Psychological readiness of high school students for entrepreneurial activities and financial literacy

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Abstract—The study of economic and psychological views, ideas, psychological characteristics of economic consciousness and the behavior of various social groups appeared as socio-economic changes is of particular interest in Russian society.

Research in the direction of studying the psychology of economic, entrepreneurial activity of the population and the economic behavior of various social groups in modern socio-economic conditions determines the economic activity effectiveness of the Russian Federation. A special social significance belongs to a scientific search in the field of formation of the psychological prerequisites for future economic and entrepreneurial activities of students in the educational system.

The article described the results of an empirical study of the characteristics of the psychological readiness of schoolchildren for entrepreneurial and innovative economic activity and financial literacy of schoolchildren. Schoolchildren of 10–11 grades from the city of Cheboksary (Russia), majoring in socio-economic sciences and intending to engage in business in the future, took part in the study.

The practical significance of this study lies in the fact that the results can be used in the work of educational organizations to improve the economic and financial literacy of high school students.

Keywords — psychological readiness; entrepreneurial activity; business activities; financial literacy; high school students; Russian society.

I. INTRODUCTION

Socio-economic transformations taking place in Russian society have aroused particular interest in the study of economic and psychological views, ideas, psychological characteristics of economic consciousness and the behavior of various social groups.
Entrepreneurship has the interdisciplinary nature of research and the existence of numerous interpretations and methodological implies the definition of the concept (Hezrich, Peters, 1991).

In the Middle Ages, “entrepreneurs” were, as a rule, clergymen, since they were usually entrusted with the execution of large construction projects - the erection of public buildings, cathedrals and monasteries. Thus, in the Middle Ages, entrepreneurship is the management of large-scale and socially significant work associated with the disposal of someone else's (usually public) property (Hezrich, Peters, 1991).

In the interpretation of representatives of various economic schools, the term "entrepreneurship" was referred to as "entrepreneur" (equivalent to the French word "entrepreneur"), "entrepreneurial" (entrepreneurial), leader, "innovator" (innovator), "capitalist" (capitalist), "adventurer" (adventurer). "self-employed" (self-employed).

A common model for studying entrepreneurship was theories that determine bias towards entrepreneurship by biological-genetic and sociocultural factors. Modern modifications of this approach appeared from the concept of the German historical school at the turn of the XIX-XX centuries. The most famous representatives were G. Schmoller, V. Zombart, M. Weber. Entrepreneurial "spirit" is a component of the economic "spirit" of capitalism and is all manifestations of intelligence, character traits, moral and value norms. They were considered deeply rooted in social principles, customs and traditions of certain people, specific to a particular stage of economic development. The predisposition to entrepreneurship was considered only in limited, specifically national and specifically cultural-historical conditions.

Analysis of the main approaches to the definition of "entrepreneur" allows us to conclude that there are "economic" and "psychological" interpretations of this concept.

The specificity of the "economic" interpretation of an entrepreneur as an economic entity is associated with a model of a general concept of man and society, known as "Homo Economicus" ("economic man"). The idea of an “economic man” was given by Adam Smith, a Scottish economist, scientist, philosopher. He considered the implementation of his own well-being, regardless of the well-being of any other person;

2) emphasizes the egoism of a person who cares about his own well-being, regardless of the well-being of any other person;

3) the model indicates the rationality of a person who determines his own benefits and goals and calculates the comparative costs associated with this choice, optimizes his actions according to the criterion of utility maximization;

4) “economic man” is well informed about possible ways of meeting his needs (Glushchenko, Kaptsov, Tikhonravov, 1996).

Psychological interpretation of the concept of "entrepreneur" is characterized as a psychological type regardless of the content of its economic function. Special psychological properties of the individual, his personal characteristics "control" his behavior that makes business activities successful. Among the characteristics that distinguish entrepreneurs from others, there was the motivation of achievements, the internal locus of control and the propensity to take risks.

The modern understanding of entrepreneurship developed only in the middle of the 20th century. According to many authors, the most consistent interpretation of this problem belongs to J. Schumpeter (Schumpeter, 1982). In his classical study of the entrepreneur J. Schumpeter made an attempt to synthesize certain "facets" of the models mentioned, where the economic function of the entrepreneur was closely connected with the peculiarities of his personality, namely, with intellectual and volitional qualities. The concept of entrepreneurship by J. Schumpeter combines the economic rationale of the entrepreneurial function (the implementation of "new combinations of factors of production") with an attempt to make a psychological portrait of an entrepreneur. This theory was added by the study of entrepreneurship as a carrier of a special "spirit" rooted in the customs of certain people, moral, legal and religious foundations. Joseph Schumpeter believed that entrepreneurial activity is the basis of all development, it contributes to the transition of the economy from one equilibrium state to another. He considered the implementation of new functions: the manufacture of a new good, the improvement of existing goods and the change in the structure of the sphere of activity as a distinctive feature of the entrepreneur.

Scientists' search for relationships between various aspects of entrepreneurship has been actively pursued in the 1960s - 1970s of the 20th century.

Scientists tried to identify the tasks of identifying the personal variables and structures that determine the effective economic behavior of the entrepreneur, to distinguish it from the general population in the framework of the psychodynamic approach that studies intra-psychological factors of entrepreneurship. The number of entrepreneurial characteristics varies depending on the concept of the authors; often such personality traits are combined into a corresponding "entrepreneurial personal profile". The most frequently called characteristics include achievement motivation, internal locus control, risk rate and developed creative potential.
Direct transfer of the information obtained has not been possible, as the domestic entrepreneur is formed in a different economy, a different social environment, a different way of becoming an entrepreneurial career, and possibly other skills and abilities, despite the productivity of foreign experience in the study of the psychology of entrepreneurship (Musaelyan, Silniisky, 1995). World science constantly proves that public policy, methods of economic reform should correspond to the socio-psychological factors, the deep psychology of the ethnic group, and the sociocultural characteristics of the population. Consequently, the success of carrying out market reforms in our country largely depends on taking into account the economic mentality of the population of Russia and the regional mentality.

Political and economic reforms carried out in our country became the basis for the revival of domestic entrepreneurship and Russian entrepreneurship became the subject of intensive interdisciplinary research In the 1990s. Special interest was shown by scientists to the business and personal qualities of entrepreneurs, to the socio-psychological factors of business success in the field of psychology of Russian entrepreneurship (Zhiravlev, Zhiravleva, Kornilova, Marchenko, Poznyakov, Khashchenko, Shorokhova, Chirikova).

Awareness of the economic and social nature of entrepreneurship from the point of view of increasing the efficiency of its management involves conducting in-depth studies of internal and external factors of entrepreneurship development based on a systematic approach and, first of all, from the position of integrative interaction between economics and psychology. The systems approach means that each system (economics and psychology) is an integrated whole even when it consists of separate, disconnected subsystems, united by a common goal, which makes it possible to reveal the characteristic properties, internal and external connections, and also to study difficultly revealed properties and relations in objects.

The problem of business and personal qualities that make up a psychological portrait of successful entrepreneurs is explored by foreign and Russian scientists in the context of considering the most important personal prerequisites for successful entrepreneurship. It is the study of the personal qualities of a person performing an entrepreneurial function, which are the main components of the entrepreneurial potential, forms the basis of a person’s business qualities. Without it the functioning as a subject of the economic process is impossible.

The main direction of applied psychological research is the formation of psychological readiness for entrepreneurial and innovative economic activity among schoolchildren and students at the present time (Antropyanskaya, 2012; Amiryen, 2003; Tokov, 2005; Abreкова, 2006; Kitova, 2007; Dyshkev, 2008; Khanova, 2012; Khashchenko, 2012; Morova, Zakharova, Talanova, Dulina, Nikolaev, 2017).

The grounds for revealing this topic as an actual scientific problem are the contradictions that have become aggravated at the present stage of economic development between the need of various sectors of the economy for specialists with entrepreneurial potential and the lack of such potential among a significant part of university graduates, between the need to introduce into the system the education of psychological technologies that ensure the formation of the psychological readiness of the individual for entrepreneurial activity and the insufficient knowledge of this phenomenon (Khashchenko, 2012).

V.V. Uskov (Uskov, 2007) considers the formation of psychological readiness for entrepreneurial activity within the educational institution as a process that results in students' awareness of their own psychological characteristics and qualities that contribute to the successful implementation of a small business and the emergence of sustainable motivation for self-development and development in this area.

The study of the psychological readiness of the individual for entrepreneurial and innovative economic activity is of scientific, theoretical and also practical significance, since it has a close relationship with the financial literacy of schoolchildren.

The need for economic knowledge is also due to the fact that schoolchildren are active participants in market relations as consumers, citizens, future specialists of various levels and profiles.

High school students are an age group that will eventually occupy leading positions in the economy and politics, social and spiritual spheres of society.

The results of international studies show that the state of financial illiteracy is widespread, and this happens not only in Russia, but also in Germany, the Netherlands, Sweden, Japan, Italy, New Zealand and the USA.

Financial literacy refers to the entire amount of economic knowledge acquired by a person about economic markets functioning, the characteristics of their functioning, the use of financial instruments, types of products and services, the ability to use them with full awareness of the results of their activities and the willingness to take responsibility for economic decisions. Financial literacy is a means to control personal income and expenses, the ability to plan one’s expenses and investments, manage money and achieve material well-being. The Government of the Russian Federation has begun the implementation of the National Strategy for Improving Financial Literacy of the Population and Improving Financial Literacy in the Russian Federation for 2017-2023. The Ministry of Finance of the Russian Federation has launched a project aimed at improving the financial literacy of Russian citizens (especially students at schools and higher educational institutions, as well as adults with low and medium income levels), helping Russian citizens to develop reasonable financial behavior, informed decisions and responsible attitude to personal finance, improving efficiency in the field of protecting the rights of consumers of financial services (Financial..., 2018).

The subject “Basics of economic literacy” has been introduced into the federal school curriculum as part of the subject “Social Studies” at the state level in Russia in 2018.

II. MATERIALS AND METHODS

In the research we used “Methodology of scenarios of economic behavior” by N.M. Lebedeva and A.N. Tatarko (Lebedeva, Tatarko, 2011). The study was conducted involving
50 schoolchildren of 10–11 grades of schools in the city of Cheboksary (the Chuvash Republic), who major in a socio-economic profile and intend to engage in business in the future.

Respondents were asked to evaluate opposite behaviors that two heroes of situations manifested to study typical economic behavior in the methodology developed by the Social and Psychological Research Laboratory of the Higher School of Economics of National Research Laboratory. (Shevtsova, 2012).

This method involved respondents evaluating 11 situations that reflected different bipolar dimensions of economic behavior. The methodology of economic behavior models is based on the description of situations in which the respondent needs to make a choice. This allows assessing the readiness of people to act in a certain way in terms of choosing alternatives when making economic decisions.

We will highlight only the respondent’s assessment of the willingness to act in a certain way within the framework of this publication.

We took the “Questionnaire to study the attitude of schoolchildren to money” by M.Yu. Semenova (Semenov, 2010, Furnham, 1998). The author (M.Yu. Semenov) edited statements based on the age characteristics of high school students and the specifics of monetary practice in Russia.

Scale 1. Positive and rational attitude to money. The art of managing money.

Scale 2. Fixing on money. The motive of saving.

Scale 3. Anxiety over money. The motive of financial security.


Scale 5. Therapeutic function of money, money as pleasure or medicine (Semenov, 2010).

For the study of associations connected with money, the research with the questionnaire “Moral assessment of money” by E.I. Gorbacheva and A. B. Kupreychenko was used (Zhuravlev, Kupreychenko, 2007, modified N.M. Lebedeva and A.N. Tatarko (Lebedeva, Tatarko, 2011).

The questionnaire "Moral assessment of money" (Gorbachev, Kupreychenko, 2006) reveals the connection between the concepts of “money” that exists in the minds of respondents. It is both with positive (basic vital and moral values) and with negative phenomena.

The respondent was given the following instruction: “Please rate how your ideas about money are related to the concepts listed below. To do this, indicate on the scale the number corresponding to your opinion. 1 is the lowest degree of communication, 5 is the highest degree of communication”. Further, a list of 15 concepts was proposed for evaluation: truthfulness, unprincipledness, responsibility, achievements, justice, freedom, health, tolerance, dependence, comfort, entertainment, cynicism, power, strength, security.

Mathematical-statistical data analysis included descriptive statistics (arithmetic mean and standard deviation) and Pearson correlation analysis.

III. RESULTS AND DISCUSSIONS

Representations of high school students about the motivation to engage in business activities are presented in Table 1. It was possible to choose no more than 3 answers (Table 1).

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td>1 Economic necessity, desire to leave need</td>
<td>26</td>
</tr>
<tr>
<td>2 The desire for economic freedom and independence (the ability to become the master of one’s own business, the ability not to depend on the authorities)</td>
<td>50</td>
</tr>
<tr>
<td>3 The desire to realize their abilities</td>
<td>36</td>
</tr>
<tr>
<td>4 The desire to secure a high level of material well-being</td>
<td>62</td>
</tr>
<tr>
<td>5 Social status</td>
<td>16</td>
</tr>
</tbody>
</table>

The respondents of our research named the desire to secure a high level of material well-being of 62% (31 people) as the most important incentive to engage in entrepreneurial activity. The next important point is the desire for economic freedom and independence (the ability to become the master of one’s business, the ability not to depend on the authorities) for 50% (25 people). For less than half of our respondents, the important motivation is the desire to realize their abilities 36% (18 people) and economic necessity, the desire to get rid of scarcity 26% (13 people). In the opinion of a minority of respondents, the urge to engage in entrepreneurial activity is to increase their social status by 16% (8 people).

Based on the results of the technique “Methods of studying models of economic behavior” by (N.M. Lebedeva, A.N. Tatarko, 2011), the following conclusions can be made on patterns of behavior (see Table 2).

<table>
<thead>
<tr>
<th>Situations / scales</th>
<th>M±σ</th>
</tr>
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<tbody>
<tr>
<td>Economic paternalism</td>
<td>3.02±2.53</td>
</tr>
<tr>
<td>Saving time</td>
<td>3.56±2.37</td>
</tr>
<tr>
<td>Short-term orientation in economic behavior</td>
<td>3.2±2.68</td>
</tr>
<tr>
<td>Wastefulness in economic behavior</td>
<td>2.66±2.49</td>
</tr>
<tr>
<td>Economic indifference</td>
<td>2.58±2.78</td>
</tr>
<tr>
<td>Priority of profits over the law</td>
<td>2.9±2.54</td>
</tr>
</tbody>
</table>
Modern psychological science considers the attitude to money, economic values as an important, but little studied problem. The difference in the approaches to the study of money is largely determined by the attitude to the fundamental principle of economic rationality. Scientists point out the need to study attitudes towards money, problems relating to the money of children, etc. (Semenov, 2011; Fenko, 2000; Shchedrina, 1991).

We considered the peculiarities of the schoolchildren’s monetary behavior, since during the period of transformations in the Russian economy, the study of money perception appears to be particularly relevant. For this matter we used the “Questionnaire to study the attitude of schoolchildren to money” by M. Yu. Semenov.

The central concept in the context of studying the value of the phenomenon of money is “attitude”. The data are given in Table 3.

<table>
<thead>
<tr>
<th>Scales</th>
<th>M±σ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive and rational attitude to money</td>
<td>40.18±9.89</td>
</tr>
<tr>
<td>The motive of saving</td>
<td>25.88±6.57</td>
</tr>
<tr>
<td>Anxiety over money</td>
<td>32.8±7.34</td>
</tr>
<tr>
<td>Negative emotions in relation to money</td>
<td>26.56±8.23</td>
</tr>
<tr>
<td>Therapeutic function of money, money as pleasure or medicine</td>
<td>31.2±9.18</td>
</tr>
</tbody>
</table>

Comparison of the average rates showed that the majority of respondents (40.18±9.89) expressed a positive and rational attitude to money. They are careful and attentive to money. Money can be a symbol of independence for them.

The respondents of this sample have anxiety over money (32.8±7.34), which means that students in the study group often worry about money, perhaps overestimating the importance. Money often takes thought and attention and is an emotionally saturated object because of its high value.

The least mentioned scale is “negative emotions in relation to money” (25.88±6.57). Neutral or positive emotions are associated with money. There is no guilt over money. The person uses money quite prudently and rationally. He believes that the money goes to hard work.

To study the assessment of money by schoolchildren, the questionnaire "Moral assessment of money" by E.I. Gorbacheva and A. B. Kupreychenko was used (Gorbachev, Kupreychenko, 2006). The results are shown in Table 4.

<table>
<thead>
<tr>
<th>Concept</th>
<th>The degree of connection with the concept of &quot;money&quot;, (M±σ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authority</td>
<td>4.1±1.14</td>
</tr>
<tr>
<td>Entertainment</td>
<td>4.08±0.93</td>
</tr>
<tr>
<td>Comfort</td>
<td>4.06±1.05</td>
</tr>
<tr>
<td>Health</td>
<td>3.86±1.17</td>
</tr>
<tr>
<td>Dependence</td>
<td>3.7±1.25</td>
</tr>
<tr>
<td>Strength</td>
<td>3.66±1.27</td>
</tr>
<tr>
<td>Security</td>
<td>3.66±1.23</td>
</tr>
<tr>
<td>Responsibility</td>
<td>3.58±1.22</td>
</tr>
<tr>
<td>Cynicism</td>
<td>3.44±1.06</td>
</tr>
<tr>
<td>Freedom</td>
<td>3.4±1.28</td>
</tr>
<tr>
<td>Achievements</td>
<td>3.4±1.23</td>
</tr>
<tr>
<td>Equity</td>
<td>3.08±1.35</td>
</tr>
<tr>
<td>Unprincipled</td>
<td>3±1.2</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>2.9±1.27</td>
</tr>
<tr>
<td>Tolerance</td>
<td>2.7±1.35</td>
</tr>
</tbody>
</table>

According to the survey results, money is primarily associated with “power” (4.1±1.14) “entertainment” (4.08±0.93) and “comfort” (4.06±1.05) for high school students. Least of all it is associated with “unprincipled” (3±1.2), “tolerance” (2.7±1.35) and “truthfulness” (2.9±1.27).

Money for the respondents of our research is a meaningful notion connected with health, comfort, safety, and with power, strength. In our opinion, the group of schoolchildren under study was closest to the type of moral evaluation of money as the “moral – conflict assessment of money” according to the typology A. Kupreichenko (Kupreichenko, 2011). Representatives of this type consider business as a world of competition, partnership, goal achievement, and at the same time a world of high risks and competition. The highest one among all types of assessment is the possibility of increasing material income. It is combined with the highest level of competition. At the same time, the level of attitude to the observance of moral standards of truthfulness, tolerance is rather low.

Correlation analysis showed that the largest number of correlation relationships was identified with the position on “economic passivity.” This position is interconnected with such model of economic behavior as a focus on “economic paternalism” (r = 0.51; p<0.01) and “short-term perspective in
economic behavior” (r = 0.58; p≤0.01), “Wastefulness in economic behavior” (r = 0.29; p≤0.05) and “priority of profit over the law” (r = 0.48; p≤0.01). Thus, schoolchildren focused on a model of economic behavior with low economic activity may be based in their behavior on the conviction that the state, the government must take care of citizens, ensure that their needs are met at public expense, taking all the concerns about the welfare of citizens. Such orientation towards state care makes a more pronounced short-term orientation in economic behavior for schoolchildren, making it possible not to build far-reaching economic plans and be wasteful.

IV. CONCLUSIONS

Analysis of the research results using the methodology of economic behavior scenarios showed that there is currently a negative attitude towards economic paternalism and economic passivity in the studied group of students with entrepreneurial intentions, they prefer to save time rather than money (striving for professionalism), they have a long-term perspective in economic behavior, give greater priority to the creative component of the work than its material component. The study of the characteristics of the monetary behavior of high school students showed the severity of indicators on a scale of "positive and rational attitude to money". They use their money rationally, tend to accumulate and save, so as not to have material difficulties in the future. All these are favorable phenomena of economic consciousness and behavior, indicating the need for economic activity and the growth of well-being, psychological predictors of readiness for entrepreneurial activity.

At the same time, respondents show an attitude of economic indifference (weak interest in economic events), preferring profit rather than compliance with laws. They are not ready to use loans and prefer distribution of remuneration for work according to the principle of equality rather than fairness. The group of schoolchildren studied was found to have such type of moral evaluation of money as “moral-conflict assessment of money” (according to A. Kupreychenko), anxiety over money, which may further cause a controversial and conflicting attitude to economic phenomena, in particular, moral-conflict assessment of money and intrapersonal moral conflict about the observance of moral norms of business behavior.

These manifestations of economic consciousness and behavior of schoolchildren may further become psychological barriers to the development of effective economic and entrepreneurial activity.

The practical significance of this study lies in the fact that the results can be used in the work of educational organizations to improve the economic and financial literacy of high school students, in the psychological support of Russian and regional programs to promote and support young entrepreneurs.

In the conditions of educational organizations, it is necessary to conduct periodic monitoring of psychological diagnostics to identify potential entrepreneurs among schoolchildren.

Formation of psychological readiness for entrepreneurial activity in the conditions of educational organizations and programs to support entrepreneurial activity of young entrepreneurs must also include a psychological component (motivational, value, cognitive, behavioral structural components). The work should be based on the principles of working with gifted students (Alexandrov A.Yu., and co-authors, 2018), using modern active and educational technologies. Within the framework of the psychological block, psychological preparation and counseling of start-up entrepreneurs are necessary in view of the identified potential psychological difficulties; conducting training programs for the development of psychological readiness of schoolchildren for entrepreneurial activity, their business and personal qualities and a positive attitude towards business.

References


