

Volume 24, Special Issue 3**Print ISSN: 1098-8394;
Online ISSN: 1528-2651**

ADDRESSING THE STUDENT PERSPECTIVE IN ENTREPRENEURSHIP EDUCATION: INSIGHTS ON STUDENT'S ATTITUDES TOWARDS ENTREPRENEURSHIP AND RECOMMENDATIONS FOR EDUCATIONAL DESIGN

**Hannah Laura Schneider, Stuttgart Media University, Germany
Nils Högsdal, Stuttgart Media University, Germany
Laila Mazhar, Stuttgart Media University, Germany**

ABSTRACT

One of the key challenges for contemporary entrepreneurship educators is to decide what to teach. Within the context of this content-challenge, this paper is taking a student-centered approach. In order to place the students and their needs on the center of the educational design and decision making within entrepreneurship education, this paper aims to gain a better understanding of student's perception and attitude towards entrepreneurship. The research is quantitative and descriptive using a survey approach based on administering a questionnaire to 2,698 university students (Bachelor degree/undergraduates) in Germany. The primary focus of this work is to gain insights into what students think about entrepreneurship and how educators can address those perceptions in their design of entrepreneurship education. It is one goal of Entrepreneurship Education to increase student's Entrepreneurial Attitude and Intentions, thus it is important to integrate the student perspective into the educational design. The aforementioned is realized by following a contemporary understanding of education as a designer task. Based on the insights from the survey, recommendations for Entrepreneurship Educators will be drawn including concrete examples for course development and curricular design on how the student's perspective and their conceptions (and misconceptions) of Entrepreneurship can be addressed.

Keywords: Student-Centered, Entrepreneurship Education, Survey, Entrepreneurial Education, Student Attitude, Educational Design, Student Perception, Entrepreneurial Education, Course Design, Programme Design, Curriculum Design.

INTRODUCTION

One of the key challenges for entrepreneurship educators is to decide what to teach. In fact, “as a result of entrepreneurship education's increased popularity (...), entrepreneurship educators are in danger of trying to do too much to please too many” (Henry, 2020). Moreover, Volery et al., (2013) suggested that it is one of the core decisions made by contemporary entrepreneurship educators to reflect on what to teach. Especially that entrepreneurship is

comparably a young discipline striving for legitimacy and consistency (Kuratko, 2005; Volery et al., 2013). Educational design of entrepreneurship must not only fit the educational/pedagogical model of teaching and learning of the educational institution but also should reflect the student's needs. Consequently, this paper follows the student-centered approach. As a matter of fact, the primary research focus has been to assess what students think about entrepreneurship and how educators can address those perceptions in their design of entrepreneurship education. Stressing on the students' input context, Khoury et al. (2011) recommended to look into the experiences of students, "*as these groups of students and (...) their experiences were a good place to begin a deeper exploration of their views, expectation and experiences*".

While Entrepreneurship Education has a long history (Bae et al., 2014; Block & Stumpf, 1992; Choi & Shepherd, 2004; Fayolle, 2007; Fayolle, 2013; Honig, 2004; Huq & Gilbert, 2017), entrepreneurship today as a topic has made its way into the standard curricula in higher education institutions (Twaalfhoven & Wilson, 2004) and most universities offer entrepreneurship courses to their students. Even more, some claim that Entrepreneurship Education is "*en vogue*" these days (Henry, 2020). Still, there exist a variety of definitions focusing on different aspects of entrepreneurship (Fayolle & Gailly, 2008). While some still refer entrepreneurship back to the act of venture creation (Gartner, 1988; Hejase et al., 2014), other definitions focus on the process of opportunity exploitation (Shane & Venkataraman, 2000; Katz, 2007). Neck & Green (2011) argue to approach "*entrepreneurship as a method means teaching a way of thinking and acting built on a set of assumptions using a portfolio of techniques to encourage creating*". The idea to teach entrepreneurship as a method is supported by Sarasvathy & Venkataraman (2011) who claim to "*teach entrepreneurship not only to entrepreneurs but to everyone, as a necessary and useful skills and an important way of reasoning in the world*". These different definitions in themselves represent different approaches and intentions for entrepreneurship education. There has been a growing interest in the research on entrepreneurship education from different perspectives. And while academia is not consistent in describing Entrepreneurship Education (EE), it also falls short in prescribing the design of such education regarding critical factors and pedagogical approaches. Hence, given the rate of adoption of this subject into the higher education curriculum and the lack of a robust common understanding of the subject or how it should be taught, there is a considerable need for further evaluative research on the outcomes and design of entrepreneurship education (Vanevenhoven & Liguori, 2013; Ronstadt et al., 1988).

It might be questioned why Entrepreneurship Educators should care about the student's perspective while the educator knows best what content is relevant. On one hand, this concern is valid as it will be the Entrepreneurship Educators who will manage the content decision in Entrepreneurship Education-especially in their role as unique aggregators of content (Henry, 2020). But on the other hand, the question remains on which parameters and insights these decisions should be based on. Thus, it is needed to reflect upon the true purpose of entrepreneurship education and argue within the interest of the entrepreneurship students (Kuckertz, 2021). Within this, the students and their needs should be placed on the center of the educational design and decision making. A further goal of Entrepreneurship Education is to increase student's Entrepreneurial Attitude and Intentions (Fayolle & Gailly, 2015; Linán, 2004). Moreover, some scholars focus on "*awareness raising*" as an overall objective of Entrepreneurship Education (Linán, 2004; Fretschner & Weber, 2013). Especially when considering Entrepreneurship Education's goal to shape student's entrepreneurial attitudes (Fretschner & Weber, 2013), the inclusion of the student's perspective is essential.

Understanding the students' background and perspective should be considered as the starting point in the initial design of the program. Thus, in order to gain a deeper understanding of the student's perception and attitude towards entrepreneurship, the following paper is presenting results from a survey administered to 2,698 undergraduate university students on their attitude towards entrepreneurship.

The upcoming article is structured as following: the next section is about the study design and methodology of the research. Then, the results of the survey among university students will be displayed, structured around the main three questions of the survey analyzed in this context. This will provide insight into the general entrepreneurial intention as well as the reasons for and against entrepreneurial action (in the sense of starting a venture) as named by the students. Based on the analysis of the survey data then recommendations will be given on how the findings can be addressed by entrepreneurship educators. Lastly, a reflective conclusion will be drawn, summarizing the contribution.

STUDY DESIGN AND METHODOLOGY

This research is quantitative and descriptive. It is based on a survey questionnaire which has been administered as an e-survey as well as a paper and pencil survey.

Sampling and Research Sample

The survey was administered to 2,698 bachelor students from three German polytechnic universities, representing diverse fields of study. The target actually was specifically students at towards the end of their first year of studies. Table 1 depicts the distribution of students in the three universities.

Participants	Men	In %	Women	In %	Total	Excluded / Added	Total	In %
Reutlingen University	431	15.8%	361	13.3%	792	+5	797	29.5%
Aalen University	662	24.3 %	382	14.0%	1,044	-32	1,012	37.5%
Stuttgart Media University (HdM)	344	12.6%	541	19.8%	885	+4	889	32.9%
Total	1,437	52.8 %	1,284	47.2%	2,721	-23	2,698	100%

After the exclusion/inclusion process, Table 1 shows that the final distribution of students were 29.54% in Reutlingen University, 37.51% in Aalen university and 32.95% from Stuttgart Media university (HdM). A gender gap was not to be found: almost as many women as men participated in the study, exactly representing the overall student population of the universities. Table 1 shows that before the exclusion/inclusion process in finalizing the number of participants, the gender distribution in all the universities was 52.80% males and 47.20% females. Moreover, following a closer look at the kind of undergraduate studies programs the students were enrolled in, the majority consisted of 44% in the engineering and IT department followed by 37% studying in the field of economics and law. Almost a third of the students were found to have an entrepreneurial family background with at least one parent self-employed or active as a co-owner of a company.

Questionnaire Design

Overall, the questionnaire dealt with the topics of entrepreneurship culture at universities, the visibility and perception of entrepreneurship education and the attitude of students about starting their own venture. Questions/statements were designed using both a Multiple Choice approach and a 5-level Likert scale whereby the scale ranged from “*strongly disagree*” to “*strongly agree*” with “*don’t know*” as the neutral option. The questionnaire comprised several questions but in relation to the context of this paper the following measures have been included:

- **Entrepreneurial Intent:** The questionnaire included a statement on Entrepreneurship as a perspective asking whether the students could imagine Entrepreneurial Activity in the sense of founding a venture as a potential career perspective in the future.
- **Possible reasons/motivators for Entrepreneurial Activity (in the sense of founding a venture):** The questionnaire asks the students to choose max. Three reasons for entrepreneurship out of 8 given choices (multiple choice questions) as well as the option to mention other reasons.
- **Possible reasons/obstacles against Entrepreneurial Activity (in the sense of founding a venture):** The questionnaire included a statement on possible obstacles of Entrepreneurial Activity by asking the student to choose max. Three reasons against entrepreneurship. Eight choices have been given as well as an open field to mention various “*other*” reasons, including student’s perception and attitude towards Entrepreneurship

Questionnaire Administration

The students were requested to complete the questionnaire on a voluntary basis and anonymously. Anonymity is important for the sake of ethical research and to respect confidentiality of the respondents. The questionnaire took about 10-15 minutes to complete and has been conducted in German. The majority of the students had the opportunity to attending an “*innovation workshop*” in their first years of studies, after which they answer the questionnaire. This denotes the sample consisting of a particular target group, hence classified in the literature as a mixture of an occasional and probabilistic random sample (Schnell et al., 2008). As a result of it, the achieved outcome and insights entail a limited generalization potential-notwithstanding notable awareness and discernment pertaining to the scope of such a project and beyond. The survey incorporated a total of four phases along four semesters between October 2017 and March 2019.

RESULTS AND FINDINGS

It has been the aim of this study to gain insights into students’ perception and attitude towards entrepreneurship; in the following the results of the survey will be shown:

Students’ Perception and Attitude towards Entrepreneurship

Although entrepreneurship is increasingly promoted across the globe, people and especially students tend to have a rather low motivation to become an entrepreneur by themselves (Räty, 2019). In order to gain a better understanding of the general Entrepreneurial Intent of the students in the specific context of the three participating universities, the questionnaire included a statement whether students would generally consider entrepreneurship as a perspective for their own future. Overall, students’ assessment of perceiving

entrepreneurship as a perspective by “*starting their own business*” yields positive results. Table shows that the number of students that fully agree with the aforesaid statement (n=373) is more than double compared to those who do not generally agree with the idea of “*founding a company*” (totally disagree n=144). Although, most of the students seem to not have made up their minds yet, which is why “*I don't know*” or “*rather agree*” were both the most common answers. This result is best comprehended by acknowledging the fact that the participants are still “*freshmen*” enrolled in the second semester of their undergraduate studies.

The results also highlight the fact that male students seemingly have a greater affinity for start-ups than female students. Therefore, men are much more likely to seriously pursue the opportunity to “*start a business*”. This trend has also been observed in previous studies (Räty, 2019).

Reasons	Men	In %	Women	In %	Total	In %
Strongly agree	279	20%	94	7%	373	14%
Rather agree	467	34%	302	23%	769	29%
I don't know	354	26%	418	32%	772	29%
Rather disagree	243	17%	378	29%	621	23%
Strongly disagree	44	3%	99	8%	144	5%

A closer look at the statistics of male students (in Table 2) reveals that out of all possible options, two answer options were the most popular. The option “*Rather agree*” with 34% was selected the most, followed by “*I don't know*” with 26%. This further emphasizes that male students lean towards being more open and positively inclined to the issue of entrepreneurs. On the other hand, female students are more reluctant towards this topic based on the fact that the statement “*I don't know*” was chosen as the top answer with 32% followed by “*rather not agree*” with 29%. Solely 7% of female students fully agree with seeing “*starting a venture*” as a personal career possibility. Pivotal to know is that the collected data must be read in the context of the survey, as it only shows the intention to start a company (entrepreneurial intention)-whether or not the students actually decide to found a company (entrepreneurial activity) is cannot be deducted.

Positive Perception of Entrepreneurship: Reasons Why Students Would Start a Venture

Within this study 2,698 students chose their top three reasons and motivators of why entrepreneurship would seem like a possible career opportunity to them. Table 3 summarizes the findings.

Reasons	Men	In %	Women	In %	Total	In %
Possibility to realize own ideas	1040	78%	1093	80%	2133	79%
Freedom to decide for myself/to be my own boss	898	61%	856	69%	1754	65%
Prospect of financial success	756	58%	430	31%	1186	44%
Solving a problem e.g. design a product	495	35%	484	38%	979	36%
Proactively changing the world	292	22%	306	23%	598	22%

To advance my career	285	18%	251	22%	536	20%
Engaging for society	128	10%	206	15%	334	12%
Recognition	164	8%	109	13%	273	10%

One of the main reasons why students would like to start their own venture is the “*possibility to realize one's own ideas*” - which has been chosen by 79% in sum. The second most common reason is the “*freedom of choice/possibility to be my own boss*”. Comparing both genders shows that “*financial success*” takes up the third place for men, whereas female participants chose the desire “*to solve a problem or design a product*”. The opportunity of having financial success shows a considerable gender difference. While it bears a strong significance for male students - almost two-thirds of men (58%) cite financial success as a reason for starting a business - only for one-third of women (31%) it is a motivator. Additionally, there is another aspect amongst female students when asked about founding a company: significantly more women than men state “*getting engaged in society*” as a reason for starting their own venture. Overall, the results from the survey show, that individual freedom and self-realization are more important for the students than financial or career motivators.

Negative Perception of Entrepreneurship: Reasons Why Students Would not start a Venture

The following paragraph will elaborate on the main reasons for avoiding a venture from the students’ point of view. It is a mix between reservations by students and foreseen obstacles. The shared result allows a unique insight on this particular topic (Table 4).

Reasons	Men	In %	Women	In %	Total	In %
High financial risk/no funds	971	69%	1007	78%	1978	73%
High Insecurity/Fear	622	44%	813	64%	1435	53%
Lack of idea	551	39%	535	41%	1086	40%
Attractive job offers	416	30%	325	25%	741	27%
Lack of qualification	194	14%	259	23%	453	16%
Lack of co-founders/team	225	16%	189	15%	414	15%
Lack of time	228	16%	181	14%	409	15%
Missing coaches/mentors	195	14%	147	11%	342	12%

Overall, it is significant to evaluate how great the fear of financial risk and the concern about a lack of funds are amongst participants: 73% of all students state “*high financial risk/no funds*” as a reason which caters against starting their own business. For more than half of the students “*high insecurity or fear of failure*” peaks as a reason-especially among women. Almost two-thirds of all female students (64%) would decide against starting a business for this reason. The third most discouraging factor amongst males and females is accounted for by the “*lack of idea*”. In comparison to both genders the fact also strikes that nearly a quarter of women (23%) cited “*lack of own skills*” as a reason against founding a company.

DISCUSSION

From the perspective of this paper, we follow the general recommendation of Fretschner & Weber (2013) that “*knowing these beliefs underlying student’s personal attitude is crucial to the curricular design of awareness programs. Only if these basic beliefs are triggered by the program, students can update their current beliefs based on new information provided by the course content*”. Therefore we try to generate practical insights for curricular design of Entrepreneurship Education based on the results from the survey among 2,698 university students. Taken together the results and explorative insights from the study, we suggest the following recommendations and future fields of action for designing entrepreneurship education courses in higher education:

Shaping and Reflecting about Entrepreneurial Attitudes

We agree with Fretschner & Weber (2013) that it is important for Entrepreneurship Education to focus on shaping entrepreneurial attitudes first, and develop skills later. In order to do so, one of the first steps that could be taken in an Entrepreneurship Education Course is specifically to discuss the topic of entrepreneurial attitudes. This can be done by explicitly showing the results from conducted surveys on Entrepreneurial Attitudes and discussing the results in an open format with the students. This task might be a first step in order to start a reflection process why students develop certain positive or negative attitudes and perspectives towards entrepreneurship and what might have influenced and shaped these attitudes in the past. Research shows that student’s attitudes are mainly affected by the social environment by adapting social expectation of friends, family and university staff-as mentioned earlier, it is important to talk about these influences and attitudes in order to allow students to form new attitudes based on new knowledge gained in the course. Moreover, further results from this study show that students who have met relevant people at their university feel considerably more encouraged (Spinovation, 2020). Within this context, especially the importance of role-models should be emphasized (Rahman & Day, 2014).

Discuss Motives and Obstacles for Entrepreneurship from Different Perspectives and Relatable Role-Models

Motives and obstacles for/against founding a start-up or becoming an entrepreneur should be discussed in special teaching formats of entrepreneurship education. By this, a more differentiated view can be taken by the students thinking about reasons for/against entrepreneurship from different viewpoints. Too often, students think about entrepreneurial stereotypes and therefore the discussion of different motives and individual paths to entrepreneurship is crucial. Thus, this study also reveals the limiting beliefs of the students about entrepreneurial stereotypes and confirms the need for more identity work within entrepreneurship education (Raible & Middleton, 2021). In this line, different “*sorts*” of entrepreneurs such as part-time-entrepreneur, accidental entrepreneur, so called “*mompreneurs*”, solo-entrepreneurs etc. could be discussed with the students in an interactive format. Direct Exposure with role models in general and relatable role-models in specific are also very important in this context. This will not only reinforce the guidelines of Fretschner & Weber (2013) but also empathize the ideas by Welsh et al., (2013) which imply Entrepreneurship

Education as an important way to develop their own, individual path to Entrepreneurship. As a matter of fact, encouraging autonomy is highly advised.

Addressing the Fears of Financial Risk/Lack of Funding in an Appropriate Manner

The most cited reason against a start-up/ entrepreneurship is the fear of failure and the financial risk. 1,978 out of 2,698 students chose this as one of three reasons against starting a venture. It can be said, that almost all students have the fear of missing capital and financial risk. This urgently needs to be addressed by Entrepreneurship Educators. So far, EE formats and courses focus on components and competencies such as ideation and creativity and universities are offering courses with bootcamp character to create a creative atmosphere encouraging students to think entrepreneurial. However, another important field of action for Entrepreneurship Education can derive from the results of the survey: What could new teaching formats look like that take away students' fears of financial risk in the area of sensitization and awareness education? This might be tackled by providing real knowledge instead of myths – about the real financial risk in the beginning by discussing research results, as well as concepts such as bootstrapping etc. but also by informing students about support systems such as e.g. the EXIST program. Besides, the fear of entrepreneurial failure could be discussed by referring to notable research insights in regard to actual risk, reasons for failure and ways to mitigate the risks.

Encourage existing motivators and design and communicate entrepreneurship education accordingly

Most students state that the possibility to realize own ideas (79%) and personal and individual freedom (65%) are strong motivators for starting as an entrepreneur. These potential catalysts should be integrated better and communicated more when promoting Entrepreneurship Education Programmes. Prior research has been shown, that the Entrepreneurial Path is always an individual one (Vanevehoeven, 2013; Welsh et al., 2013). Especially in this context entrepreneurship education should address the existing wish of self-actualization (Zgheib, 2004) by encouraging individual paths and strengths of each student. Thus, related topics such as “Finding Purpose” or other soft-skill related courses and reflection-based formats encouraging self-knowledge might be a good complementary content for any Entrepreneurship Education programme.

FINAL THOUGHTS AND FURTHER RESEARCH

Following recent research in the field (Kyrö, 2015; Henry, 2020; Liñán, 2004), this paper argues that the human and individual perspective in entrepreneurship education should be further developed, as not only the entrepreneurship educator but “*both the individual educator and the individual student are integral part of the entrepreneurial learning process*” (Henry, 2020). Especially in the context of Entrepreneurship Awareness Education, aiming for educating a mindset and attitude, the student perspective should be better represented in the process of designing Entrepreneurship Education formats. Within this paper a student-centered approach to Entrepreneurship Education has been presented-based on the insights of over 2,500 bachelor students; recommendations for further development of entrepreneurship education courses have

been given. Clearly, the survey approach has its limitations, but still the size of the data set allowed the entrepreneurship educators to base their insights on a relevant and valid basis. More practical information on implications of the study can be found in the publication of the Spinnovation project (Spinnovation, 2020). Further research could add a qualitative research perspective into the student's perspective on entrepreneurship education. A qualitative approach might complement the insights from this survey approach and provide deeper insights in order to gain a greater understanding of the student's perspective. Within a next step, the recommendations developed based on the insights from this study should be further implemented and tested. So far, we see this approach as a first step for our future entrepreneurship education by integrating the student perspective into our educational design, following a contemporary understanding of education as a designer task.

ACKNOWLEDGEMENTS

We would like to acknowledge the contribution of the whole team of the Spinnovation Project from our appreciated partners at Reutlingen University and Aalen University to this study. The completion and data collection of this study project could not have been possible without the participation and assistance of a lot of individuals contributing to this project funded by the Ministry of Science, Research and Arts Baden Württemberg, Germany.

REFERENCES

- Bae, T.J., Qian, S., Miao, C., & Fiet, J.O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A meta-analytic review. *Entrepreneurship Theory and Practice*, 38(2), 217-254.
- Block, Z. & Stumpf, S.A. (1992). Entrepreneurship education research: Experience and challenge. In Sexton, D.L. & Kasarda, J.D. (Eds), *The State of the Art of Entrepreneurship*, PWS-Kent Publishing Company, Boston, MA, pp. 17-42.
- Choi, Y.R., & Shepherd, D.A. (2004). Entrepreneurs' decisions to exploit opportunities. *Journal of Management*, 30(3), 377-395.
- Fayolle, A. (2013). Personal views on the future of entrepreneurship education. *Entrepreneurship & Regional Development*, 25(7-8), 692-701.
- Fayolle, A. (Ed.). (2007). *Handbook of research in entrepreneurship education: A general perspective (Vol. 1)*. Edward Elgar Publishing.
- Fayolle, A., & Gailly, B. (2008). From craft to science: Teaching models and learning processes in entrepreneurship education. *Journal of European Industrial Training*, 32(7), 569-593.
- Fayolle, A., & Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. *Journal of Small Business Management*, 53(1), 75-93.
- Fretschner, M., & Weber, S. (2013). Measuring and understanding the effects of entrepreneurial awareness education. *Journal of Small Business Management*, 51(3), 410-428.
- Gartner, W.B. (1988). "Who is an entrepreneur?" is the wrong question. *American Journal of Small Business*, 12(4), 11-32.
- Hejase, H.J., Hamdar, B., Haddad, Z., Chaaya, M., Hejase, A.J., & Beyrouti, N. (2014). Corporate entrepreneurship in Lebanon: An exploratory research. *Quarterly Journal of Business Studies*, 1(3), 94-118.
- Henry, C. (2020). Reconceptualizing the role of the future entrepreneurship educator: an exploration of the content challenge. *Entrepreneurship & Regional Development*, 32(9-10), 657-676.
- Honig, B. (2004). Entrepreneurship education: Toward a model of contingency-based business planning. *Academy of Management Learning & Education*, 3(3), 258-273.
- Huq, A., & Gilbert, D. (2017). All the world's a stage: transforming entrepreneurship education through design thinking. *Education+ Training*, 59(2), 155-170.

- Katz, J.A. (2007). Education and training in entrepreneurship. In Baum, J.R., Frese, M., & Baron, R.A. (Eds.), *The Psychology of Entrepreneurship*. Lawrence Erlbaum Associates Publishers, 209-235.
- Khoury, A., Eddeen, L.N., Saadah, D., & Harfoushi, O. (2011). E-learning: Justifications and obstacles. *International Journal of Emerging Technologies in Learning (iJET)*, 6(3), 53-56.
- Kuckertz, A. (2021). Why we think we teach entrepreneurship-and why we should really teach it. *Journal of Entrepreneurship Education*, 24(3), 1-7.
- Kuratko, D.F. (2005). The emergence of entrepreneurship education: Development, trends, and challenges. *Entrepreneurship Theory and Practice*, 29(5), 577-597.
- Kyrö, P. (2015). The conceptual contribution of education to research on entrepreneurship education. *Entrepreneurship & Regional Development*, 27(9-10): 599-618.
- Liñán, F. (2004). Intention-based models of entrepreneurship education. *Piccola Impresa/Small Business*, 3(1), 11-35.
- Neck, H.M., & Greene, P.G. (2011). Entrepreneurship education: Known worlds and new frontiers. *Journal of Small Business Management*, 49(1), 55-70.
- Rahman, H., & Day, J. (2014). Involving the entrepreneurial role model: A possible development for entrepreneurship education. *Journal of Entrepreneurship Education*, 17(2), 163-171.
- Raible, S.E., & Williams-Middleton, K. (2021). The relatable entrepreneur: Combating stereotypes in entrepreneurship education. *Industry and Higher Education*, 35(4), 293-305.
- Räty, H., Komulainen, K., Hytti, U., Kasanen, K., Siivonen, P., & Kozlinska, I. (2019). University students' perceptions of their abilities relate to their entrepreneurial intent. *Journal of Applied Research in Higher Education*, 11(4), 897-909.
- Ronstadt, R., Vesper, K.H., & McMullan, W.E. (1988). Entrepreneurship: Today courses, tomorrow degrees?. *Entrepreneurship Theory and Practice*, 13(1), 7-13.
- Sarasvathy, S.D., & Venkataraman, S. (2011). Entrepreneurship as method: Open questions for an entrepreneurial future. *Entrepreneurship Theory and Practice*, 35(1), 113-135.
- Schnell, R., Hill, P.B., & Esser Venkataraman, S. (2008). Methoden der empirischen Sozialforschung.
- Shane, S., & Venkataraman, S. (2000). The Promise of Entrepreneurship as a Field of Study. *Academy of Management Review*, 25(1), 217-226.
- Spinnovation (2020): Entrepreneurship meets Education: Förderung von Gründungskultur an Hochschulen: Ergebnisse, Erfahrungen und Erfolgsfaktoren aus dem Spinnovation Projekt; Hrsg: Högsdal, N., Münch, J., Bauer, H., Stuttgart.
- Twaalfhoven, B., & Wilson, K. (2004). Breeding more gazelles: The role of European universities. *European Foundation for Entrepreneurship Research*.
- Vanevenhoven, J., & Liguori, E. (2013). The impact of entrepreneurship education: Introducing the entrepreneurship education project. *Journal of Small Business Management*, 51(3), 315-328.
- Volery, T., Müller, S., Oser, F., Naepflin, C., & Rey, N.D. (2013). The impact of entrepreneurship education on human capital at upper-secondary level. *Journal of Small Business Management*, 51(3), 429-446.
- Welsh, M.A., & Dehler, G.E. (2013). Combining critical reflection and design thinking to develop integrative learners. *Journal of Management Education*, 37(6), 771-802.
- Zgheib, P. (2004). Cultural perceptions of social and economic changes within entrepreneurial businesses in the MENA region. *Global Development Studies*, 3(3-4), 148-171.