific and technological parks, etc.). Additionally, when developing entrepreneurial education programmes, universities should aim to close the gender gap in the entrepreneurial intention formation process.

We accept that the entrepreneurial intentions of Romanian PhD and postdoctoral students may differ from those of the wider Romanian community or from those of other nations. This is a limitation of the current research. We intend to continue our research and further analyse the impact of the entrepreneurial education programme at a comparative level across various nations and target groups of students. As an interesting and underutilised angle of research development in the Romanian context, we want to continue our research and further explore the entrepreneurial teaching methods for PhD and postdoctoral students. Future research will also look into the effect of entrepreneurial education on entrepreneurial intentions while controlling for the students' field of study, which is another very promising research area.

Author Contributions: Conceptualisation: R.H., A.D., A.H.; Methodology: R.H., S.C., G.B., A.D., A.H.; Software—Validation: R.H., S.C., G.B., A.D., A.H.; Formal analysis: R.H., S.C., G.B.; Investigation: R.H., S.C., G.B., A.D., A.H.; Data curation: R.H., S.C., G.B.; Writing—original draft preparation: R.H., S.C., G.B., A.D., A.H.; Writing—review and editing: S.C., G.B., A.D., A.H.; Project administration: R.H., S.C., G.B., A.D., A.H. All authors have read and agreed to the published version of the manuscript.

Funding: Project co-financed by the European Social Fund through the Human Capital Operational Programme 2014–2020. Web: https://smartdoct.uoradea.ro/, accessed on 15 May 2022.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Not applicable.

Acknowledgments: The SmartDoct project "High quality programmes for doctoral and postdoctoral students at the University of Oradea for the increase of relevance in research and innovation, in the context of the regional economy", Beneficiary: University of Oradea, Partner: Bihor County Employment Agency; Total eligible value: 6.436.627.61 lei, Implementation period: 19 June 2019–15 October 2022; Project ID: 123008. Project co-financed by the European Social Fund through the Human Capital Operational Programme 2014–2020. Web: https://smartdoct.uoradea.ro/, accessed on 15 May 2022.

Conflicts of Interest: The authors declare no conflict of interest.

Sustainability **2022**, 14, 8369 19 of 22

References

1. Shapero, A.; Sokol, L. The social dimensions of entrepreneurship. In *Encyclopedia of Entrepreneurship*; Prentice-Hall: Englewood Cliffs, NJ, USA, 1982; pp. 72–90.

- 2. Shapero, A. The Entrepreneurial event. In *The Environment for Entrepreneurship*; Lexington Books: Toronto, ON, Canada, 1984.
- 3. Bandura, A. The Explanatory and Predictive Scope of Self-Efficacy Theory. J. Soc. Clin. Psychol. 1986, 4, 359–373. [CrossRef]
- 4. Bird, B. Implementing Entrepreneurial Ideas: The Case for Intention. Acad. Manag. Rev. 1988, 13, 442–453. [CrossRef]
- 5. Ajzen, I. The Theory of Planned Behavior. Organ. Behav. Hum. Decis. Process. 1991, 50, 179–211. [CrossRef]
- 6. Brännback, M.; Carsrud, A.L. A Research Agenda for Entrepreneurial Cognition and Intention; Edward Elgar Publishing: Cheltenham, UK, 2018; ISBN 1-78471-681-2.
- 7. Liñán, F.; Fayolle, A. A systematic literature review on entrepreneurial intentions: Citation, thematic analyses, and research agenda. *Int. Entrep. Manag. J.* **2015**, *11*, 907–933. [CrossRef]
- 8. Krueger, N.F., Jr.; Reilly, M.D.; Carsrud, A.L. Competing Models of Entrepreneurial Intentions. *J. Bus. Ventur.* **2000**, *15*, 411–432. [CrossRef]
- 9. Kolvereid, L.; Isaksen, E. New Business Start-up and Subsequent Entry into Self-Employment. *J. Bus. Ventur.* **2006**, *21*, 866–885. [CrossRef]
- 10. De Pillis, E.; Reardon, K.K. The influence of personality traits and persuasive messages on entrepreneurial intention. *Career Dev. Int.* **2007**, 12, 382–396. [CrossRef]
- Krueger, N.F.; Carsrud, A.L. Entrepreneurial Intentions: Applying the Theory of Planned Behaviour. Entrep. Reg. Dev. 1993, 5, 315–330.
 [CrossRef]
- 12. Ozaralli, N.; Rivenburgh, N.K. Entrepreneurial intention: Antecedents to entrepreneurial behavior in the U.S.A. and Turkey. *J. Glob. Entrep. Res.* **2016**, *6*, 1. [CrossRef]
- 13. Liñán, F.; Rodríguez-Cohard, J.; Rueda-Cantuche, J. Factors Affecting Entrepreneurial Intention Levels: A Role for Education. *Int. Entrep. Manag. J.* **2011**, *7*, 195–218. [CrossRef]
- 14. Pruett, M.; Shinnar, R.; Toney, B.; Llopis, F.; Fox, J. Explaining Entrepreneurial Intentions of University Students: A Cross-cultural Study. *Int. J. Entrep. Behav. Res.* **2009**, *15*, 571–594. [CrossRef]
- 15. Fayolle, A.; Gailly, B. From Craft to Science: Teaching Models and Learning Processes in Entrepreneurship Education. *J. Eur. Ind. Train.* **2008**, 32, 569–593. [CrossRef]
- 16. Pittaway, L.; Cope, J. Entrepreneurship Education: A Systematic Review of the Evidence. *Int. Small Bus. J.* **2007**, 25, 479–510. [CrossRef]
- 17. Franke, N.; Lüthje, C. Entrepreneurial Intentions of Business Students—A Benchmarking Study. *Int. J. Innov. Technol. Manag.* **2004**, *1*, 269–288. [CrossRef]
- 18. Remeikiene, R.; Startiene, G.; Dumciuviene, D. Explaining entrepreneurial intention of university students: The role of entrepreneurial education. In *Active Citizenship by Knowledge Management & Innovation, Proceedings of the Management, Knowledge and Learning International Conference* 9–21 *June* 2013, *Zadar, Croatia*; ToKnowPress: Bangkok, Thailand; Celje, Slovenia; Lublin, Poland, 2013; pp. 299–307.
- 19. Barba-Sánchez, V.; Mitre-Aranda, M.; del Brío-González, J. The entrepreneurial intention of university students: An environmental perspective. *Eur. Res. Manag. Bus. Econ.* **2022**, *28*, 100184. [CrossRef]
- 20. Sherkat, A.; Chenari, A. Assessing the effectiveness of entrepreneurship education in the universities of Tehran province based on an entrepreneurial intention model. *Stud. High. Educ.* **2022**, *47*, 97–115. [CrossRef]
- 21. Nowiński, W.; Haddoud, M.Y.; Lančarič, D.; Egerová, D.; Czeglédi, C. The impact of entrepreneurship education, entrepreneurial self-efficacy and gender on entrepreneurial intentions of university students in the Visegrad countries. *Stud. High. Educ.* **2019**, *44*, 361–379. [CrossRef]
- 22. Salamzadeh, Y.; Sangosanya, T.A.; Salamzadeh, A.; Braga, V. Entrepreneurial universities and social capital: The moderating role of entrepreneurial intention in the Malaysian context. *Int. J. Manag. Educ.* **2022**, *20*, 100609. [CrossRef]
- 23. Breznitz, S.N.; Zhang, Q. Entrepreneurship education and firm creation. Reg. Stud. 2022, 56, 940–955. [CrossRef]
- 24. Haddoud, M.Y.; Onjewu, A.-K.E.; Nowinski, W.; Alammari, K. Assessing the role of entrepreneurship education in regulating emotions and fostering implementation intention: Evidence from Nigerian universities. *Stud. High. Educ.* **2022**, 47, 450–468. [CrossRef]
- 25. Che Embi, N.A.; Jaiyeoba, H.B.; Yussof, S.A. The effects of students' entrepreneurial characteristics on their propensity to become entrepreneurs in Malaysia. *Educ. Train.* **2019**, *61*, 1020–1037. [CrossRef]
- 26. Eesley, C.E.; Lee, Y.S. Do University entrepreneurship programs provide entrepreneurship? *Strat. Mgmt. J.* **2021**, 42, 833–861. [CrossRef]
- 27. Balaku, M.; Leonsio, M.; Bantu, E.; Otto, K. The impact of autonomy on the relationship between mentoring and entrepreneurial intentions among youth in Germany, Kanya, and Uganda. *Int. J. Entrep. Behav. Res.* **2018**, 25, 170–192. [CrossRef]
- 28. Liu, M.; Gorgievski, M.J.; Qi, J.; Paas, F. Increasing teaching effectiveness in entrepreneurship education: Course characteristics and student needs differences. *Learn. Individ. Differ.* **2022**, *96*, 102147. [CrossRef]
- 29. Wilson, F.; Kickul, J.; Marlino, D. Gender, Entrepreneurial Self-Efficacy, and Entrepreneurial Career Intentions: Implications for Entrepreneurship Education. *Entrep. Theory Pract.* **2007**, *31*, 87. [CrossRef]

Sustainability **2022**, 14, 8369 20 of 22

30. Popescu, C.C.; Bostan, I.; Robu, I.-B.; Maxim, A.; Diaconu, L. An Analysis of the Determinants of Entrepreneurial Intentions among Students: A Romanian Case Study. *Sustainability* **2016**, *8*, 771. [CrossRef]

- 31. Johara, F.; Yahya, S.; Tehseen, S. Determinants of Future Entrepreneurship and Entrepreneurial Intention. *Glob. Bus. Manag. Res. Int. J.* **2017**, *9*, 80–96.
- 32. Israr, M.; Saleem, M. Entrepreneurial intentions among university students in Italy. J. Glob. Entrep. Res. 2018, 8, 1–14. [CrossRef]
- 33. Paço, A.; Ferreira, J.; Raposo, M.; Rodrigues, R.; Dinis, A. Behaviours and entrepreneurial intention: Empirical findings about secondary students. *J. Int. Entrep.* **2011**, *9*, 20–38. [CrossRef]
- 34. Paray, Z.A.; Kumar, S. Does entrepreneurship education influence entrepreneurial intention among students in HEI's? *J. Int. Educ. Bus.* **2020**, *13*, 55–72. [CrossRef]
- 35. Global Entrepreneurship Monitor (GEM). *Global Entrepreneurship Monitor* 2021/2022 *Global Report: Opportunity Amid Disruption*; GEM: London, UK, 2022; p. 29, ISBN 978-1-9160178-9-4.
- 36. World Bank Group. Doing Business 2020: Romania. Available online: https://www.doingbusiness.org/content/dam/doingBusiness/country/r/romania/ROM.pdf (accessed on 13 April 2022).
- 37. Organization for Economic Co-Operation and Development (OECD). Inclusive Entrepreneurship Policies, Country Assessment Notes, Romania, 2020 (Romania IE-2020). Available online: https://www.oecd.org/cfe/smes/Romania-IE-2020.pdf (accessed on 13 April 2021).
- 38. Organization for Economic Co-Operation and Development (OECD). *The Innovation Imperative: Contributing to Productivity, Growth and Well-Being*; OECD Publishing: Paris, France, 2015. [CrossRef]
- 39. Organization for Economic Co-Operation and Development/The European Commission (OECD/EC). Supporting Entrepreneurship and Innovation in Higher Education in Romania; OECD Publishing: Paris, France, 2019; Available online: https://heinnovate.eu/sites/default/files/oecd_ec_supporting_entrepreneurship_and_innovation_in_higher_education_in_romania.pdf (accessed on 13 April 2021).
- Dodescu, A.O.; Botezat, E.A.; Cohut, I.C.P.; Borma, A. Antecedents, Experiences and Entrepreneurial Intentions among Economics Students. In Proceedings of the 12th LUMEN International Scientific Conference Rethinking Social Action, Core Values in Practice RSACVP 2019, Iasi, Romania, 15–17 May 2019; LUMEN Publishing: Iasi, Romania, 2019; pp. 89–107.
- 41. Dodescu, A.-O.; Botezat, E.-A.; Constăngioară, A.; Pop-Cohuţ, I.-C. A Partial Least-Square Mediation Analysis of the Contribution of Cross-Campus Entrepreneurship Education to Students' Entrepreneurial Intentions. *Sustainability* **2021**, *13*, 8697. [CrossRef]
- 42. Becker, G.S. Human Capital; Columbia University Press: New York, NY, USA, 1964.
- 43. Bates, T. Entrepreneur Human Capital Inputs and Small Business Longevity. Rev. Econ. Stat. 1990, 72, 551. [CrossRef]
- 44. Chandler, G.N.; Jansen, E. The founder's self-assessed competence and venture performance. *J. Bus. Ventur.* **1992**, *7*, 223–236. [CrossRef]
- 45. Davidsson, P.; Honig, B. The role of social and human capital among nascent entrepreneurs. *J. Bus. Ventur.* **2003**, *18*, 301–331. [CrossRef]
- 46. Unger, J.M.; Rauch, A.; Frese, M.; Rosenbusch, N. Human capital and entrepreneurial success: A meta-analytical review. *J. Bus. Ventur.* **2011**, *26*, 341–358. [CrossRef]
- 47. Crook, T.R.; Todd, S.Y.; Combs, J.G.; Woehr, D.J.; Ketchen, D.J. Does human capital matter? A meta-analysis of the relationship between human capital and firm performance. *J. Appl. Psychol.* **2011**, *96*, 443–456. [CrossRef]
- 48. Davidsson, P. Researching Entrepreneurship; Springer: New York, NY, USA, 2004.
- 49. Thompson, E.R. Individual Entrepreneurial Intent: Construct Clarification and Development of an Internationally Reliable Metric. *Entrep. Theory Pract.* **2009**, *33*, 669–694. [CrossRef]
- 50. Ndofirepi, T.M. Relationship between entrepreneurship education and entrepreneurial goal intentions: Psychological traits as mediators. *J. Innov. Entrep.* **2020**, *9*, 1–20. [CrossRef]
- 51. Zhao, H.; Seibert, S.E.; Hills, G.E. The Mediating Role of Self-Efficacy in the Development of Entrepreneurial Intentions. *J. Appl. Psychol.* **2005**, *90*, 1265–1272. [CrossRef]
- 52. Ajzen, E. Perceived Behavioral Control, Self-Efficacy, Locus of Control, and the theory of planned behaviour. *J. Appl. Soc. Psychol.* **2002**, 32, 665–683. [CrossRef]
- 53. Vamvaka, V.; Stoforos, C.; Palaskas, T.; Botsaris, C. Attitude toward entrepreneurship, perceived behavioral control, and entrepreneurial intention: Dimensionality, structural relationships, and gender differences. *J. Innov. Entrep.* **2020**, *9*, 1–26. [CrossRef]
- 54. Newman, A.; Obschonka, M.; Schwarz, S.; Cohen, M.; Nielsen, I. Entrepreneurial self-efficacy: A systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and an agenda for future research. *J. Vocat. Behav.* 2019, 110, 403–419. [CrossRef]
- 55. Neneh, B.N. Entrepreneurial passion and entrepreneurial intention: The role of social support and entrepreneurial self-efficacy. *Stud. High. Educ.* **2022**, *47*, 587–603. [CrossRef]
- 56. Karimi, S. The role of entrepreneurial passion in the formation of students' entrepreneurial intentions. *Appl. Econ.* **2020**, *52*, 331–344. [CrossRef]
- 57. Krabel, S. Are entrepreneurs made on campus? The impact of entrepreneurial universities and graduates' human capital on graduates' occupational choice. *J. Int. Entrep.* **2017**, *16*, 456–485. [CrossRef]
- 58. Oftedal, E.M.; Iakovleva, T.A.; Foss, L. University context matter. Educ. Train. 2018, 60, 873–890. [CrossRef]

Sustainability **2022**, 14, 8369 21 of 22

59. Oosterbeek, H.; Van Praag, M.; Ijsselstein, A. The Impact of Entrepreneurship Education on Entrepreneurship Skills and Mo-tivation. *Eur. Econ. Rev.* **2010**, *54*, 442–454. [CrossRef]

- 60. Fretschner, M.; Weber, S. Measuring and Understanding the Effects of Entrepreneurial Awareness Education. *J. Small Bus. Manag.* **2013**, *51*, 410–428. [CrossRef]
- 61. Lackéus, M. Entrepreneurship in Education. What, Why, When, How. Entrepreneurship 360; OECD: Paris, France, 2015; Available online: https://www.oecd.org/cfe/leed/BGP_Entrepreneurship-in-Education.pdf (accessed on 24 September 2021).
- 62. Byabashaija, W.; Katono, I. The Impact of College Entrepreneurial Education on Entrepreneurial Attitudes and Intention to Start a Business in Uganda. *J. Dev. Entrep.* **2011**, *16*, 127–144. [CrossRef]
- 63. Hussain, A.; Norashidah, D. Impact of entrepreneurial education on entrepreneurial intentions of Pakistani Students. *J. Entrep. Bus. Innov.* **2015**, 2, 43–53. [CrossRef]
- 64. Khalifa, A.H.; Dhiaf, M.M. The impact of entrepreneurship education on entrepreneurial intention: The UAE context. *Pol. J. Manag. Stud.* **2016**, *14*, 119–128. [CrossRef]
- 65. Liu, X.; Lin, C.; Zhao, G.; Zhao, D. Research on the effects of entrepreneurial education and entrepreneurial self-efficacy on college students' entrepreneurial intention. *Front. Psychol.* **2019**, *10*, 869. [CrossRef]
- 66. Noel, T.W. Effects of entrepreneurial education on intent to open a business: An exploratory study. *J. Entrep. Educ.* **2002**, *5*, 3–11. Available online: https://www.proquest.com/scholarly-journals/effects-entrepreneurial-education-on-intent-open/docview/747991323/se-2?accountid=8027 (accessed on 20 January 2022).
- 67. Pedrini, M.; Langella, V.; Molteni, M. Do entrepreneurial education programmes impact the antecedents of entrepreneurial intention? An analysis of an entrepreneurship MBA in Ghana. *J. Enterprising Communities People Places Glob. Econ.* **2017**, 11, 373–392. [CrossRef]
- 68. Sánchez, J.C. The impact of an entrepreneurship education program on entrepreneurial competencies and intention. *J. Small Bus. Manag.* **2013**, *51*, 447–465. [CrossRef]
- 69. Sang, D.; Lin, J. How does Entrepreneurial Education Influence the Entrepreneurial Intention of College Students: The Moderating and Mediating Effects of Entrepreneurial Alertness. *Int. J. Emerg. Technol. Learn.* **2019**, *14*, 139–154. [CrossRef]
- 70. Saptono, A.; Purwana, D.; Wibowo, A.; Wibowo, S.F.; Mukhtar, S.; Yanto, H.; Utomo, S.H.; Kusumajanto, D.D. Assessing the university students' entrepreneurial intention: Entrepreneurial education and creativity. *Humanit. Soc. Sci. Rev.* **2019**, *7*, 505–514. [CrossRef]
- 71. Sun, H.; Lo, C.T.; Liang, B.; Wong, Y.L.B. The impact of entrepreneurial education on entrepreneurial intention of engineering students in Hong Kong. *Manag. Decis.* **2017**, *55*, 1371–1393. [CrossRef]
- 72. Wang, M.; Soetanto, D.; Cai, J.; Munir, H. Scientist or Entrepreneur? Identity centrality, university entrepreneurial mission, and academic entrepreneurial intention. *J. Technol. Transf.* **2022**, *47*, 119–146. [CrossRef]
- 73. Gill, R.; Ganesh, S. Empowerment, Constraint, and the Entrepreneurial Self: A Study of White Women Entrepreneurs. *J. Appl. Commun. Res.* **2007**, *35*, 268–293. [CrossRef]
- 74. Verheul, I.; Thurik, R.; Grilo, I.; van der Zwan, P. Explaining preferences and actual involvement in self-employment: Gender and the entrepreneurial personality. *J. Econ. Psychol.* **2012**, *33*, 325–341. [CrossRef]
- 75. Robledo, D.; Gutiérrez, A.P.; Barría, A.; Lhorente, J.P.; Houston, R.D.; Yáñez, J.M. Discovery and Functional Annotation of Quantitative Trait Loci Affecting Resistance to Sea Lice in Atlantic Salmon. *Front. Genet.* **2019**, *10*, 56. [CrossRef] [PubMed]
- 76. Kolvereid, L. Prediction of Employment Status Choice Intentions. Entrep. Theory Pract. 1996, 21, 47–57. [CrossRef]
- 77. Kirk, J.; Belovics, R. Making e-working work. J. Employ. Couns. 2006, 43, 39–46. [CrossRef]
- 78. BarNir, A.; Watson, W.E.; Hutchins, H.M. Mediation and Moderated Mediation in the Relationship Among Role Models, Self-Efficacy, Entrepreneurial Career Intention, and Gender. *J. Appl. Soc. Psychol.* **2011**, *41*, 270–297. [CrossRef]
- 79. Langowitz, N.; Minniti, M. The Entrepreneurial Propensity of Women. Entrep. Theory Pract. 2007, 31, 341–364. [CrossRef]
- 80. Maes, J.; Leroy, H.; Sels, L. Gender differences in entrepreneurial intentions: A TPB multi-group analysis at factor and indicator level. *Eur. Manag. J.* **2014**, 32, 784–794. [CrossRef]
- 81. Garrido Yserte, R. La hora de la Unión Europea: El virus que puede acabar con ella. Las ciencias políticas y sociales ante contingencias de amplio impacto. *Incógnitas Propues.* **2020**, 271–275.
- 82. Glaser, B.; Strauss, A. The Discovery of Grounded Theory: Strategies for Qualitative Research; Sociology Press: Mill Valley, CA, USA, 1967; ISBN 0-202-30160-1.
- 83. Saunders, B.; Sim, J.; Kingstone, T.; Baker, S.; Waterfield, J.; Bartlam, G.; Burroughs, H.; Jinks, C. Saturation in qualitative research: Exploring its conceptualization and operationalization. *Qual. Quant.* **2018**, *52*, 1893–1907. [CrossRef]
- 84. Strauss, A.; Corbin, J.M. Basics of Qualitative Research: Grounded Theory Procedures and Techniques; Sage Publications, Inc.: Thousand Oaks, CA, USA, 1990.
- 85. Conner, M.; Sparks, P. The Theory of Planned Behavior. In *Predicting Health Behaviour: Research and Practice with Social Cognition Models*; Conner, M., Norman, P., Eds.; Open University Press: Buckingham, UK, 2005; pp. 121–162.
- 86. Schultz, T.W. Investment in Human Capital. Am. Econ. Rev. 1961, 51, 1–17.
- 87. Freeman, R.B. The Overeducated American; Academic Press: Cambridge, MA, USA, 1976.
- 88. Godin, G.; Kok, G. The theory of planned behavior: A review of its applications to health-related behaviors. *Am. J. Health Promot.* **1996**, *11*, 87–98. [CrossRef] [PubMed]
- 89. Sutton, S.R. Health Behavior: Psychosocial Theories. In *International Encyclopedia of the Social & Behavioral Sciences*; Smelser, N.J., Baltes, P.B., Eds.; Elsevier: Amsterdam, The Netherlands, 2001. [CrossRef]

Sustainability **2022**, 14, 8369 22 of 22

90. van der Zwan, P.; Thurik, A.R.; Grilo, I. The entrepreneurial ladder and its determinants. *Appl. Econ.* **2010**, *42*, 2183–2191. [CrossRef]

- 91. Mceachan, R.; Conner, M.; Taylor, N.; Lawton, R. Prospective Prediction of Health-related Behaviours with the Theory of Planned Behaviour: A Meta-analysis. *Health Psychol. Rev.* **2011**, *5*, 97–144. [CrossRef]
- 92. Sheppard, B.H.; Hartwick, J.; Warshaw, P.R. The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. *J. Consum. Res.* **1988**, *15*, 325–343. [CrossRef]