

YOUTH FROM INDUSTRIAL REGIONS OF RUSSIA: THE IMPACT OF THE PERSONAL WELL-BEING ON THE INNOVATIVE ACTIVITY OF YOUNG PEOPLE

Dmitriy Trynov – Yana Didkovskaya – Nadezda Dulina

Abstract

There is much attention paid today to study the issue of preparing the conditions to stimulate the innovational activity of young people so that they could develop and fulfil their potential more effectively. That is why we need to study the factors affecting this activity. We believe that such extra-economic phenomena as the personal well-being of the social group play an important role.

In this article, we present the results of the sociological survey conducted on working and studying youth from the six industrial regions of Russia. Two categories of youth act as the object of study. First, university and college students are receiving professional training in engineering and natural science (N=2400). Second, young employees of industrial enterprises of high-tech sectors of the regional economy (N=1050).

The hypothesis of the study proved partially: we have not found any correlation between life satisfaction indicators and types of innovational activity, but the level of youth's innovational activity correlates with the social moods and security – optimistic and pessimistic ones. Young people who feel secure are more active in the development of creative and business projects, participates in professional and scientific competitions, active in the inventive practices.

Key words: youth, industrial regions, well-being, innovative activity

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Introduction

Schumpeter's works put the innovations on the central place in the process of social modernization. The innovations are critical both in the development of the welfare economy and in changing the way people live in a radical way (Schumpeter, Becker, & Knudsen, 2002). The value of innovation in a post-industrial society becomes crucial since it helps achieve success in the global competition of goods and services. Being rivals in such competition, some countries taking advantage of established economic ties, progressive

thinking, and stimulating such competition in society. Other countries suffer from such disadvantages as obsolete economic order, conservative elites, lack of interest in innovation.

Inglehart & Welzel believe that technical innovation becomes a trigger for modernization, followed by an increase in labour productivity; then goes professional specialization, increase in the level of education and income of people; forms of interaction between people are diversified, the leadership and subordination losing its predominant role, contractual relations steps ahead; in the long term, all this turns into changes in the cultural sphere. Using this logic, they conclude that these changes happen only if people have been living in prosperity for a long period (Inglehart & Welzel, 2005).

In actual modernization theory, there is a state proving the direct link between welfare and innovation. Binder believes that innovation affects life quality and well-being indicators (Binder, 2013). Innovation strongly affects the labour market, the emergence of new employment forms influenced by information and communication technologies etc. (Atkinson, Castro, 2008).

At the same time, there is a different kind of connection. Modern social and economic studies note that human and social capital has a serious effect on the economic development of countries and regions (Pelinescu, Pauna, Saman, & Diaconescu, 2019). Several studies on this topic confirmed the important role of human capital in development and innovation. Acs & Doh, in their cross-cultural study, revealed that social capital has a positive impact on innovation at the national level (Doh & Acs, 2010). Human capital influences innovative behaviour in the workplace and has a strong impact on the relationship between institutions and entrepreneurship. This influence is greater in the relationship between property rights, access to credit, subjective insecurity, and business activity in developing countries (Urbano, Audretsch, Aparicio, & Noguera, 2020).

Developing countries, such as Russia, have to improve the quality of human capital first so they could succeed in modernizations and increase their competitiveness in the future. In this regard, the researchers studying the innovation interested not only in the usual subjects of innovation as enterprises, business projects, production clusters but also in social communities. Youth is the one, which innovative potential should be regarded as one of its main psychophysiological characteristics.

Different social groups (in age, gender, culture, etc.) may be ready to some extent or not ready at all to adopt innovation. The results of studies in Russia show that youth, along with the highest innovative potential also ready to apply innovations in practice. Arkhipova &

Kuchmaeva studies revealed that age is significant in the innovation issue. The share of people with a positive attitude to innovation among the groups that are interested in and actively use innovations in the age under 30 is 72.4%, while among people over 30 years – 31.6% (Arkhipova & Kuchmaeva, 2018).

Studying young people in the field of innovation plays an important role since it reflects certain psychophysiological features of the young, such as freedom of thinking, energy, and the absence of stereotypes (Didkovskaya & Trynov, 2019). We also note a symbolic resource as young people having a natural desire for novelty represents the hopes of society for renewal.

We see youth innovation activity as complex of measures aimed at preparing, creating and implementing innovations. The starting point for it is the interest that transforms into skills and its usage over time. The innovative abilities of young people need certain conditions formed by a competent social policy so that they could be implemented by demand of society. The key question is: what social factors can affect youth innovational activity? Are there any not economic but internal resources or ways to encourage innovation?

1. Theoretical framework

Since the mid-twentieth century, in the Western scientific literature has been published the study results that complement the usual economic tools designed to assess the standards of living of the population. These were such concepts as happiness (Easterlin, 1973), social well-being (Campbell, 1976), and quality of life (Mercier, 1994).

They tried to clarify the influence of numerous factors on the subjective assessment of life made by the population and build a reliable research tool. Standing at the intersection of sociological and psychological knowledge, subjective well-being was filled with such components as positive (joy, satisfaction, happiness) and negative (fear, anxiety, concern) feelings. At the same time, in the central position of these concepts is the assessment of a person's life concerning the situation in society.

Subjective well-being acts as a real phenomenon that reflects the individual state and a theoretical construct at the same time. There is an ongoing discussion in modern social science about the influence of various factors on subjective well-being. The range of phenomena is vast: from the socioeconomic status and employment (Andersen, 2009), to the security (Rawsthorne, Kinsela, Paxton, & Luscombe, 2019).

Theories of subjective well-being, based on empirical studies with a clear, dynamic basis, allow making a detailed and comprehensive assessment of the innovation impact on society (Binder, 2013). At the same time, the theoretical development of subjective well-being indicators does not seem complete, and the application of these indicators requires adjustment over time.

We assume that subjective well-being is an integral characteristic of a person's satisfaction (or dissatisfaction) with his or her social status, an indicator of his or her moods and orientations.

In this article, we aim to test a set of variables consisting of the three components of youth subjective well-being structure in their impact on innovation activity.

2. Data and Method

We interviewed students of universities and colleges receiving professional training in engineering and IT.

We conducted a selective sociological study in 2018 и 2019 surveying students of universities and colleges receiving professional training in engineering and IT (N=2400), and young employees of industrial enterprises of high-tech sectors of the regional economy (N=1200). The survey has been conducted in the six largest industrial regions of Russia.

During the study, we focused on the three topics:

1. Youth innovative activity degree during the study or professional activity
2. Youth life and professional plans
3. Youth social mood about the near future

Young people's innovative activity was taken as a set of activities aimed at preparing, creating and implementing innovations. The range of activities was represented by certain forms of educational or professional work related to the development and implementation of innovative potential.

Taking the level of innovation development as the main criterion, we divided it into three categories. The first category consists of certain types of innovative activity, such as working on their project or preparing a patent for an invention. The second category consists of such types of activity that are aimed at mastering existing innovations, for example, introducing innovations into production. The third type of innovative activity is preparatory ones - it is associated with educational activities that affect the development of creative potential. Here we have included "spontaneous forms" of self-education.

We studied the social mood of the youth as emotional attitudes to social changes in the near future. The planning horizon for the future was three years.

We interpreted positive expectations as a mood of optimism and expectation of changes for the worse as pessimism; the expectation of maintaining the status quo in society was seen as a neutral setting about the future.

3. Results

Satisfaction with life

The core of subjective well being is a person's assessment of his or her life. Respondents rate satisfaction with their life in whole as high. Almost 80% of respondents are satisfied with life. Is specific for young people optimistic mood its positive nature and the very group with a stable social position. Only one in seven respondents reported being completely or partially dissatisfied with their lives.

We must note that respondents satisfied most of all in personal life aspects (Table 1). Communication with family, friends and colleagues lies in the sphere of comfort. Employed respondents rate this aspect higher than studying, which could mean that the value of these contacts for employed is higher.

Tab. 1: Satisfaction with certain aspects of life (average values, 1 – not satisfied at all, 5 – absolutely satisfied)

Please rate are you satisfied or not with different aspects	Employees	Students
Finance	2,87	3,03
Health	3,71	3,59
Work / Study	3,56	3,60
Education	3,84	3,68
Relationships with your family and friends	4,43	4,20
Relationships with colleagues / groupmates	4,21	4,04
Environment	2,60	2,78
Relationships with teachers	-	3,86

Source: author's calculation

Respondents are not satisfied with the environment. Modern youth get all the negative consequences of the industrial age. Taking into consideration that the respondents live in industrial centers, the environmental problem established there a long time ago. This way, the environmental situation becomes a powerful hidden driver of tension and discontent.

Let us comment on the differences in satisfaction indicators between working and studying youth. A significant number of students having support from their parents or older relatives rate satisfaction with their financial situation slightly higher. Care of older relatives giving a place to live and various financial support (as tuition pay) can modify this rate. The socioeconomic status of employed respondents could be the reason for financial dissatisfaction. The problems of the first years of marriage, the birth of children and, consequently, the need to provide for them come to the fore. Young employees have not got enough professional capital to provide the needed level of income. In professional terms, they have just hit the road - they face the challenges of career growth.

Social attitude and future planning

While young people are at the initial stage of forming their social status, their future planning horizon is rather broad. The rate of future perspectives to fulfil their potential affects the choice of life strategies. If we consider the overall security, most respondents are optimistic (66,4 %).

The estimates change when respondents are trying to predict the future situation in society (Table 2).

Tab. 2: Changes in near 3 years, %

What do you think the situation in our society will likely	Position		TOTAL
	Employees	Students	
No, nothing will change	55,0	58,0	56,9
Yes, it will change to worse	23,0	18,7	20,3
Yes, it will change to better	22,0	23,3	22,8
Total:	100,0	100,0	100,0

Source: author's calculation

The proportion of social optimists and pessimists was approximately equal. In this connection, we tend to evaluate a group without unambiguous estimates of the future as pessimistic. In our previous survey, we revealed an assessment of the situation in the country by young people as a very low, e.g. more than 50% of respondents assess the economical situation in the country and about 40% in politics negatively. Thus, seeing no changes in the future should be interpreted as a hidden pessimism.

There is a particular immaturity in the thinking of young people. The idea that their personal lives cannot be excluded from the public context has not yet been established in

mind. Thus, a certain part of the student youth (first of all) has a certain infantilism associated with the idea that their personal life depends little on appearances. Of course, the reason could also be in their limited experience of interaction with public institutions.

Youth innovational activity

The types of innovational activity we have outlined in the survey (13 types) divided into three groups: definite – innovations creation; implementation – mastering innovations; preparatory – educational activities aimed at the development of creative potential.

1. According to survey results working employed youth is more involved in definite types of innovation activities, e.g. 3% of employed youth registered patents for inventions (students - 1,5%); 19% of employed and 12% of students offered the project (idea) on the solution of a production problem to the management / potential employer.

2. Project activity implemented almost equally by both groups: 14% of employed and 9% of students were a part of creative project implementation connected to professional or working activity / participated in research projects and grants; 3% of employed and 7% of students developed a business plan.

3. Students (60%) more often than employed (40%) choose such preparatory forms as education, self-education, professional training — employed youth involved in innovation activities more than students.

According to the results of the correlation analysis, we should make two notes. First, the relationship between indicators of life satisfaction and innovative activity of young people hypothesis has not been proved. One possible explanation is a deep contradiction in the perception of the external world. While personal space gives young people a sense of comfort and satisfaction, the external world is the cause of discomfort and anxiety. This perception is proven right about future estimates as well.

Second, correlation analysis shows (table 3) that types of innovation activity and social attitudes are related. Young people who feel confident in their future tend to participate in the development of creative or business projects, in various professional and scientific competitions, and show inventive abilities. An optimistic attitude towards the future is a factor for such types of innovation activity as the development of a project (idea), the development of a business plan and its implementation, etc.

Tab. 3: The correlation between the innovative activity of young people and their attitudes towards the near future (optimism/pessimism) - the most significant relationship according to the Pearson Chi-square criterion, %

Types of innovational activity in last three	Involvement	Situation in the society in near 3 three years		
		Nothing will	Change to worse	Change to better
Work on the project (idea) to present employer (potential)	Not involved	88,4	90,1	83,9
	Involved	11,6	9,9	16,1
	TOTAL	100,0	100,0	100,0
Developed a business plan and offered it for consideration in the	Not involved	94,4	93,9	89,4
	Involved	5,6	6,1	10,6
	TOTAL	100,0	100,0	100,0
Made presentations at conferences or seminars	Not involved	88,5	91,6	81,5
	Involved	11,5	8,4	18,5
	TOTAL	100,0	100,0	100,0
Participated in research projects and grants	Not involved	92,1	91,5	87,4
	Involved	7,9	8,5	12,6
	TOTAL	100,0	100,0	100,0
Registered patents for inventions	Not involved	98,5	99,3	97,1
	Involved	1,5	0,7	2,9
	TOTAL	100,0	100,0	100,0
Raised the level of education in the educational organization	Not involved	64,9	59,5	49,6
	Involved	35,1	40,5	50,4
	TOTAL	100,0	100,0	100,0
Engaged in professional training	Not involved	65,8	62,4	56,0
	Involved	34,2	37,6	44,0
	TOTAL	100,0	100,0	100,0
None of the above	Not involved	86,5	88,6	94,0
	Involved	13,5	11,4	6,0
	TOTAL	100,0	100,0	100,0

Source: author's calculation

Conclusion

Here are some conclusions according to study results. First, the vast majority of respondents involved in innovative activity in one form or another. Only one in ten respondents reported that they are not involved in any innovation. Second, the relation between life satisfaction and

innovation activity has not been proven. At the same time, such an indicator of subjective well-being as optimism about the future affects some forms of innovative activity of young people. Optimists are more actively involved in projects and are more willing to support initiatives. Thus, social optimism can be considered a factor for the innovative activity of young people to be manifested.

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Contact

Dmitriy Trynov
Ural Federal University
Institute of Public Administration and Entrepreneurship
Mira str., 19, Yekatherinburg, Russia, 620002
DV.Trynov@urfu.ru

Yana Didkovskaya
Ural Federal University
Institute of Public Administration and Entrepreneurship
Mira str., 19, Yekatherinburg, Russia, 620002
diyanadiyana@icloud.com

Nadezda Dulina
Volgograd State Technical University
Volgograd, Lenin avenue, 28, Russia, 400005
nv-dulina@yandex.ru