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## ENTREPRENEURSHIP EDUCATION PROGRAMMES RESEARCH IN RUSSIA: STAKEHOLDER EXPECTATIONS AND UNIVERSITY PRACTICE

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**Abstract**. Introduction. Entrepreneurial education, as an area of educational practice in higher education, is a relatively new area of activity for Russian universities. In this area, due to the special dynamics of development and transformation, especially in a pandemic, there is the most significant gap between the competencies formed by universities and in demand on the labour market. The rationale for the research stemmed from two major trends in the economy and society: industry demand for workforce with greater enterprise skills, at the same time a new generation, generation Z, seeks more flexible and more fulfilling career path. Therefore, to address these trends, universities have to diversify the skill set included in the academic curriculum.

*Aim.* This study is *aimed* at studying the problems of interaction between universities and their stakeholders in curricula improvement.

Methodology and research methods. Taken into consideration the regulatory nature of the curricula design in Russian Higher Education Institutions (HEIs) a two-step strategy has been adopted for this research. The first step was a concern with meta-analysis of the competencies outlined in Federal State Educational Standard (FSES) in Management through the lens of entrepreneurial competencies. The second step was to investigate inclusion of soft skills in entrepreneurship curricula in across Russian HEIs. To address the objective of research, descriptive statistics and non-parametric Mann-Whitney U-test were applied.

*Results.* The research findings suggest in the environment where the degree programmes have to comply with set Governmental standards, curricula in entrepreneurship struggle to develop essential soft entrepreneurial skills. Most of the analysed curricula are heavily loaded with hard and cognitive skills. Even though the government proclaims a need for innovative development of the nation, creative and innovative thinking is not mentioned either in the FSES nor analysed curricula. The research findings also led to a surprising conclusion that very few core 'business' modules include the development of social or action-oriented skills in their learning outcomes.

*Scientific novelty.* The scientific novelty of this study lies in the fact that for the first time the problems of ensuring the development of soft skills in entrepreneurial education in Russia have been studied.

*Practical significance.* The results of the study will find their application in the design of entrepreneurial curricula to achieve the necessary balance of competencies in them.

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*Keywords:* entrepreneurship, entrepreneurial education, competencies, social development.

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# ИССЛЕДОВАНИЕ ПРОГРАММ ПРЕДПРИНИМАТЕЛЬСКОГО ОБРАЗОВАНИЯ В РОССИИ: ОЖИДАНИЯ СТЕЙКХОЛДЕРОВ И ПРАКТИКА УНИВЕРСИТЕТОВ

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**Аннотация**. Введение. Предпринимательское образование как область образовательной практики в высшей школе является относительно новой сферой деятельности для российских вузов, в которой в силу особой динамики развития и трансформации, особенно в условиях пандемии, наблюдается наиболее значительный разрыв между компетенциями, сформированными вузами и востребованными на рынке труда. Настоящее исследование базируется на двух основных тенденциях в экономике и обществе: отраслевой спрос на рабочую силу с более высокими навыками предпринимательства и в то же время поиск поколением Z более гибких и насыщенных карьерных перспектив. Поэтому в ответ на эти тенденции университеты должны разнообразить набор компетенций, формируемых образовательными программами.

Цель. Данное исследование направлено на изучение проблем взаимодействия университетов и их стейкхолдеров в совершенствовании образовательных программ.

Методология, методы и методики. С учетом нормативного характера разработки образовательных программ в российских вузах для данного исследования была принята двухэтапная стратегия. На первом этапе был проведен метаанализ компетенций ФГОС по направлению подготовки «Менеджмент» через призму предпринимательских компетенций. Вторым шагом было исследование включения мягких навыков в учебные программы по предпринимательству в российских вузах, реализующих программы предпринимательская статиского образования. Для решения задачи исследования применялись описательная статистика, а также непараметрический U-критерий Манна – Уитни.

Результаты. Результаты исследования показывают, что в предпринимательских образовательных программах, соответствующих ФГОС, уделяется внимание развитию необходимых мягких предпринимательских навыков. Однако большинство проанализированных образовательных программ перегружены дисциплинами, формирующими рутинные и когнитивные навыки. Несмотря на то что государство провозглашает необходимость инновационного развития нации, творческое и инновационное мышление не упоминается ни в федеральных государственных образовательных стандартах (ФГОС), ни в анализируемых образовательных программах. Результаты исследования также привели к неожиданному выводу о том, что очень немногие «предпринимательские» модули образовательных программ включают в свои результаты обучения развитие социальных или практических навыков.

Научная новизна. Научная новизна настоящего исследования состоит в том, что впервые изучены проблемы обеспечения развития мягких навыков в обучении предпринимательству в России.

Практическая значимость. Результаты исследования найдут свое применение при разработке предпринимательских учебных программ для достижения в них необходимого баланса компетенций.

**Ключевые слова:** предпринимательство, предпринимательское образование, компетенции, социальное развитие.

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## Introduction

The drive for diverse skill development in higher education is rooted in the growing pressures on industries to compete in an ever-changing global environment shaped by technological advances from one side and changes in the labour market with a shift to less hierarchical, and more self-managed, career pathways, as Jackson noted in her article [1].

The labour market is in flux. A decade ago, those individuals, who had a brilliant academic record with added work experience, were well sought after by most of the corporate institutions. But today, according to Chell and Athayde, hard skills and experience are not sufficient enough for the ingress and escalation in the corporate world. Conventional employment pathways appear already to be being eroded for many young people, where academic qualifications alone are no longer sufficient to ensure a job for which the young person believes he or she has been trained [2]. Employers prefer to hire and promote those persons

who are resourceful, ethical, and self-directed with good communication skills. According to a report published on behalf of McDonalds, by 2020 only in the UK over half a million workers will be significantly held back by lack of soft skills – an issue that is forecast to affect all industry sectors. Therefore, as Ward noted, emotional intelligence and enterprise skills now form part of a fundamental skill set which has not been given prominence in a traditional curriculum designed towards a job outcome [3].

Moreover, a new generation, Generation Z, is entering a system of higher education and will shape the labour market of the future, as Ozkan and Solmaz defined [4]. As Koulopoulos and Keldsen noted, for many of them any work, part-time work or further training, have become the lesser goals [5]. According to the US national survey conducted by the Northeastern University, "Generation Z" is highly entrepreneurial, pluralistic, and determined to take charge of their futures [6]. They leverage information technology and social media like no generation before, they open to new ideas and concepts; they are more aware of their environment and community. They do not look just for a job, they prioritise a feeling of fulfilment and excitement in their job that helps move the world forward, according to Stillman and Stillman [7]. In the context of Russia, Generation Z is much smaller: if around the world Generation Z constitute 32% in 2019, in Russia it does not exceed 7%. Connectivity and social media are the key characteristics of modern youth in Russia and it explains their 'global' perspective; similar to the Western counterparts they value happiness above wealth. However, unlike in the rest of the world Russian youth tend to share more traditional value. While they describe themselves as creative and entrepreneurial, a lesser proportion is interested in starting up own business explaining that by lack of finance, experience and skills, as Volkov noted [8].

According to Andrews and Higson, two trends, change in the labour market and work preferences of the generation entering the labour market, make it imperative for higher education to rethink a paradigm of essential skills and be able to produce highly mobile graduates able to respond to the ever-changing needs of the contemporary workplace [9]. 'Soft skills' are no longer desirable, but essential for professionals in any sector, in management in particular; they should be provided as a part of university curriculum6 as Ward suggested [10] and Tymon confirmed later [11]. While entrepreneurship education has flourished since the 1960s, the pedagogical approach, until recent, stressed a process of new venture creation. It emphasised business planning and focused less on the development of softer, entrepreneurial competencies that contribute to a person to become an enterprising individual. Moreover, the entrepreneurship education and training programmes (ETPs) are measured and evaluated in terms of the number of business plans, student intentions to start a business, and/or the actual launching of a new business. In real life, if a graduate starts a business, it is usually after 5 or more years after graduation. At the same time, need for enterprising graduates able to work independently, take initiative, think creatively, solve complex problems is in great demand from the economy.

Therefore, this research is aimed to explore the provision of soft skills development in entrepreneurship education in Russia. More specifically, the paper focuses on the investigation of inclusion of 'soft' skills and competencies in entrepreneurship curricular across different levels of education (undergraduate and postgraduate), specialist and general entrepreneurship courses by evaluating the inclusion of 'soft' skills into curricular learning outcomes. This work is grounded in a social constructivist view of entrepreneurship, which identifies the importance of learning and cognition in the entrepreneurial process, as Chell defined [12] and Mitchell, Busenitz, Lant, McDougall, Morse and Smith confirmed [13]. The paper proposed a framework for soft skills outcomes in entrepreneurship education.

The paper starts with a broader debate on the importance of soft skills for graduate employability. Then it moves on to the discussion of key skills and competencies for 21<sup>st</sup>-century undergraduate entrepreneurship education. Next, it outlines the methods behind the data collection and analysis. Finally, research results are presented and discussed.

Thereby, this study is aimed at studying the problems of interaction between universities and their stakeholders in curricula improvement. The authors chose entrepreneurial education as an object of research, because this sphere of educational practice is a relatively new field of activity for Russian universities, in which, due to the special dynamics of development and transformation, especially during a pandemic, the most significant gap in competencies formed by universities and in demand in the labour market has emerged. In this regard, the subject of our research is the problems of ensuring the development of soft skills in teaching entrepreneurship in Russia and the deficit of these competencies is traditionally noted by Russian and foreign researchers. In particular, the article is devoted to the study of the inclusion of "soft" skills and competencies in the curriculum on entrepreneurship at different levels of education (undergraduate and postgraduate studies).

#### **Theoretical Background**

#### **Defining Soft Skills**

The notion of "skills" in the context of business and management can be dated to the seminal work of Katz published in 1955 [14]. Based on his work Peterson and Van Fleet defined skills as 'the ability either to perform some specific behavioural task or the ability to perform some specific cognitive process that is functionally related to some particular task' [15]. Chell in 2013 made a connection between skills acquisition and education outlining that skills can be developed through practice and education [16].

As stated in Peterson and Van Fleet manuscript [15], Katz also introduced a typology of skills differentiating between technical, human and conceptual skills. In essence Katz was first to distinguish between hard and soft skills [14]. Hard skills are related to the skills in the technical category and correspond to proficiency in specific activities that require specialised knowledge, methods, techniques and tools. Soft skills are related to the skills in the human and conceptual category that refer to the ability to work with others, to communicate effectively as well as entrepreneurial, visionary and system thinking. According to Weber, Finley, Crawford and Rivera, 'soft' skills are not a substitute for 'hard' skills; they complement hard skills and enable better work performance [17]. Andrews and Higson in 2008 studied the perception of 'soft' and 'hard' skills from business graduates and employers perspective and their study highlighted a skill gap – employers value 'hard' business, discipline-related skills combined with more generic, transferable interpersonal and communication skills; graduates, however, perceived themselves lacking the necessary level of 'soft' skills [9].

Since Katz the conceptualisation of soft skills has significantly evolved and considerable research is devoted to defining "soft skills" [14]. However, the literature is inconsistent and often confusing. While there is broadly an agreement in the academic literature on the correspondence of soft skills to personality, attitudes, and behaviour that less rooted in a specialised domain, there is a debate on a universal set of soft skills, as Matteson, Anderson and Boyden noted [18]. According to Robles, the definition of soft skills varies from character traits, attitude and behaviour such as optimism, humour, integrity, e.g. something intrinsic to one's personality to intra- and inter-personal skills that facilitate the application of technical, "hard" skills and knowledge [19]. Although personality traits could be modified through work and life experience, for the purpose of this paper, we more concern with "learnable" soft skills, which could be developed through education and training. In this regard, the Partnership for 21<sup>st</sup> Century Learning (P21) offered a useful framework of skills necessary for success in work and life [20, 21, 22]. The great emphasis in this framework is given to the development of soft skills. The Partnership emphasises the importance of the combination of softer skills and strong content knowledge. It outlines the need for students to master creativity and innovation, critical thinking and problem solving, as well as communication and collaboration.

Alongside the debate on the importance and nature of soft skills, the growing body of research is focused on investigating the nature of enterprise and

entrepreneurship skills. Often enterprise skills are incorporated into the set of soft skills required by the knowledge-based, enterprising economy [3]. In-depth analysis of identified entrepreneurial skills and competencies demonstrates significant and relevant connections between enterprise and entrepreneurship skills and 21<sup>st</sup> century skills (see Ошибка: источник перекрёстной ссылки не найден created by authors according to analysis of such manuscripts by Jackson [1], Ward [3], Chell [16], Rae [23, 24], Gibb [25], Kirby [26], Mitchelmore and Rowley [27], Markman [28], Holmberg-Wright and Hribar [29] and based on materials available in the open press, where soft skills are highlighted in italic).



Fig. 1. Enterprise and entrepreneurship skills through the lens of  $21^{st}$  century skills

#### Skill Framework for Entrepreneurship Education

While earlier research on entrepreneurship focuses predominantly on entrepreneurs' personality traits, later studies went beyond personality trait and looked at the way entrepreneurs think, behave, act and interact with situations. The dominant theory in entrepreneurship is opportunity recognition approach, as it is mentioned by Chell [12], Mitchell, Busenitz, Lant, McDougall, Morse and Smith [13], Alvarez and Busenitz [30], Alvarez and Barney [31], Gaglio and Katz [32] and Shane and Venkataraman [33]. Stevenson defined entrepreneurship as 'the process by which individuals – either on their own or inside organisations – pursue opportunities without regard to the resources they currently control [34]. This definition opened up entrepreneurship to the broader management framework and enable view entrepreneurship not only as new venture creation but as a new mode of management irrespectively of organisational context [35]. Opportunity recognition perspective also made it possible to identify a range of entrepreneurial skills that can be learnt, practised and improved.

In a broader sense, Rae defined enterprise skills as 'the skills, knowledge and attributes needed to apply creative ideas and innovations to practical solutions' [23].

In more specific terms, Markman echoed Katz typology of skills in relation to the opportunity-driven entrepreneurial process [14, 28]. He referred to technical (business know-how, subject-specific knowledge), cognitive or conceptual (recognise and evaluate opportunities, or process trends in an industry or market, marshal resources) and human (ability to handle relationships inside and outside the venture, to lead and motivate others, and networking) skill.

Entrepreneurial cognition, way of thinking, 'mindset' was in focus of research agenda for decades. Shane and Venkararaman suggested that opportunity recognition requires 1) the possession of the information necessary to identify an opportunity, and 2) the cognitive properties necessary to exploit it [33]. Mitchell et al. defined entrepreneurial cognition as 'the knowledge structures that people use to make assessments, judgments, or decisions involving opportunity evaluation, venture creation, and growth' [13]. Active search, entrepreneurial alertness, and creativity have all been identified as methods through which entrepreneurs recognise and develop opportunities [36]. Another aspect of entrepreneurial cognition is entrepreneurial alertness, ability to make connections between seemingly unconnected things and understanding how those connections translate into an opportunity [32]. Creativity and innovation are often referred to as a cognitive ability that gives entrepreneurs an advantage in finding novel ideas and solutions [38]. Ward discussed the paradoxical role of knowledge and information in generating novel and useful ideas in entrepreneurial ventures [3].

The importance of taking into account the interests and needs of the business community in the design and implementation of entrepreneurial curricula, unfortunately, is not currently a priority for Russian universities. At the same time, the need to take into account the requests of potential employers when designing educational programmes is laid down in a number of official documents that define Russian educational policy. For example, Federal State Educational Standards for Higher Education (FSES HE) require educational programmes consider the requests of potential employers when developing and implementing educational programmes.

The approaches, on the basis of which it is possible to build a system of consideration the interests of the business community in the implementation of higher education policy, have been formed in a number of scientific research. Thereby, the work of Bulgacov et al. examines the problem of the formation of young entrepreneurs in Brazil and emphasises that most of the difficulties they experience when starting their own business are associated with the insufficient formation of the necessary entrepreneurial competencies and the isolation of entrepreneurial education from the needs of the local economy [38]. The authors formulate a number of "recipes" for how to bring these two positions closer together. A Russian study conducted by Polbitsyn clearly demonstrates the importance of taking into account the views of the professional community in the formation of entrepreneurial competencies both in the business environment and in the field of social innovation and social entrepreneurship [39]. However, the results of his research do not say how to build an integral system, part of which would be the mechanisms for implementing the tasks of Russian policy in the field of higher education, mechanisms that would ensure that employers' interests are taken into account when forming the content of educational programmes.

As discussed in previous sections of this paper, soft, social, intra- and inter-personal skills play an increasingly more significant role in the workplace. This is particularly true for the entrepreneurial process. Holmberg-Wright and Hribar emphasise the role of soft skills for entrepreneurs highlighting the deficiency in the development of these skills for aspiring entrepreneurs [29]. Social skills are crucial to build and develop entrepreneurs' social capital and network, which are useful on the different stages of venture development. An opportunity-driven entrepreneur needs to establish connections to resources and market niches, build trust within the team and external stakeholders [40].

Markman's typology is useful in differentiating between 'hard', technical, and 'soft', cognitive and social skills [28]. However, it is missing action orientation, which is essential to the entrepreneurial process. Frese describes entrepreneurship as a conscious process of establishing goals, planning for goal achievement, monitoring execution, and adjusting for success in pursuit of a recognised opportunity [41]. Action orientation also implied the initiative, self-management, self-efficacy and personal responsibility [40].

Drawing on the work of Katz, Markman and Chell, Figure 2 offers a typology of skills through the perspective of cognitive, social and action-oriented skills [12, 16, 28]. The proposed typology does not pretend to offer an exhaustive set of entrepreneurial soft skills; for a comprehensive review of entrepreneurial skills and competencies see Chell [16]. Proposed typology attempts to highlight those which could be developed by inclusion into the entrepreneurship curriculum as a set of learning outcomes. This typology is used to analyse the content of entrepreneurship curriculum in universities in Russia.



Fig. 2. Typology of soft skills outcomes in entrepreneurship education

## **Methodology and Research Methods**

Often the research on evaluation of entrepreneurship training programmes focuses on measuring entrepreneurial intent manifesting in the creation of new ventures. As discussed in the previous sections of this paper, entrepreneurial competencies and skills go beyond venture creation and should be considered as critical skills applicable for any field and any career.

It is important to mention that Higher Education Institutions (HEIs) in Russia have limited freedom to design their degree programmes; all curricula have to meet the requirements of the Federal State Education Standards (FSES) for a particular specialisation. The FSES defines both the structure of the curriculum and the expected learning outcomes and competencies acquired by the students. At the level of designing curricula, a university is able to select those disciplines that develop required learning outcomes and competencies; a university is not allowed to determine the number and content of competencies.

At present, there is no stand along FSES for entrepreneurship education; FSES in Management include entrepreneurship as one of pathways for the graduates.

Taken into consideration the regulatory nature of the curriculum design in Russian HEIs, a two-step strategy has been adopted for this research. The first step was a concern with meta-analysis of the competencies outlined in the FSES Management through the lens of entrepreneurial competencies. Analysis of competencies listed in the FSES Management also served as a tool to map skills and learning outcomes of individual programmes and teaching modules. To ensure the validity of the research, research team individually analysed FSES in Management competencies and then reached a consensus on the typology of presented competencies.

The second step was to investigate the inclusion of soft skills in entrepreneurship curricula in across HEIs in Russia. According to the policy of open access to the information, all HEIs oblige to publish full information on their curriculum including degree and module/course specifications, expected learning outcomes and competencies for each module/course. Therefore, desktop research appeared to be the most appropriate strategy to gather the data.

As a result, the data has been collected from 25 universities that offer degree courses in entrepreneurship including 24 undergraduate (UG) and 12 postgraduate (PG) Entrepreneurial Training Programme (ETPs). Each curriculum document was analysed at the level of individual modules to identify competencies relevant to the entrepreneurship and then grouped into according to the analysis of FSES Management and proposed typology (Fig. 2). Then the data were analysed in terms of (1) number of modules that developed each type of the skill; (2) number of multi-skill modules, e.g. modules that focus on more than one skill; (3) number of mono-competency modules, e.g. modules that focus on the development just one skill; and (4) the average number of soft skills in one module ("skill saturation"). The research yields nominal non-parametric data. To address the objective of the research, descriptive statistics (mean, median, maximum and minimum value and proportions) was applied. To establish whether or not there is a difference between UG and PG programmes, non-parametric Mann–Whitney U-test was applied.

## **Results and Discussions**

#### Soft vs Hard Skills in the Federal State Education Standard

The purpose of the FSES is to ensure consistency in the quality of teaching and assessment across HEIs in Russia.

Federal State Education Standard in Management states that the degree programmes in Management should equip graduates with knowledge and skills for three pathways:

- Organisation and management;

- Information management and analytics;

- Entrepreneurship.

The FSES lists seventy-two competencies that are divided into twentytwo general knowledge, social and cultural competencies and fifty professional competencies. It is remarkable that in the analysis of the professional competencies there are only three competencies listed under the "entrepreneurship" pathway.

Figure 3 represents the breakdown of skills and competencies through the lens of 21<sup>st</sup> Century Skills framework. It clearly demonstrates a strong bias towards the core, professional, skills, 60% of listed skills and competencies. Surprisingly, only 7% of listed skills and competencies are attributed to the understanding and application of information and communication technologies (ICT) in management. Even more, there were no skills related to the understanding of social media and its application for business and management. Learning and innovation skills accounted for 14%. While critical and analytical thinking had a prominent place in this category, there was no mentioning of creative thinking/ problem-solving. Creativity and innovation are not featured in the standards. The study attributed 19% to the Life and Career Skills, even though most of the knowledge and skills in this category are about general knowledge and understanding the world around us.

Next, the FSESs were analysed through the typology of soft skills in entrepreneurship education (see Figure 4). In addition to the soft skills, the study extracted the skills and competencies, which could be considered as 'hard' know-how. Figure 4 demonstrates that nearly 50% of the skills listed in the FSES Management are attributed to the 'hard' skills, followed by cognitive skills. The study attributed 19% to social skills; however, this category consists of combination of (1) skills related to the general awareness of the world and the place of an individual in this world and (2) skills for effective communication, ability to communicate in a foreign language and work in a multicultural environment. Only 4% of the skills listed in the FSES could be considered as action-oriented skills. However, these skills mainly focus on personal effectiveness, such as critically assess personal strengths and weaknesses, continues professional development and awareness of social values of the profession.



Fig. 3. Distribution of skills in FSES through the lens of 21<sup>st</sup> century skills framework

To understand the entrepreneurial skill development further, FSES Management was analysed through the lens of critical entrepreneurial skills and competencies. As it was mentioned earlier, only three competencies such as the ability to conduct a feasibility analysis of a business opportunity, the ability to develop a business plan for a new venture and knowledge and understanding of entrepreneurship and the ability to build and develop entrepreneurs' social capital and network, are useful on the different stages of venture development. While the ability for critical evaluation of theories and organisational context, and decision making take a prominent place, the FSES did not mention once creative and innovative thinking, which constitutes the foundation of entrepreneurial thinking and behaviour.

As it was mentioned earlier, teamworking was mentioned only in two competencies and from the point of view of human resource management, rather than an ability to be a team player. Leadership was mentioned only once and, similar to the teamworking, in the context of a larger organisation and from a perspective of understanding of leadership theories. Such skills as an ability to take networking, initiative, goal setting, self-efficacy, willingness to take risks, are not mentioned. The analysis suggests that FSES is not well suited to equip the graduate with essential entrepreneurship knowledge and skills.

## Analysis of ETP in Entrepreneurship

The structure of the ETP

The structure of the curricula in regard to the inclusion of soft skills (such as cognitive, social and action-oriented) was calculated on the base of the proportion of those skills in the entrepreneurship ETP. Since some modules provide only one type of skills, while others – two or more, the sum of the proportions of these modules exceeds 100%. The descriptive statistics is presented in Table 1.

Table 1

Statistical indicators	The proportion of disciplines aimed at the development of soft skills			
	Cognitive skills	Social skills	Action- oriented skills	
Median	83.2	31.9	17.3	
Minimum	50.0	7.8	1.5	
Maximum	96.8	88.2	71.4	
Maximum to minimum ratio	1.9	11.3	47.6	

Descriptive statistics on the proportion of modules in the entrepreneurship ETPs

The data analysis shows that entrepreneurship ETPs put the main emphasis on the development of cognitive skills. This is true for both UG and PG programmes. The proportion of the modules focused on the development of the cognitive skills ranges from 50% (minimum) to 96.8% (maximum). This means that at least every second module in the analysed curriculum is aimed at mastering cognitive skills. The further analysis of the frequency of the cognitive skills in the module specification indicates that the proportion of those modules even higher, – from 85 to 90% of the modules of Russian Entrepreneurial ETPs provides the development of cognitive skills. Figure 3 illustrates the distribution of the modules with a focus on cognitive skills development; it demonstrates that the vast majority of the ETPs attribute 75–90% of their learning outcomes to cognitive skill development.

The proportion of the modules that include social skills in their learning outcomes is significantly lower in comparison to cognitive skills. The distribution of the inclusion of those skills in the entrepreneurship ETP is presented in Figure 4. The analysis indicates that the proportion of social skills in the learning outcomes varies from 20 to 60%. Four of the evaluated ETPs have less than 10% of the learning outcomes attributed to social skills.





Fig. 4. Distribution of cognitive, social and action-oriented skills in FSES management

However, the most striking result of the data analysis is the lack of inclusion of the action-oriented skills into the entrepreneurship ETPs (see Figure 5, 6 and 7). The proportion of action-oriented skills does not exceed 20%.



Fig. 5. The share of disciplines in curriculum aimed at mastering cognitive skills



Fig. 6. The share of disciplines in curriculum aimed at mastering social skills



Fig. 7. The share of disciplines in curriculum aimed at mastering action-oriented skills

It is important to notice that the content of the UG and PG curriculum in Russia is much broader compared to the ETPs in Europe and North America. It ranges from degree-specific disciplines to much broader, general knowledge, subjects such as philosophy, history, foreign languages, physical education, etc. For the purpose of the analysis, these modules were not excluded. Even though they might do not have direct relevance to the degree subject, they equip graduates with a wider perspective on the world. Entrepreneurship is traditionally associated with action, and experiential pedagogy is in the centre of modern entrepreneurship education [23, 25, 26]. Therefore, it was highly surprising that none of the modules directly relevant to the entrepreneurship set any action-oriented learning outcomes. Even those learning outcomes that were attributed to the action-oriented skills were limited mainly to self-management.

Data analysis indicated that there is no significant difference between UG and PG ETPs when it concerns cognitive and action-oriented skills. At the same time, there is a statistically significant difference in the proportion of modules with social skills (p < 0.05, Mann-Whitney test) in their learning outcomes. It appears that social skills are more prominent in PG ETPs compared to UG programmes (see Table 2).

Table 2

	The share of disciplines aimed at the		
Statistical indicators	formation of social skills		
	Undergraduate	Postgraduate	
Median	27.0	55.8	
Minimum	7.8	27.3	
Maximum	69.4	88.2	
Maximum to minimum ratio	8.9	3.2	

## Descriptive statistics on the proportion of modules in the UG and PG curricula with social skills

#### "Saturation" of the entrepreneurship ETPs

Taking into account such uneven distribution of cognitive, social and action-oriented skills in the entrepreneurship curricula, the next step in the data analysis was to evaluate the "skill saturation" of the individual modules. This indicator reflects an average number of cognitive, social and action-oriented skills included in an individual module. The results indicate that this indicator is different for different skills (see Table 5).

It is noticeable that cognitive skills oriented modules include on average two cognitive competencies with a maximum number of six cognitive competencies. At the same time, modules with social and action-oriented skills in their learning outcomes include on average a little more than one those competencies (see Table 3).

Table 3

Competency group	The average number of skills in one module	The median number of skills in one module	The minimum number of skills in one module	The maximum number of skills in one module
Cognitive skills	1.99	1.83	1.00	6.00
Social skills	1.26	1.24	1.00	2.00
Action-oriented skills	1.19	1.11	1.00	3.00

# Descriptive statistics on the indicator of "saturation" of the curriculum disciplines with competencies

## "Diversification" of the entrepreneurship ETPs

In addition to the analysis of the structure and "saturation" of the entrepreneurship ETPs, the study has looked at the "diversification" of the curricula, e.g. the proportion of mono-skill modules, those that set to develop only one type of skills and multi-skill modules, with more than one skill in their learning outcomes.

The data analysis suggests that over two-thirds of the modules belong to the first group, i.e. mono-skill modules, and one third – to the second group of the multi-skill module. It did not come as a surprise to see that the vast majority of the modules are oriented on the development of cognitive skills (see Table 4).

Table 4

Structure of the curriculum of Russian educational entrepreneurial programs by the degree of diversification

The share of disciplines aimed at mastering	Median (according to the share of disciplines providing a group of skills), %	Module type	
Cognitive skills only	55.2		
Social skills only	6.2	Mono-skill modules	
Action-oriented skills only	5.6		
Mixed competency groups	29.2	Multi-skill modules	

The analysis of "diversification" of the entrepreneurship ETPs revealed the statistically significant difference between UG and PG programmes (see Table 5).

Table 5

Skills	UG/PG	Median (according to the	Chi-Square	Asymp.Sig
		share of disciplines provid-		
		ing a group of skills), %		
Cognitive skills	UG	59.7	65.000	0.001
	PG	36.7		
Social skills	UG	6.2	174.000	0.653
	PG	7.3		
Action-oriented	UG	6.0	89.000	0.007
skills	PG	3.7		
Mixed skills	UG	23.2	76.000	0.002
	PG	44.7		

Analysis of differences between UG and PG ETPs

The data in the above table suggest that the UG programmes are heavier 'loaded' with mono cognitive skills module in comparison to the PG programmes. At the same time, PG programmes have a greater proportion of multi-skills module in their curricula.

#### Conclusions

The key objective of the research was to ascertain to what extent the ETPs in entrepreneurship in Russia incorporate the development of soft skills in their curriculum. The research findings suggest in the environment where the degree programmes have to comply with set Governmental standards, ETPs in entrepreneurship struggle to develop essential soft entrepreneurial skills. Analysed ETPs and individual modules put great emphasis on the development of general management competencies such as business fundamentals such as marketing, financial management, business operations, etc., as well as planning and organising, analytical thinking and decision making. As a result, most of the analysed ETSs are heavily loaded with hard and cognitive skills. Even though the government proclaims a need for innovative development of the nation, creative and innovative thinking is mentioned neither in the FSES nor in ETPs. The research findings also led to a surprising conclusion, that very few core 'business' modules include the development of social or action-oriented skills in their learning outcomes. Most of the social and action-oriented skills were found in the modules on general knowledge. The FSES stipulate a number of personal and professional development learning outcomes. From the entrepreneurship education point of view, personal effectiveness competencies miss essential attributes that are required in the modern economy such as initiative, motivation and ambition, flexibility and adaptability, willingness to take risk, leadership, and self-efficacy. Therefore, it could be said that the existing ETPs in entrepreneurship

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focus too much on hard, business fundamentals, and cognitive skills and lack in the development of essential soft entrepreneurial skills.

Thereby, it can be said that existing curricula in the field of entrepreneurship place too much emphasis on hard skills, business fundamentals and cognitive skills, as well as insufficient development of the necessary soft entrepreneurial skills. This circumstance allows us to fix the imbalance in the influence of key stakeholders on the design and implementation of entrepreneurial education programmes: the state and the business community. Universities, focusing on the most influential stakeholder as the state, give a little consideration to the expectations and demands of entrepreneurs. Ultimately, the dominance of the state's influence on entrepreneurial education leads to a decrease in the role of universities in regional development, weak influence on the processes of the formation of entrepreneurship environment in the country.

## Limitations and Further Research

The research was based on the formal documents available to the public and at first sight they might present a deemed view of the state of the entrepreneurship education in Russia. These documents do not outline the teaching methods and underlining pedagogy. It is possible to assume that behind closed door the entrepreneurship educators exercise creative and innovative experiential pedagogy and achieve in fact learning outcomes that are not prescribed in the FSES or ETPs curriculum. Therefore, the next, logical step is to focus on practical aspects of the delivery of entrepreneurship education.

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