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Social Practices of Interaction Between Ethnic Business and Local Business Community Within the Regional Consumer Market S G Simonov, M A Khamatkhanova, I V Lysenko and O V Jamova	01-07
The Essence and Functions of Medium and Small Businesses: Their Traditional and New Types M A Khamatkhanova	08-11
Small and Medium Enterprises and Government as Institutions of the Russian Society: Areas of Common Interest M A Khamatkhanova	12-16
Family Psychoanalysis: A Systematic Literature Review Alexander Nikolaevich Kharitonov, Gennady Nikolaevich Timchenko and Igor Evgenievich Zhmurin	17-26
Experience As a Predictor of the Level of Professional Responsibility of Primary School Teachers Alexander V Bulgakov, Alexander S Polyakov, Roman V Kishikov and Pavel V Putivtsev	27-32
Specifics of Studying Changes in Individual Case of Psychological Counseling Ekaterina Viktorovna Burmistrova, Sergey Valerievich Manakhov and Igor Evgenievich Zhmurin	33-44
Organization of Teacher Training in the Context of A Competency-Based Approach In Modern Education Conditions Vladimir I Kolesov, Elena V Yakovleva, Natalia N Shevchenko, Vladimir I Shevchenko, Vasily N Mikhalev, Dmitry I Kechil and Anton O Burtsev	45-49
Development of Systematic and Self-Reflection of Students by Training Course Olga I Kayasheva and Dilyara N Efremova	50-55
The Influence of Intra-Family Relationships on Smoking Initiation of University Students Evgenii Anatolievich Kobzev, Nikolay Nikolaevich Kuzminov, Tatyana Petrovna Utesheva and Anna Nikolaevna Kuzminova	56-62
Personal Identity of Marriage Partners as the Determiner of their Conflict Irina Viktorovna Chumicheva, Igor Evgenievich Zhmurin and Ilya M Shmelev	63-70
The Role of Dispositional Mindfulness in the Person-Developmental Personality Potential Larisa Zotova and Natalia Sidiacheva	71-77



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Aspects of Intercultural Communication in the Activities of A Small Educational Group at the University Mikhail Georgievich Leontev, Igor Mikhailovich Lebedev and Alexey Anatolevich Kamyshev	78-82
Role of Physical Culture As a Basis in the University Pedagogical Process Anna Smolonskaya, Victor Silenkov, Natalia Tsvetkova, Nina Ershova, Vladislav Varinov, Oksana Komarova and Konstantin Kalashnikov	83-85
Concept and Episteme as Basic Concepts of Native Language Methodology Andrey Nikolaevich Kokhichko	86-91
Transcendental-Phenomenological and Existential-Phenomenological Practices of Self-Knowledge and Self-Transformation Veronika O Bogdanova	92-97
Transformation of Social Attitudes at the Stage of Professional Adaptation of Village School Teachers Nikolai N Lavrov, Valentin V Sysyoyev, Vladimir N Seleznev and Vera V Loginova	98-104
Current Trends in the Development of Music Education in the Global Innovation Context Artemova E G, Bodina E A, Balaban O V, Pokrovskaya S V and Telysheva N N	105-110
Individualized Teaching English Writing in China Olga Predushchenko	111-116
Problems of Reconstruction of Local Specificity of Culture Sargylana V Nikiforova, Egor N Gotovtsev and Li Lei	117-120
Predicted Effectiveness of the Use of Surface-Active Substances (SAS) for Effective Development of a Cenomanian low-Pressure Gas Deposit Danil A Kobylinskiy, Andrey A Ponomarev, Tatiana S Nurullina and Mariya A Kiselyova	121-124
The Role of Statistical Analysis on Nanofluid Flow and Heat Transfer over Cylinder with Porous Medium Izamarlina Asshaari, Alias Jedi*, Noorhelyna Razali, Nuryazmin Ahmat Zainuri, Haliza Othman, Noraishikin Zulkarnain and Nor Ashikin Abu Bakar	125-130
Influence of the Use of A Biological Preparation on the Fermentation and Quality of Alfalfa Haylage Irek T. Bikchantaev, Shamil K Shakirov, Ziliya F Fattakhova, Marsel Sh Tagirov and Farit F Zinnatov	131-134
Multifractal Analysis of Ozone Concentration at Monitoring Stations in Klang Valley, Malaysia Nuryazmin Ahmat Zainuri, Noorhelyna Razali and Alias Jedi	135-138

# CONTENTS



VOLUME 13 • NUMBER (9) • SPECIAL ISSUE 2020

Social Practices of Interaction Between Ethnic Business and Local Business.....	01-07
Community Within the Regional Consumer Market S G Simonov, M A Khamatkhanova, I V Lysenko and O V Jamova	
The Essence and Functions of Medium and Small Businesses: Their Traditional and New Types.....	08-11
M A Khamatkhanova	
Small and Medium Enterprises and Government as Institutions of the Russian Society:.....	12-16
Areas of Common Interest M A Khamatkhanova	
Family Psychoanalysis: A Systematic Literature Review.....	17-26
Alexander Nikolaevich Kharitonov, Gennady Nikolaevich Timchenko and Igor Evgenievich Zhmurin	
Experience As a Predictor of the Level of Professional Responsibility of Primary School Teachers.....	27-32
Alexander V Bulgakov, Alexander S Polyakov, Roman V Kishikov and Pavel V Putitvsev	
Specifics of Studying Changes in Individual Case of Psychological Counseling.....	33-44
Ekaterina Viktorovna Burmistrova, Sergey Valerievich Manakhov and Igor Evgenievich Zhmurin	
Organization of Teacher Training in the Context of A Competency-Based Approach.....	45-49
In Modern Education Conditions Vladimir I Kolesov, Elena V Yakovleva, Natalia N Shevchenko, Vladimir I Shevchenko, Vasily N Mikhalev, Dmitry I Kechil and Anton O Burtsev	
Development of Systematic and Self-Reflection of Students by Training Course.....	50-55
Olga I Kayasheva and Dilyara N Efremova	
The Influence of Intra-Family Relationships on Smoking Initiation of University Students.....	56-62
Evgenii Anatolievich Kobzev, Nikolay Nikolaevich Kuzminov, Tatyana Petrovna Utesheva and Anna Nikolaevna Kuzminova	
Personal Identity of Marriage Partners as the Determiner of their Conflict.....	63-70
Irina Viktorovna Chumicheva, Igor Evgenievich Zhmurin and Ilya M Shmelev	
The Role of Dispositional Mindfulness in the Person-Developmental Personality Potential.....	71-77
Larisa Zotova and Natalia Sidiacheva	
Aspects of Intercultural Communication in the Activities of A Small Educational Group at the University.....	78-82
Mikhail Georgievich Leontev, Igor Mikhailovich Lebedev and Alexey Anatolevich Kamyschanov	

Role of Physical Culture As a Basis in the University Pedagogical Process Anna Smolonskaya,.....	<b>83-85</b>
Victor Silenkov, Natalia Tsvetkova, Nina Ershova, Vladislav Varinov, Oksana Komarova6 and Konstantin Kalashnikov	
Concept and Episteme as Basic Concepts of Native Language Methodology.....	<b>86-91</b>
Andrey Nikolaevich Kokhichko	
Transcendental-Phenomenological and Existential-Phenomenological Practices.....	<b>92-97</b>
of Self-Knowledge and Self-Transformation Veronika O Bogdanova	
Transformation of Social Attitudes at the Stage of Professional Adaptation of Village School Teachers.....	<b>98-104</b>
Nikolai N Lavrov, Valentin V Sysyoev, Vladimir N Seleznev and Vera V Loginova	
Current Trends in the Development of Music Education in the Global Innovation Context.....	<b>105-110</b>
Artemova E G, Bodina E A, Balaban O V, Pokrovskaya S V and Telysheva N N	
Individualized Teaching English Writing in China.....	<b>111-116</b>
Olga Predushchenko	
Problems of Reconstruction of Local Specificity of Culture.....	<b>117-120</b>
Sargylana V Nikiforova, Egor N Gotovtsev and Li Lei	
Predicted Effectiveness of the Use of Surface-Active Substances (SAS) for Effective.....	<b>121-124</b>
Development of a Cenomanian low-Pressure Gas Deposit Danil A Kobylinskiy, Andrey A Ponomarev, Tatiana S Nurullina and Mariya A Kiselyova	
The Role of Statistical Analysis on Nanofluid Flow and Heat Transfer over Cylinder with Porous Medium.....	<b>125-130</b>
Izamarlina Asshaari, Alias Jedi, Noorhelyna Razali, Nuryazmin Ahmat Zainuri, Haliza Othman, Noraishikin Zulkarnain and Nor Ashikin Abu Bakar	
Influence of the Use of A Biological Preparation on the Fermentation and Quality of Alfalfa Haylage.....	<b>131-134</b>
Irek T Bikchantaev, Shamil K Shakirov, Ziliya F Fattakhova, Marsel Sh Tagirov and Farit F Zinnatov	
Multifractal Analysis of Ozone Concentration at Monitoring Stations in Klang Valley, Malaysia.....	<b>135-138</b>
Nuryazmin Ahmat Zainuri, Noorhelyna Razali and Alias Jedi	

# Social Practices of Interaction Between Ethnic Business and Local Business Community Within the Regional Consumer Market

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## ABSTRACT

The phenomenon of local politics remains a topical and interesting topic for researchers of the political process of modern Russia. The local elite can be very broadly defined as the circle of the most influential people in the localities, or as a group of people who determine the state of affairs in "their" territory. We understand the local elite as a community that makes the most important strategic decisions on "its" territory and has the necessary resources for this. Thus, we are talking about the elite primarily in its functional meaning. The subject of consideration in this work is the nature of their relationship and typical patterns of behavior during interaction. At the local level, various options for the "balance of power" between representatives of government and business are possible. The aim of this research is to analyze the social interaction between ethnic business and the local business community at a regional market and find out their specific features. Research results have allowed to conclude that there are two stages of interaction development. Today, the ethnic business in the regions of the country, as well as in the Tyumen region, is quite representative. Currently, the local business community painfully reacts to the emergence of ethnic business organizations in the region with awareness towards possible local business competition and communication conflicts with new diaspora. The expert assessment of interaction development between the local business community and ethnic businesses is also interesting by actualization of such an important, in our opinion, direction as their social responsibility. There is a characteristic of ethnic business and its economic entities. There is a rationale for the diaspora role as a criterion in relation to "division" between the concepts of ethnic business and local business community. We applied to the methodology in respect to the concept of local business community and its general and specific features. The article examines the domestic practice of social interaction between ethnic business and the local business community within the consumer market of the Tyumen region. It presents the results of sociological research in 2018-2019 within the framework of the scientific community "Corporate Social Responsibility" (Tyumen). The representatives of Tyumen region municipal authorities, local business community and ethnic business of the region participated in the research.

**KEY WORDS:** ETHNIC BUSINESS, LOCAL BUSINESS COMMUNITY, BUSINESS ORGANIZATIONS, SOCIAL INTERACTION, CONSUMER MARKET, MIGRANTS, DIASPORA, SOCIAL RESPONSIBILITY.

## ARTICLE INFORMATION

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## INTRODUCTION

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In modern scientific literature, the concept of ethnic business refers to the entrepreneurial activity of external and internal migrants who represent not immanent ethnic groups in relation to this region. For most Russian regions, such economic entities are Chinese, Uzbeks, Tajiks, Kirghiz, Armenians, Georgians, Azerbaijanis, Dagestanis, Chechens, Ingush, etc. (Simonov S. G., Hamatkhanova M. A., Yamova O. V 2019) in accordance with the basic criteria (the size of the authorized capital and the number of employees), ethnic business, as a rule, belongs to medium and small forms of business and occupies a significant share of regional consumer markets. However, each ethnic community has its own market niche with specific list of consumer goods and services as offer in respect to the regional society. Such confidential assignment of consumer market certain segment to them contributes to the consolidation of ethnic businesses, forms their common goals and interests, and favours the successful competition within the local business community.

We should note that currently there is no common approach in respect to local business community concept among economists and sociologists: what is the criterion for its selection, which economic entities are in it, what is its specificity in relation to the consumer services market, etc. Most often, this concept associates with location of business and its official registration. It is obvious that such interpretation only partially characterizes the the local business community, but does not underline its rich content. It is clearly important to divide these two concepts within the problem of interaction between ethnic business and the local business community. The above-mentioned business location is not enough, since it is common for all business structures without reference to their national or ethnic origin. With addition of other characteristics to the concept of local business community, such as the duration of stay (residence) in the region, the relative numerosity (in comparison to ethnic businesses) in our opinion, the classification of economic entities as indigenous ethnic groups (Tatars, Russians, etc.) also does not solve the problem.

There are many examples in history when migrating peoples lived for centuries "in a foreign land", with a foreign language, in conditions of confessional and socio-cultural environment, but at the same time preserved their national color and integrity as an ethnic system (Armenian, Jewish diasporas, etc.).The determination criterion of the local business community, such as the relative quantity of economic entities in it, also does not answer to criticism. Firstly, it is a quantitative rather than a qualitative characteristic. Secondly, today in many regions of the post-soviet countries (Osh region of Kyrgyzstan, southern Kazakhstan, etc.), there is such a large-scale concentration of Chinese ethnic business that it can compete with local business communities. In addition, in 2019, for this reason, in the largest city of Kazakhstan, Almaty, there were mass protests against

the dominance of Chinese business, primarily in the consumer markets of the country (inbusiness.kz January 2020).

Finally, it is extremely difficult to attribute only indigenous ethnic groups to the local business community, firstly from a practical frame of reference. Currently, Russian passports do not have a column "responsible" for national identity, there are many mixed marriages, and the degree of "Russification" among representatives of other ethnic groups is so strong that they differ little from Russians, Tatars, Ukrainians, etc. in their mentality, economic behavior and culture (S.G., Khamatkhanova M.A., Lysenko I.V. 2015)

## METHODOLOGY

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In our opinion, the reason of certain concept "incompleteness" in regard to the local business community is insufficient methodological study of the ethnic business itself (Khamatkhanova, M.A., Simonov, S.G., Lysenko, I.V. 2018). Its common perception as business organization of so-called "national minorities" which operates within this territory does not distance ethnic business from the local business community. In order to consider the ethnic business as a system, it is necessary to determine its essence, the fundamental element. In accordance with our research and other scientists papers of the late XX – early XX centuries (Waldinger, R. Ethnic Entrepreneurs / R. Waldinger, H. Aldrich, R. Ward , Bernal M. E., Knight G. P. 2000), such an element is the business organizations headed by people from the diaspora which lives in the region.

The diaspora integrity, provided by their ability for self-organization, their desire to avoid assimilation and not preserve their language, traditions and other cultural values, gives ethnic businesses a certain characteristic of self-sufficiency, national flavor, and facilitates adaptation within the place of their residence. As a social organism with a certain autarchy and a common mentality among its members, each diaspora differs from other ethnic communities in the region. However, the business organizations of diaspora are to submit the internally accepted order, as well as the local business community.

So, as social institution, diaspora within the economic field operates as an ethnic business, which interacts with the local business community in the consumer market. Such interpretation of the ethnic business as diaspora in nature gives us, in our opinion, a fairly complete and systematic idea of the local business community. We should note that the methodology for the local business community interpretation belongs to V. Sombart, who identified three basic features that are immanent to the economic entities that are part of it:- local economy in connection with reasonable economy, thrift and rational business management;- business ethics as commercial solidarity, loyalty and accurate records;- commitment to formal independence, economic self-sufficiency and

balance between personal interests, the family interests and the interests of the local business community as a whole (Sombart V. Bourgeois 1994).

By modern interpretation, the local business community unites small and medium-sized businesses, individual entrepreneurs and even a certain segment of the economically inactive population (self-employed, representatives of households, personal and subsidiary farms, etc.) (Idrisov Sh. A. 2019) and characterizes by a number of specific features that complement the overall social image of this concept: -the local business community has supranational features, i.e. its representatives can be people of any nationality or ethnicity; -the local business community has its own established regional (local) culture of business management, consumer relations, business communication at the level of business structures that are part of the community, etc.; -the local business community has developed its own rules of conduct with regional and municipal authorities and has a certain level of trust; -the local business community in its relations with large businesses which operates in this consumer market of the region uses two strategies in order to ensure economic stability in accordance with the current market situation: the strategy of an adequate response and the strategy of "adoption" (Simonov S. G., Hamatkhanova M. A., Lysenko I. V., Safonov D. A. 2016).

## RESULTS

We put under study the practical aspects of ethnic business relations with the local business community in the South of the Tyumen region, we underlined two stages in the development of these process. We can consider the end of the 90s of the last century as the starting point of the first stage, when domestic medium and small sized businesses formed and experienced a strong demand in cheap workforce in the regions of the country, especially in the donor regions,. The local business communities as the business organization of the "second echelon" (Safonov D.A., Simonov S.G. 2017) initiated external ethnic labor migration mainly from Tajikistan, Kyrgyzstan, and Uzbekistan. Thus, the influx of labor from the Central Asian Republics, which consisted of various ethnic communities and was relatively more cheap in comparison with the local labor force, had a positive impact on the labor market in the South of the Tyumen region. The unsatisfied demand for workers of simple, heavy physical and service labor mainly caused the imbalanced condition on the labor market. The influx of external labor migrants contributed to the achievement of market balance (T. E. Zerchaninova 2018).

The feature of first stage also refers to the favorable investment climate in the regions of Russia, as well as in the Tyumen region, and the synergetic effect of some positive factors (the appearance of jobs with relatively high wages on the labor market; the acquisition of new labor skills and competences that indicate labor qualifications; the language barrier crossing and successful social adaptation in the country and region,

etc.) have led to the creation of a potential opportunity for ethnic migrants to qualitatively change their socio-economic state: stop to work as an employee, open a business here, become an entrepreneur.

The second stage of relations development between ethnic business organizations and local business communities, which began in 2013-2014, largely associates, in our opinion, with the sanctions against Russian by the West countries and the deterioration of the macroeconomic situation in the regions of the country (a large outflow of capital abroad, the departure of foreign companies, a sharp devaluation of the ruble, a total increase in prices, primarily in regard to consumer goods and services, etc.). This led to a decrease in jobs, real wages, and a devaluation of the ethnic migrants labor income. They spent a large part of their incomes to buy currency (for example, American dollars) and leave to their native countries. However, it paradoxically did not cause a serious outflow of foreign labor from Russia, but on the contrary, encouraged it to actively engage in business activities.

Today, the ethnic business in the regions of the country, as well as in the Tyumen region, is quite representative. One part of it includes the external migrants, i.e. it consists of business organizations headed by people from not only Central Asian diaspora, but also Chinese, Azeri, Georgian, Armenian, etc. In regard to the last three above-mentioned diaspora, we should clarify that these are ethnic entrepreneurs who brought their businesses to Russia after the Republics of Transcaucasia declared their independence. The other part of ethnic business in Russian regions refers to internal migrants (most of them come from the Republics of the North Caucasus) . This part includes business organizations whose owners are most often people from Dagestan, Chechen, Ingush and other diaspora of the North Caucasus. Their feature is their ability to operate in the "secretly", conduct business on the basis of mobile business infrastructure (discounters, pavilions, kiosks and concession stands that sell vegetables and fruits, maintain traveling and street trade), total presence of a commercial talent, appetite for risk, etc.

Currently, the local business community painfully reacts to the emergence of ethnic business organizations in the region with awareness towards possible local business competition and communication conflicts with new diaspora. The concerns of medium-and small-sized businesses generally refer to the threat of the labor force loss which consists from ethnic migrants and cheap unskilled and low-qualified workers. It will be difficult to replace them, since the native population do not want to do such a low-profile job.

In 2018-2019, the scientists of the Department of Economics and Production engineering of Tyumen Industrial University conducted a study of relations between the local business community and ethnic businesses which operate in the consumer market of this region. On the one hand, the Tyumen entrepreneurs that



represented more than 200 medium and small enterprises in the consumer services market participated in it, on the other hand, the ethnic economic entities that come from 11 diaspora of the Tyumen region. In addition, the ethnic economic entities participated within two groups, the first group consisted of external ethnic migrants (from the former Soviet Republics of Transcaucasia

and Central Asia, China, etc.), and the other – internal ethnic migrants (mainly from the Republics of the North Caucasus of Russia). Primarily, we clarified the relationships of both sides to each other (Fig.1).

In accordance with the responses of the Tyumen entrepreneurs to the question "How do You feel about ethnic business, which operates within the consumer market of the region?", about half of respondents (46,5%) expressed positive attitude to the ethnic business with addition that they largely perceive its members as "brothers in trade". However, almost a third of respondents (30,6%) had directly opposite opinion – "they are our business rivals." In our opinion, the last remark is very important, because it does not indicate interpersonal or inter-ethnic conflict, but rather economic competition within the market of consumer goods and services. In accordance with the survey, 13,9% of Tyumen business entities of medium and small size are neutral towards ethnic business. They explain such attitude by the fact that they practically do not intersect with it and operate in different market segments.

Figure 1: What is your attitude to the ethnic business which operates in the consumer market of the region?

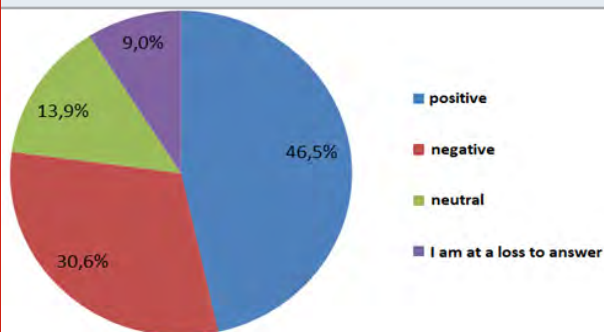


Table 1. The typical disposition over goods between ethnic businesses and the local business community in the consumer market of the South of the Tyumen region

№ Sl.No.	Types of consumer goods and services	Alignment of medium and small sized business organizations in the regional market		
		Ethnic businesses represented by external migrants	Ethnic businesses represented by internal migrants	Local business community
1	Greengrocery distribution	++	+	+
2	Distribution of meat and meat products	++	+	+++
3	Distribution of fish and fish products	+	+	++
4	Distribution of milk and dairy products	+	+	+++
5	Distribution of bread and bakery products	++	+	++
6	Home repair business	+		++
7	Private taxi services	+	+	++
8	Services in suburban areas, work that requires simple physical labor	++	+	
9	Cleaning services for apartments and homes	++		+
10	Funeral services	+	+	+++
11	Shoe and clothing repair services	+		++
12	Distribution of household and electrical devices, computer equipment	+		++
13	Distribution of building materials, coal, firewood	+	++	+++
14	Distribution of flowers	++	+	+
15	Services of «leisure industry»	++	+	++

The remaining respondents (9.0%) found it difficult to give the answer. In a certain way, such attitude is easy to interpret in general by the insignificant share of ethnic business in the total number of "second echelon" business organizations in a donor region such as the Tyumen region. Therefore, this part of local entrepreneurs has no experience of such social and economic interaction.

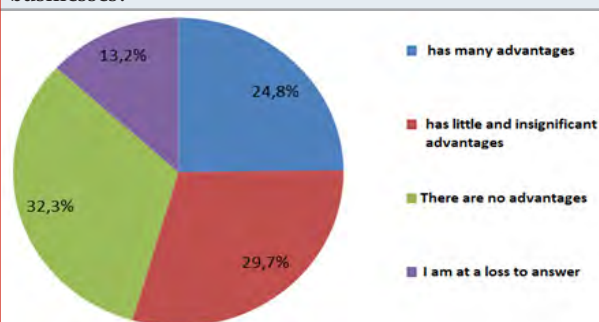
In our opinion, the differentiation of consumer services types between ethnic businesses and the local business community gives a certain idea of the market positions in the region (table 1). As we can see, each group of medium and small sized business organizations in the regional market has its own set of consumer services. The signs "+", "++" and "+++" reflect, respectively, a low,

medium and high concentration and business activity of ethnic and local enterprises. They make it possible to identify niches in the region's consumer market and their degree of occupation, as well as provide information about the behavioral priorities of economic entities and the level of competition in each segment of the consumer market in the Tyumen region.

For example, in such market segments as the services of "leisure industry" (restaurants, bars, cafes, kebab shops, wine shops, etc.), the sale of vegetables and fruits, bread and bakery products, flowers, there is a healthy competition between ethnic businesses and the local business community. There is imperfect competition in such segments of the Tyumen region consumer market as the sale of milk and dairy products, meat and meat products, funeral services. It is interesting that in accordance with the study the ethnic business refers to a monopoly in a certain sense in terms of services provided to summer residents on their land, jobs that require simple physical labor.

In case of the current assessment in relation to the consumer market of the region as a whole, we can make a conclusion that the local business community has quite dominant position. In order to understand better its nature, we asked Tyumen entrepreneurs the question: "Do you believe that the local business community has the advantages in competition with ethnic businesses?". About a quarter of them (24.8%) responded that there were many advantages. The other part of respondents (29.7%) also confirmed the presence of advantages, but described them as "few and insignificant". Most of the respondents were those who believed that there were no practical advantages (32.3%). The percentage of those who found it difficult to answer was quite high-13.2% (Fig. 2).

Figure 2: Do you believe that the local business community has the advantages in competition with ethnic businesses?



Since more than half of all Tyumen business entities under survey confirmed the existence of certain competitive advantages of the local business community in comparison with ethnic business, we asked them to specify what these advantages are (one could specify not one, but several advantages). We present the results of such "specifics" as the percentage of respondents who

noted the competitive advantages of Tyumen business organizations decreases:-the best start-up opportunities with connection to the availability of personal, consumer market infrastructure facilities under operation, initial capital accumulation, and a good credit history with regional banks (50.5%);-a large "credit of trust" on behalf of the local population (43.9%);- knowledge of the regional society market behavior, its mentality as employees and as a consumer of goods and services (38.8%);- realization of scale effect associated with price changes of product unit in accordance.

With the turnover volume in the consumer market of the region (31,0%);- good knowledge of information and regulatory framework, joint participation in its development with local legislative bodies (26.7%);- communication in the regional consumer market with retailers of large business structures, for example, through outsourcing, re-engineering, "adoption", etc. (24,1%);-the possibility of additional costs to maintain the "threshold" level of economic security (up to 15%) (Davydova T. E., Simonov S. G., Chuklanova S. P. 2014), which is practically difficult for ethnic businesses (12.2%);- loyal relations, and sometimes support from local authorities (8.4%), etc.

## DISCUSSION

One can treat the advantages noted by representatives of the local business community in their competition with ethnic businesses in different ways: talk about excessive subjectivity of such opinions, declare a certain underestimation of the ethnic entrepreneur's potential, disagree with the importance of competitive advantages, etc. However, in our opinion, they to a certain extent underline the state of affairs within the consumer market of the Tyumen region on how competitive the market situation is and whether there is a danger of its (market) monopolization. The independent experts participated in the interaction assessment of the local business community and ethnic business, as well as their examination of such interaction prospects. The group of experts included the employees of the Department of licensing and regulation of the consumer market of the Tyumen region, the Department of consumer market of the regional center administration, and the municipal authorities in the South of the region.

Firstly, they confirmed the presence of monopolistic attitude towards the regional market of consumer goods and services. In accordance with their explanation the reason of such attitudes was a high proportion of presented local business organizations with a number of advantages, the lack of consolidation in the ranks of ethnic business, the slow social adaptation of its subjects in the place of their residence, etc. In terms of the future relations between local and ethnic entrepreneurs, independent experts not only noted possible development trends, but also determined them as important for the increase of the consumer market in Tyumen region (table 2).

Table 2. The expert assessment of interaction prospects between the local business community and ethnic business in the consumer market of the Tyumen region

No Sl.No.	Description of relations trends between the local business community and ethnic business	The value of identified trends in terms of the efficiency improvement in respect to the region's consumer market
1	The share of ethnic business organizations will increase	III
2	The concentration of ethnic business capital will continue to increase, but it will not exceed the indicators of the local business community	II
3	The interaction vector will go towards fair competition	I
4	Local business community and ethnic business will agree on the main spheres of influence	VI
5	The local authorities will develop their relations with ethnic businesses on the basis of partnership (Button A. 2017), mutual benefits and interests of the population	IV
6	In the economic behavior of regional society, there will be a transition from local protectionism which aims at support only Tyumen goods and services, towards differentiation of consumer choice, as well as the offer of ethnic businesses	V
7	The local business community and ethnic businesses increase their participation in social programs and social projects in terms of charity and sponsorship (Lamb, N.H., Butler, F. 2017)	VII

## CONCLUSION

In accordance with table 2, there are first three priority areas for the development of interaction between the local business community and ethnic business from the position of the efficiency development in relation to the consumer market in the Tyumen region. Therefore, the relations development between them exceeds these limits and does not reduce to the consumer market infrastructure increase, maintenance of walking distance to its facilities, the product range enlargement, distribution of high-quality and innovative consumer goods and services, and improvement of customer services. It is obvious that it will bring good "benefits" to the development of the region as a whole. It reflects in the economic aspect of the gross regional product increase, the creation of new jobs,

reduction of unemployment, the share development of the economically active population; in the social aspect – in equalization towards the income differentiation of social layers in the region, improvement of the demographic situation and social well-being of the population within the region, social tension decrease, overcoming language barriers by representatives of diaspora, etc. (Simonov S. G., Koryakina E. A., Sheveleva N. P., Kulakova N. S., Yagodkina I. A. 2019).

The expert assessment of interaction development between the local business community and ethnic businesses is also interesting by actualization of such an important, in our opinion, direction as their social responsibility. (Popescu, D.I. 2018) It involves the legally independent decision-making by the business organization in regard

to the funds investments within the creation of a favorable social environment and the implementation of environmental protection measures, the supply of organic products to the population, etc. In fact, the ethnic business community and the local business community take overall charge of their employees and the regional society as the employer in relation to their health, safety and comprehensive development (Pathak, N., Choudhury, S., Kumar, V., Kumbhani, C. 2017).

## REFERENCES

- A., B. (2017). Social Responsibility and Risk Management. social responsibility risk management. Retrieved from <https://bizfluent.com/info-8203341-social-responsibility-risk-management.html>
- A., I. S. (2019). The difficult path of small and medium-sized businesses in the Russian economy. *Financial economy*, 170-177.
- Bernal M. E., K. G. (1993). *Ethnic identity: Formation a. transmission among Hispanics a. other minorities*. Albany.
- Bourgeois., S. V. (1994). *Etudes on the history of spiritual development in respect to modern economic man*. M: Science, 225-237.
- Davydova T. E., S. S. (2014). Tactics and strategy of small business development in the Russian consumer market. *Problems and prospects of the regional consumer market development*, 22-26.
- I., L. Z. (2001). *The Diaspora mentality (systematic and social-cultural analysis)*. Institute of Oriental studies RAS "Quantum", 176.
- inbusiness. (n.d.). *Anti-chinese rallies in Kazakhstan: should we fear the Celestial Empire*. Retrieved from <https://inbusiness.kz>.
- Khamatkhanova, M. S. (2018). Development of structural and functional model of interaction between authorities, society and ethnic business at the regional level. *Journal of Social Sciences Research*, 334-339. .
- Lamb, N. B. (2017). Family firms and corporate social responsibility: exploring "concerns. *Journal of Strategy and Management*, 10(4), 469-487.
- Pathak, N. C. (2017). Corporate social responsibility activities by Ambuja Cements Limited: Developing the local community through various initiatives. *Journal of Mines, Metals and Fuels*, 65(4), 199-204.
- Popescu, D. (2018). Social responsibility and business ethics vii. *Circular economy and the role of corporate social marketing*. *Quality - Access to Success*, 19(163), 118-121.
- R. Waldinger, H. A. (2000). Waldinger, R. *Ethnic Entrepreneurs*. *The Social Science View*, 10(3), 45-50.
- Safonov D.A., S. S. (2017). Formation and Social Direction of Direction of Diasporal Business in Russia// *North-East Asia Academic Forum (Publication of scientific articles)*. Harbin University of Commerce, 174-180. Retrieved from <http://dby.hrbcu.edu.cn>
- Simonov S. G., H. M. (2016). *Diaspora business: the essence, formation, and security of development in the region*. Monograph. Tyumen: TIU, 160.
- Simonov S. G., H. M. (2019). *Ethnic entrepreneurship and the population of the region: experience of social interaction*. *University news. Sociology. Economics Politics.*, 4, 44-56.
- Simonov S. G., K. E. (2019). *Social interaction of large businesses as a security condition of its operation and development in the Northern region*. *Humanities & Social Sciences Reviews*, 7(4), 773-780. doi:eISSN: 2395-6518
- Simonov S.G., K. M. (2015). *Problems of the diaspora business formation and development in the regions of Western Siberia*. *International Journal of Economics and Financial*, 5, 287-291.
- Zerchaninova, E. b. (2018). *The modern Russian society and management: state, problems and trends of development*. Monograph. Institute of management - branch of RANEPА., 184.

# The Essence and Functions of Medium and Small Businesses: Their Traditional and New Types

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## ABSTRACT

Small business is an important, essential component of the modern economy, without which the development of the state cannot happen. It is the most important component of modern production in light industry, trade and services. Objective of this paper is to find the main goals of small businesses include innovative growth and overall innovation in industry, regions, and countries. Small businesses are designed to address the following issues: identifying the causes of innovative growth of large, small, and medium enterprises, as well as determining the impact of each component. The article provides a detailed definition of the concept of "small business" and signs of small businesses. The importance of small business for the country's economy has been investigated. Its main features, advantages, and disadvantages have been considered. The prospects for the development of small businesses at the state level have been disclosed.

**KEY WORDS:** ENTREPRENEURSHIP, SMALL BUSINESS, SMALL BUSINESS, SMALL INNOVATIVE ENTREPRENEURSHIP, CRITERIA FOR SMALL BUSINESS.

## INTRODUCTION

Small business is an important, necessary element of the modern economy, without which the development of the state cannot take place. It is one of the most important components of modern manufacturing in light industry, trade and services. Building Today, entrepreneurs need serious government support. Small business leaders must provide clear integrated state and state policy on small business to provide state agencies and government agencies (unions, unions, agencies) with the existing experience of developed countries. Modern economics is marked by a complex combination of different sizes of art: large, monopolistic structures, even small structures,

and influenced by many elements. On the one hand, the stability of scientific and technological progress is determined by the focus of production. These are big companies that have outsourced materials, financial and labor resources, qualified workers.

They can manage large-scale scientific and technological developments by determining technological progress. On the other hand, there has been significant growth in the small and medium industries in recent years, especially with significant capital, large equipment and many workers not required to cooperate. Small and medium industries, especially in high-tech manufacturing related industries, are numerous, such as consumer product production and services. The sector of small and medium-sized enterprises (hereinafter referred to as SMEs) is a worldwide recognized driving force that generates national wealth through the creation of new jobs, the growth of gross domestic product (GDP), as well as stimulating the development of competitiveness and innovative potential of the economy (L. Trifunovich, 2016).

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Understanding of the nature and characteristics of the country's SME sector is based on the relatively limited amount of available and reliable statistics. Most enterprises can operate a common or simplified tax system. The criteria for classifying a business entity as

small business structures and microenterprises in 2019 are given in the Table 1 and 2. Small businesses do not need to confirm their status, all the necessary information on compliance with the criteria is presented in the reports submitted to control bodies and tax authorities.

Table 1. Criteria for classifying a business entity as small business in 2019 [Small business: classification criteria in 2019].

Criterion	Limit value	Limit value document
Average number of employees for the previous calendar year	≤ 100 people	
The total share in the authorized capital of the company of the subjects of the Russian Federation, municipalities, public and religious organizations and foundations	≤ 25%	Art. 4 of the Federal Law of 24.07.2007 NQ 209-FL
The total share of other organizations that are not small or medium-sized enterprises, as well as foreign organizations	≤ 49%	
Income from operations (amount of revenue and non-operating income) for the previous calendar year (excluding VAT)	≤ 800 million RUB.	04.04.2016 Government of The Russian Federation Of The Order No. 265 (Effective from August 1, 2016)

Unlike large enterprises with the access to resources that can compensate for the unfavorable business climate in some way, SMEs are interested in improving the regulatory environment and investment climate, since these factors have significantly improved the chances of SMEs to survive and grow. However, SMEs lack resources

and an effective dialogue with the authorities; they face strong competition, an unstable regulatory environment, and bureaucracy. SMEs need business support services. The contribution of SMEs to creating a better business environment and more effective business policy-making can be significantly greater.

Table 2. Criteria for classifying a business entity as microenterprises in 2019 [Small business: classification criteria in 2019]

Criterion	Limit value	Limit value document
Average number of employees for the previous calendar year	≤ 15 people	
The total share in the authorized capital of the company of the subjects of the Russian Federation, municipalities, public and religious organizations and foundations	≤ 25%	Art. 4 of the Federal Law of 24.07.2007 NQ 209-FL
The total share of participation of other organizations that are not SMEs, as well as foreign organizations	≤ 49%	
Income from operations (amount of revenue and non-operating income) for the previous calendar year (excluding VAT)	≤ 120 million RUB.	Russian Federation Government Orders 04.04.2016 NQ. 265

You should pay attention to other problematic aspects of the business environment (S.V. Terebova 2017): Despite an educated workforce, Russia has a low labor productivity in Europe and Central Asia; the country has a low position in terms of the quality of institutions, which is explained by the insufficient level of protection of property rights and the rights of minority shareholders, the low independence of the judiciary and

the inefficient spending of public funds; the concentration of economic activity in limited circles of businessmen and large conglomerates requires a proactive approach to competition policy and initiatives to develop SMEs in order to achieve a balance and maintain fair competition in the market; studies confirm the low barriers to entry and exit of enterprises in the Russian economy, the low level of foreign direct investment and the limited amount

of investment in export-oriented enterprises; the country is still characterized by a significant share of the informal sector of the economy; budget constraints resulting from the economic recession of 2014–2015 and political sanctions, has led to the fact that government support for certain areas of politics, such as the development of SMEs, has been limited (O.N. Bocharova 2014).

The formation of economic policy in the field of SMEs should determine recommendations for the development

and Implementation of SME Development Strategy. The development of the SME sector does play a key role in improving economic competitiveness, restoring sustainable growth, and in developing an enabling business environment and attracting investment in the country. In order to diversify the sources of state economic growth, policies in the field of SMEs should develop directions for the integrated development of this sphere - Table. 3. It also requires attention to the improving of financial literacy of owners and small business workers.

Table 3. Directions for reforming the development system of SMEs

Major reforms	Key recommendations
Deregulation of business and simplification of administrative procedures Development of e-government services Legislative reform of areas such as licensing, resolution of insolvency and secured lending Updates of the quality infrastructure of the country	The adoption of a feasible and realistic strategy for SMEs in the short term Any agency or structure responsible for implementing state policy in SME as per existing financial resources and capabilities Implementation of legislative and regulatory reform, consideration of the issue of creating a system of guaranteeing loans in order to improve access to finance Continuous implementation of measures to promote the development of entrepreneurial skills, innovative potential and the internationalization of SMEs Inclusion of entrepreneurial competencies in the national curriculum

According to the statistics, 30% of SMEs need training on issues such as starting and running a business, marketing, etc. Also, a problem is lack of financial literacy. Financial literacy is the ability to control financial resources during the life cycle of an enterprise and choose financial products and services. A significant obstacle to the growth of permanent SMEs is the lack of knowledge, skills and understanding of how to professionally direct the finances of their company. Entrepreneurs make inefficient financial decisions due to lack of financial knowledge, lack of time to learn about personal financial management, the complexity of financial transactions and a wide variety of financial products / services.

Lack of business management skills can further complicate access to funds for SMEs. The low level of financial signature of SMEs can also have different effects if they are not able to evaluate and understand different products and navigate the complex processes of applying for n. Thus, there is a need for awareness and training to raise the level of financial education among SMEs in the framework of communication with commercial banks, non-bank financial institutions, business associations, and chambers. Also, school-level financial literacy education needs to be supported. There are other weaknesses of small business as well, most small enterprise capital is the main person, the initial source of initial capital or funds is already invested in a self-financed business which is self-financing.

Differences and personal expenses are facilitated by small production Small production is facilitated by differences and personal expenses. Small businesses create a favorable environment for development, create a competitive environment, create additional employment, create structural adjustment; The consumer sector is expanding. Also, small businesses increase market saturation with products and services, increase export potential, and lead to better use of local raw materials. Small and medium industries can be divided into two parts. The first group is legally independent, directly or indirectly associated with big business, they work under a contract with big entrepreneurs. The enterprise is characterized by this group: low production costs, limited space, and collection (which deprives their large industry in their workshops), which allows large merchants to save property; Flexibility in production, which contributes to rapid range change and expansion.

It is also noteworthy that scientific and technological advances as new products created by small businesses, larger corporations, and larger corporations have reached a new level of law. The second group consists of small businesses that compete directly with large businesses and markets. Early development of group enterprises: the ability to respond quickly to market demand and meet the growing demand for products and services; In fact, small initial capital, which allows you to operate independently compared to more powerful competitors;

For a variety of reasons, the desire to fill space is not effective for large companies; And finally, the pricing policy of large corporations indicates a downturn in the market.

The main goals of small businesses include innovative growth and overall innovation in industry, regions, and countries; Overall, the population levels and values of the region and the country; The structure and gradual development of the innovative economy of the state. Achieving these requires an innovative manufacturing process and the provision and development of a broad model of socio-economic activity in a small business to prioritize the core model of small business. In keeping with the goal, small businesses are designed to address the following issues: identifying the causes of innovative growth of large, small, and medium enterprises, as well as determining the impact of each component; Identifying population levels and livelihood bullets; Prioritize the innovative development of small businesses as well as identify the potential for middle-class expansion. Creating jobs, setting up innovative growth tools, identifying ways to expand the middle-class path, creating an entrepreneurial environment, innovating small businesses.

SMEs are a key element in the supplier network of large enterprises. However, the SME sector is very heterogeneous. Some SMEs have new projects that bring innovations, increase in productivity and changes in structure. On the other hand, there are ordinary SMEs,

which adjust to market pressure but do not bring a lot of innovations.

## CONCLUSION

In short, small business is an essential part of the modern economy. It is marked by individual dynamics, supplements, and high skills. Small initiatives can be taken in any area of the economy in response to the unreasonable demands of the people. This and other benefits of small business are an incentive for the development of the national economy; Thus, the state is obliged to provide significant support for small business development.

## REFERENCES

- Anon., 2019. Small business: classification criteria in. Electronic resource.
- O.N. Bocharova. N. Bocharova, S. P. O. L. / S.-e., 2014. Analysis of lending to small and medium-sized businesses in Russia: measures to create favorable conditions. phenomena and processes, Volume 3, pp. 9-13.
- Terebova., S., 2017. The state and features of the development of small business in Russia. Economic and social changes: facts, trends, forecast, 10(1), pp. 178-199.
- Trifunovich., L., 2016. Tools for financial support of applied research projects of small and medium-sized businesses through the programs of the Fund for the Promotion of Innovations. Symbol of science, 8(1), pp. 151-155.



# Small and Medium Enterprises and Government as Institutions of the Russian Society: Areas of Common Interest

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## ABSTRACT

The article explores the main trends and problems of small enterprises development in Russia. It has been established that the solution of these problems should become one of the key areas of governmental policy, these are small enterprises that will significantly increase the implementation efficiency of Russia's domestic economic potential. A complex of administrative and legal, organizational and economic, investment and social and cultural tasks is proposed to develop small enterprises. The main objectives of this study are to describe the current position of small and medium entrepreneurship in Russia, to show the market for SME financing and to define the interests between the government and SMEs. Small enterprises form market economy and create the necessary competitiveness atmosphere. This is government support that is the key factor in the small enterprises development though there shall be a significant interaction between these sectors.

**KEY WORDS:** SMALL AND MEDIUM ENTERPRISES, ENTREPRENEURSHIP, GOVERNMENT REGULATION, ADMINISTRATIVE PRESSURE, SOCIAL AND ECONOMIC DEVELOPMENT.

## INTRODUCTION

A key development factor of the country's economy is the development of the real sector of the economy, a significant part of which is accounted for small enterprises. Small enterprises are the most common form to exercise entrepreneurship freedom for the main body of citizens, a condition for healthy economic competitiveness, as well as employment and welfare sustenance for a significant part of the population. Such form of entrepreneurship does not require large start-up investments, guarantees a high velocity of

resources turnover and satisfies a significant part of the demand for goods and services of mass consumption. It is impossible to increase the competitiveness of the national economy without the qualitative development of the small enterprises segment, which has a much higher potential to overcome the economic crisis, due to its flexibility and adaptability.

## RESULTS AND DISCUSSION

The prosperity of any nation requires maximum employment of the employable population and sustainable economic development enabling the development of the social sphere and economy directly. The small enterprises development is one of the most priority areas of economic development. These are small enterprises that are the economy base in economically developed countries. (V.A.V.A. Chesnokova, I. G., 2017).

The particular significance of small enterprises for Russia is also manifested in the fact that it is the basis to form the so-termed "new economy" - large modern enterprises

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created not on the pieces of Former Soviet Union industrial enterprises, but “scratch” as P. A. Guryanov notes. (L.G. Lopasteyskaya, L. L. Y. K., 2019.). At present Russia as a self-sustained, independent government guarantees all entrepreneurs and small enterprises as well, equal rights and creates equal opportunities to

function, to access to material and technical, financial, labor, information, natural and other resources while performing work and deliveries for government needs. The criterion to designate an enterprise entity as small and medium-enterprises is shown in Table 1.

Table 1. The criterion to designate an enterprise entity as small and medium-enterprises

Criterion	Medium enterprise	Small enterprise	Micro enterprise
Incom	2 mlrd.roubles	800 mln. roubles	120 mln.roubles
Stuff number	101–250 persons	100 persons	15 persons
Other persons' share ownership in the capital	Participation share of governmental entities (RF, constituent entities of the RF, municipalities), public and religious organizations and foundations is not more than 25% in total. Participation share of ordinary legal entities participation (including foreign ones) is not more than 49% in total. Participation share of legal entities that are small and medium enterprises is not limited.		

However, today in spite of small enterprises are a key in economic development, its contribution to gross domestic product is only 22%. The figures characterizing the development trends of small enterprises in Russia by entities of the mesoeconomic level are given in table 2. The number of employees in 2019 is determined on the base of the average number payroll count, a report on which is submitted annually to the tax inspectorate. The development of small enterprises depends mainly on two basic conditions: the internal economic situation in the country as a whole and in its regions and the ability of a particular entrepreneur to use the rights given to him to realize their economic purposes (Malacheva, V., 2016.).

Therefore, the problems of small enterprises development can be divided into macro and micro level problems. The problems of small enterprises development in Russia include (P.A. Guryanov, 1999–2007):- the lack of an effective sustentation mechanism to develop and protect small enterprises. This is proved by the weakness and complications encountered in the process of small enterprises functioning;- the incidence of corruption. According to the Global Competitiveness Index, corruption is the most significant problem for enterprises development in Russia.

The consequences of this problem is a significant enterprises shadow, the incidence of illegal schemes and leverages, the disappointment of a significant part of entrepreneurs, it menaces to destroy the public authority system and to level the functioning of the domestic legal system. In addition, there are direct and indirect criminal offences, the so-termed "raidership", as well as discriminatory actions against entrepreneurs, etc.;

- limited and opaque access to resources. In particular, this problem's manifestations are the excessive complication, considerable period of time and cost of procedures to grant the use or to lease government

or communal lands, as well as government and communal property; legislative unsettled amount of related payments (expenses of enterprises entities);

- the underdevelopment of public and private collaboration instruments in the concession form as well; opaque procedure and criterion (reasons) to provide government financial and credit sustentation and the like;
- inefficiency of mechanisms to protect the rights and legitimate interests of small enterprises. A significant deterrent to the small enterprises development is the lack of effective mechanisms to protect enterprises entities. The consequences of this problem are the distorted administration law by public authority, the disappointment of a significant part of entrepreneurs in the government ability to protect their rights and interests in the order and remedy prescribed by law, as well as the significant incidence of unlawful customs and practices that do not conform to legislation;
- excessive over regulation of economical activity is manifested in the high expenditure of time to pass formalities to build up an enterprise; high expenditures of time and entrepreneurs' funds to register property.
- low competitiveness in domestic markets. There is a high concentration of large enterprises in many areas but entering the market criterions of new enterprises remain low. In this situation, it is difficult for the new participants of goods and services production market to reinforce their positions. The main problems of the competitive environment are that many sectors have a high enterprises concentration leading to charge up prices;
- imperfection of tax system;
- underdeveloped infrastructure to support and develop small enterprises. In spite of a large amount of infrastructure facilities (business centers,

business incubators, technology parks, informative consulting institutions, public associations of enterprises entities), their role in the small enterprises development in Russia is still very insignificant;

- low solvency of the population which significantly reduces the capacity of the most consumer goods and services markets. This is commercial but not production oriented enterprises sector (in particular, the resource economy takes almost 70% in the export structure);
- insufficient (unguaranteed and irregular) funding of regional support programs and small enterprises development;
- underdeveloped mechanisms of financial and credit support and cover on risks of small enterprises, lack of self-financing mechanisms;
- control imperfection of the funds use allocated to small enterprises, as a result a part of funds is spent to inappropriate purposes;
- the lack of a full-fledged system of effective interaction between large and small enterprises at the local (regional) level;
- the lack of social enterprises responsibility;
- The entrepreneurship sphere has the following main problems at the micro level (L.G. Lopasteyskaya, L. L. Y. K., 2019):
- low labor productiveness and employee motivation;
- high time spent to prepare tax documents;
- low level of entrepreneurs qualification which greatly complicates the innovative development prospects;
- ineffective management which leads to decrease the enterprises competitiveness;
- entrepreneurs underfunding to develop their own enterprises;
- high interest rates to use bank credits.

The solution of these problems of small enterprises development in Russia should become one of the key areas of governmental policy, because these are small enterprises that can significantly increase the implementation efficiency of the domestic economic potential, optimize Russia's participation in the international division of labor, and increase the domestic economic competitiveness (P.A. Guryanov, 1999–2007 // 2016.). It is proposed to base key tasks of government policy on goals that will increase the amount of small enterprises. It is proposed to divide the main tasks of the government policy on the small enterprises development into: administrative and legal, focused on legal support and support for the small enterprises development; organizational and economic, including economy-wide tasks; investment, focused on providing small enterprises with financial and investment resources; social and cultural focused on creating a unified enterprises culture. It is proposed to attribute to the main governmental tasks in the small enterprises development (A.V. Abysheva, A. A. L. D., 2017):

Administrative and Legal:

- the creation of an legal framework. It is required

to bring the effective regulatory legal acts of local public administrations and local government authorities in accordance with the principles of government regulatory policy;

- tax legislation reform (the state can proceed by decreasing tax burden, stimulate the enterprises' funds release to invest or use a flexible tax benefits system and tax holidays for innovative investments in small enterprises);
- development of a unified system to register and legalize enterprises entities;
- introduction of preferential profit taxation of commercial banks raised from small enterprises lending: tax holidays for small and medium enterprises;
- optimization of enterprises sector government regulation by deregulation measures;
- Organizational and economic:
- stimulating the development of the domestic market of goods and services, creating an effective competitive environment;
- Improving the technological structure of production using world-class scientific and technological achievements;
- Promoting the full functioning of material and technical resources market;
- information support for small entrepreneurs and simplification of their access to the necessary information; information and analytical materials regarding the entrepreneurship development in the region, cost situation, regulatory policy, available financial institutions and credit unions with a list of their services in the field of lending to small enterprises;
- Investment:
- the introduction of small enterprises lending instruments by commercial banks against budget funds guarantees;
- the infrastructure formation, the provision of government orders and open tender management;
- public and private partnerships development in Russia;
- investment sources increasing— domestic savings and involvement of external resources, which will revive the financial and economic activities of small enterprises and improve the economy as a whole;
- focus on involvement a strategic investor. The main goal of a strategic investor, especially a foreign one, is to concentrate ownership and ensure the enterprise efficiency in the long term, and not to profit from shares holding in the short term;
- Social and cultural: increasing social responsibility. Formation of the enterprises culture, which is one of those tasks, the solution of which is possible providing the effective interaction and joint efforts of governmental structures (local authorities, employment centers, educational institutions) and public or private organizations (regional development agencies, business centers, business -associations and the like);
- training highly skilled specialists by creating new training programs for workers employed in the field

- of small and medium enterprises;
- strengthening of public participation in managerial

decisions to improve the enterprises environment.

Table 2. The number of legal persons and entrepreneurs data about whom is contained in the Unified Register of Small and Medium Enterprises 2018 [5]

Constituent entity of the RF	Total	From Legal person			Entrepreneur			
		Total	From them Micro enterprises	Total Small enterprises	From them Medium enterprises	Micro enterprises	Small enterprises	Medium enterprises
The Russian Federation	6 170 963	2 917 371	2 661 202	236 495	19 674	3 253 592	27 460	346
Central Federal District	1 928 175	1 053 243	958 864	86 411	7 968	874 932	6 219	87
Northwestern Federal District	716 973	398 966	365 728	30 925	2 313	318 007	2 406	30
Southern Federal District	717 402	217 921	198 485	17 930	1 506	499 481	3 487	32
North Caucasian Federal District	203 163	50 614	45 743	4 439	432	152 549	815	10
Volga Federal District	1 099 717	497 647	450 917	43 314	3 416	602 070	6 349	82
Urals Federal District	528 791	250 843	230 103	19 228	1 512	277 948	2 715	34
Siberian Federal District	711 469	333 478	306 297	25 277	1 904	377 991	3 787	51
Far Eastern Federal District	265 273	114 659	105 065	8 971	623	150 614	1 682	20

## CONCLUSION

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Thus, small enterprises form market economy and create the necessary competitiveness atmosphere. It is able to quickly respond to any changes in market conditions, providing for employment opportunities. In modern economic conditions, the only way to economic recovery is to create favorable conditions to develop small enterprises. The analysis of state and problems of small enterprises development in Russia suggests that the development of small enterprises in the future without active and positive government intervention can lead to the scaling back of this economic sector with a corresponding aggravation of economic problems and increased social tension. Thus, this is government support that is the key factor in the small enterprises development. However, it requires the creation of an effective mechanism for effective interaction between the government and enterprises sector.

## REFERENCES

- Abysheva, A. A. L. D., 2017. Financial infrastructure of small enterprises: regional aspect. *Science Studies*, 9(39), pp. 1-6.
- Lopasteyskaya, L. L. Y. K., 2019. Small enterprises: general characteristics and criterion to classify organizations as small enterprises, *Scientific revolutions: essence and role in the development of science and technology: Sat. Art. According to the results of the Intern.. scientific-practical conf., Magnitogorsk*, pp. 140-142.
- Malacheva, V., 2016. Improving the mechanism of infrastructural support for small and medium enterprises: *dis. Cand. econ.. Univ. and economics*, 8(5), p. 174.
- Guryanov, PA 1999–2007 // 2016. Status and development trends of small enterprises in St.. *International journal of applied and fundamental research*, Volume 5, pp. 93-96.
- Service, O. s. o. t. F. S. S., n.d. Electronic resource.
- V.A.V.A. Chesnokova, I. G., 2017. Chesnokova, Problems of providing financial state support to small and medium enterprises. *New Science: Lying. state and development paths*, 1(3), pp. 171-173.

## Family Psychoanalysis: A Systematic Literature Review

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### ABSTRACT

Family problems within the framework of the psychoanalytic approach have a rich history of research, which originates from the case of "Little Hans". This is one of the famous clinical cases by Z. Freud, which occurred in 1907 and its first mentioning refers to the "Open letter to Dr. M. Furst: On the sexual education of children", and published as "Phobia analysis of the five-year-old boy" in 1909 in German in the publication "Jb. Psychoanalyt. psychopath. Forsch., B. 1(1), 1-109» [33]. The current state of family psychoanalysis proposed more than 10 theoretical approaches and models as the basic foundations that aim to study a fairly wide range of family problems and comprehension of it as a system that includes a set of relationships that function in a unique way which is characteristic for a particular family [48]. The authors make emphasis on family relationships through the study of the uniqueness of the personality development for each partner, children and other family members with the analysis of their life, study of child relationship and its transformation within the reality of created relations system. In the article we consider the contemporary state of family psychoanalytic studies in accordance with the systematic literature review in order to unify the preservation and representation of basic provisions under the selected concepts of family studies within the family psychoanalysis as an independent direction of psychoanalytic research under the recognition within the scope of scientific literature. we conducted a systematic literature search within the scope of family problems in regard to psychoanalysis in the information bases of the Scientific electronic library eLIBRARY.ru, the information platform of the international book publisher Taylor & Francis Group and the information platform of the independent publishing company SAGE Publishing (previously SAGE Publications).

In our review of articles, we have focused special attention to the following aspects: (1) basic provisions of family psychoanalysis (definitions, terms, approaches, authors); (2) family problems presented in family psychoanalysis research; (3) the potential of family psychoanalysis as a family research area; and (4) the applicability of family psychoanalysis and its family research areas in various areas of life. All in all, 61 articles meet certain criteria for inclusion in the review. The survey showed that family psychoanalysis has sufficient accuracy, one can use it as one of the main directions within the deep and systematic study of the family, it is a sensitive and specific study in respect to the development dynamics of family and relationships and its provisions are important benchmarks in research design and assessment of the reality influence on the family. The scope of problems within the selected articles reflects the main directions of family psychoanalytic research, which is consistent with the problem field of family psychoanalysis. The combination of family psychoanalytic studies within the scope of family psychoanalysis will protect from the content disintegration of the basic definitions in regard to those phenomena and problems of family life that have already been under study. It will provide a clearer comprehension of terminology within the framework of psychoanalytic practice, which will coordinate the diagnosis and work of the Counseling specialists.

**KEY WORDS:** PSYCHOANALYSIS, FAMILY. FAMILY RELATIONS, FAMILY PSYCHOANALYSIS, SYSTEMATIC LITERATURE REVIEW.

## ARTICLE INFORMATION

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## INTRODUCTION

The relevance of scientific research within the scope of family psychoanalysis is due to the increase in tension within the life of the modern family as a social group. The challenges of reality include the intense intrusions into the family's life space by multi-level combinations of political, national, economic, religious, social and psychological crises, tensions, confrontations and conflicts of the world.

As a single and most significant fact, the influence of reality on family life, we should note: in accordance with the survey of Russians, the increase of problem families among their neighbours (4% in 2013; 16% in 2018) [21]; increased influence of psychological factors that determine the tension within the family relationships (19% in 2013 and 21% in 2019) [22]; the situation of the pandemic coronavirus has caused a surge in the number of divorces in China associated with high tension in the marital relationship, in a situation of high intensity and depth of cooperation under home quarantine [23].

The above-mentioned actual problems of the modern family are the focus of a whole direction within the psychoanalytic research. So, the position developed by N. Ackermann, D. Winnicott, O. Kersbergen, M. Klein, M. Nichols, D. P. Siegel, A. Freud, George Flugel and others. [1], [2], [3], [4] [9], [10], [11], [12], [16], [17], [18], [19], [40], [41], [42], [52], orient the research of actual family problems on the study in relation to the uniqueness of the personality development for each partner, and the research focus is the analysis of his life, with a focus on the study of child relationship experience and transformation of this experience in the actual relations of partners in a valid variety [3], [4], [6], [8], [9], [13], [20], [27], [46], [47], [51], [59].

The website's analysis of the psychoanalytic electronic publications (Psychoanalytic Electronic Publishing) revealed that the first work devoted to the influence of problem family relations on the effect and development of psychopathological reactions of the individual belonged to L. E. Emerson in 1914 in the Journal of Abnormal Psychology [50], and the book by J. Flugel "Psychoanalytic study of the family" [52] it became the first in terms of the psychoanalysis methodology

application to the study of various areas of family relations – spousal, parent-child, and sibling.

We note that the time periods of these concepts study and development are not so distant, and the provisions are outdated. It is often more advantageous to recognize such remoteness economically and politically in order to emphasize success in these areas, rather than to understand the complexity of the family development as a social group. A long history, a wide range of problems and a multi-level depth of family psychoanalytic research allowed a significant number of authors to specify the system of family problems research and assess their effects within the "norm-pathology". It, among the other things, allowed R. E. Heyman, A. M. S. Slep, S. R. H. Beach, M. Z. Wamboldt, N. J. Kaslow, and D. Reiss to consider the possibilities of clinical evaluation in respect to various effects of family relationships that are due to the interaction of personal characteristics between the marriage partners and family members [53].

The modern comprehension of family problems reasonably associates with the family health, and one considers it as the basis of physical and mental health of the world's population, which is legitimately in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) and in the group "Relational Problems" [49]. We should note that the entire space of the diagnostic domain in regard to the DSM-5 group "Relational problems" correlates with the problems of family psychoanalytic studies, which refers to the indicators recognition of relationship problems: basic and intimate relationships of adult partners, parent-child relationships in the field of education and intergenerational relationships that affect the health of people in these relationships. The position of the DSM-5 Manual, with regard to the need for the psychosocial problems integration in relational problems (problems with primary support group; problems of relations with social environment) [49], correspond to the basic provisions of psychoanalytic family research focused on the study of family social environment, family constellations, inter-generational relations and relations with the parental family [15], [26], [28], [43], [44], [47], [48], [49].

In accordance with the above-mentioned statements, A. N. Kharitonov developed and conceptualized the basic provisions of family psychoanalysis. The methodological grounds, definition (essence), objectives and the main sections of family psychoanalysis In the grounds to the concept, theory and practice of family psychoanalysis as a new scientific and practical, clinical direction in Russia, I relied on the following theoretical models:

1. Classical psychoanalysis of Z. Freud (the first experience of family psychoanalysis-the case of little Hans) [33];
2. theories of object relations (M. Klein, R. Fairbairn, M. Balint, D. Winnicott, O. Kernberg, etc.) [5], [9], [10], [11], [12], [29], [30], [31], [36],;
3. child psychoanalysis by M. Klein and A. Freud [11], [12], [14], [26],;

4. Ego-psychology by H. Hartmann, A. Freud, E. Erickson [32], [37], [38], [39], [43];
5. psychology of the sameness, narcissism by H. Kohut and his students [7], [9], [10], [15], [25], [29], [34], [45], [54], [55], [57], [58];
6. theories of humanistic, interpersonal psychoanalysis by E. Fromm, G. S. Sullivan, K. Horney [35], [37], [40], [41], [42], [43], [44];
7. French school and Lacanian psychoanalysis [40], [41], [42];
8. ideas about marriage by C. G. Jung [40], [41], [42];
9. ideas of "family constellation" ("family education") by A. Adler [40], [41], [42];
10. family psychoanalytic psychotherapy by N. Akkerman (1958) [1], [2], [3], [4], as well as G. Dix, J. Framo, T. Leeds, M. Kerr, N. Paul, I. Boshormeni-Nagy, etc.[40], [41], [42];
11. psychoanalytic practice of work with the family by a number of psychoanalysts in the United States, Great Britain, Germany, Italy, France (D. Bloch, D. Jackson, M. Mahler, F. Fromm-Reichman, N. Paul, H. Richter, H. Sterlin, M. Selvini-Palazzoli, J. Flugel, B. Sperling, etc.) [40], [41], [42];

In addition, we presented the reconsideration of new ideas by V. N. Myasishchev on the theory of relations, the experience of psychodynamically oriented family therapy by the domestic experts V. K. Maher, T. M. Mishina (70-ies of XX century) [40], [41], [42]. Family psychoanalysis refers to a direction in psychoanalysis that focuses on the patterns, phenomena of family relations, interactions, as well as comprehension of the normal, problematic functioning of the family and the family form of psychoanalytic assistance (psychotherapy).

#### **Family psychoanalysis includes three main sections (structural compositions):**

1. psychoanalysis of normal development, functioning, and evolution of the family;
2. family psychoanalytic psychopathology;
3. family psychoanalytic psychotherapy.
4. The goals of family psychoanalysis:
  1. Determine the criteria, indicators of mature, normal functioning of the family, develop ideas about harmonious relationships in the family, justify, understand the patterns, mechanisms, phenomena of family psychoanalysis psychology as a whole and as the object relations.
  2. Substantiate and develop signs and indicators of problematic multi-level relationships in the family – difficult, pre-broken (borderline) and problem, i.e. different levels of relational conditions.
  3. Develop a concept in the content and psychotechnical sense of family psychoanalytic assistance in the form of a family psychoanalytic psychotherapy method (short-term, long-term options) [40], [41], [42].

The relevant family problems and the presented basic provisions of family psychoanalysis allowed us to analyze the development of psychoanalytic approaches

with focus to help the family to identify and then combine them within the framework of family psychoanalysis. The purpose of the research is to conduct a systematic literature review on psychoanalytic family research with an emphasis on the following aspects:

1. representation of the basic family psychoanalysis provisions in modern research;
2. comprehension the root directions within the psychoanalytic research of the family;
3. the potential of modern psychoanalytic studies in regard to the family and its consistency with the problematic field of family status and family relations;
4. the possibility of psychoanalytic family studies combination in the area of family psychoanalysis in order to harmonize theoretical and practical provisions and conceptualize the provision of psychological assistance to families.

## **MATERIAL AND METHODS**

### **Search strategy**

1. Selection of information platforms for the analysis. The research strategy in order to present the problems of family psychoanalysis in scientific articles suggested that the analysis of scientific content could refer to the use of search engines through the scientific information platforms.

We selected the information platforms in accordance with the following criteria:

- platforms should have a multidisciplinary focus and possibly more diverse national affiliation (for a broader analysis of the family psychoanalysis problems);
- platforms must have a scientific focus and linkage with the Web of Science, Scopus, and Journal Citation Reports. It allows the analysis of publications on family psychoanalysis to bas on the transparent data and statistics that are independent of the publisher and authors, so that one might make the informed decisions in the study of the publications content.
- platforms should have common links to coordinate search engines that allow you to allocate group information for publications by: type and date of publication, keywords, reference to the academias (topics) and journals.

During the selection of information platforms for the analysis of articles in the Russian space we selected the Scientific electronic library (SEL) eLIBRARY.ru, among the foreign platforms we selected: the information platform of the international book publisher Taylor & Francis Group and the information platform SAGE JOURNALS (an independent publishing company SAGE Publishing).

2. Criteria for inclusion and exclusion of articles. In order to select the scientific articles on information platforms, we applied to a selection by keywords, which allowed us



to assess the ratio of research on various family problems and psychoanalytic research on family problems. Within the adjustment of a keyword search, we used several provisions:

- the keywords in scientific articles are the semantic core of the article's text and determine the semantic space of its content;
- keywords are a set of words, each of which may not enter in the title of the article, but may contain semantic threads of the article's text and reflect the emphasis of the article's topic;
- keywords can focus on the inclusion of professional terms and abbreviations that have a concentrated (1 or a combination of 2-3 words) and clearly defined meaning that reveals and relates the text to a specific problem or research direction;
- keywords – words that are attractive to the author of the article and the points that visitors use in the search engine to find the interesting information.
- We used the following keyword search scheme to select the articles:

a) selection by keywords: "family" (in the Russian-language information system eLIBRARY.ru) and "family" (on the English-language platforms Taylor & Francis Group and SAGE JOURNALS);

b) selection by the keywords and psychoanalysis

c) selection by combination of keywords: and family psychoanalysis". The selection of articles at each stage occurred without the consideration whether the article has open access or not.

This selection scheme allowed the analysis of articles that include psychoanalytic studies of family problems and their share in the sphere of "family studies" and "psychoanalytic research". Quite wide boundaries, set by the keywords "family" and "psychoanalysis" separately, allowed us to identify the territorial range of scientific publications, as well as to determine the time and thematic coordinates of these area under study, in order to understand the dynamics and uniqueness of the research topic of interest.

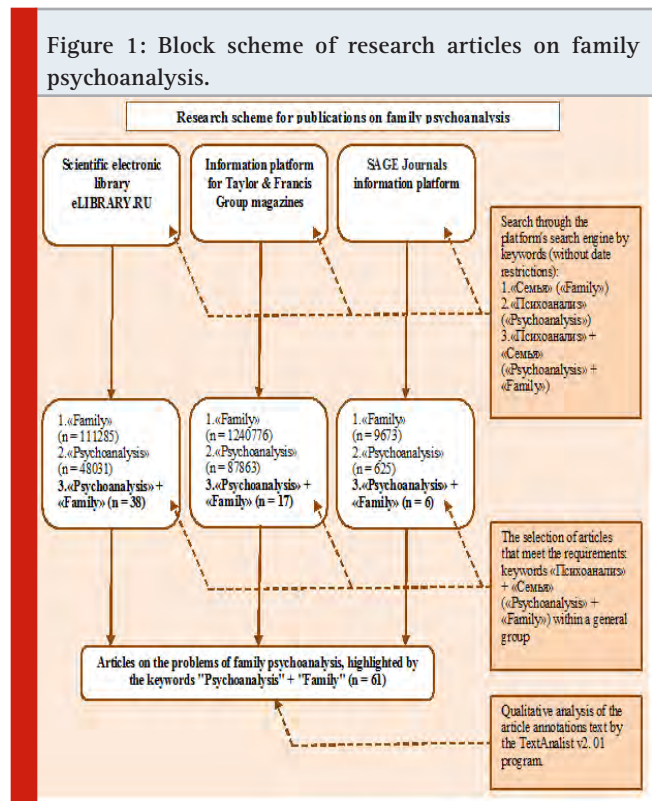
Elaboration methods: We maintained the selection of articles on information platforms eLIBRARY.ru, Taylor & Francis Group and SAGE JOURNALS through their search engines. All scientific articles published before or on May 10, 2020 were under review and processing in accordance with the above-mentioned criteria. During the usage of search engines, we excluded books, abstracts, reviews, and other documents from the results by selection of the document type - "article", in the search box. We assessed the other scientific articles by criteria, and we included the scientific articles selected by the combination of the keywords "family" + "psychoanalysis" in the group for qualitative analysis of their annotations through the program TextAnalist v2.01.

The TextAnalist v2. 01. program allows you to create a network of the main (most significant) concepts

within the texts under study. This network serves as a representation of the text's meaning and the basis for all types of further analysis. One uses the TextAnalist v2. 01 program in order to analyze the annotations of 61 scientific articles (7 (11.5 %) open-source articles) on family psychoanalysis by the information content: which problems descriptions of family research are in the articles; which of the family psychoanalysis terms and in what combination the authors use; which of the basic provisions the authors developed most of all within the articles (schools, directions, authors).

## RESULTS

The block scheme for the study of family psychoanalysis articles (fig. 1) shows the number of identified scientific articles for each information platform at each stage of the study, which we subsequently saved and used for the analysis.



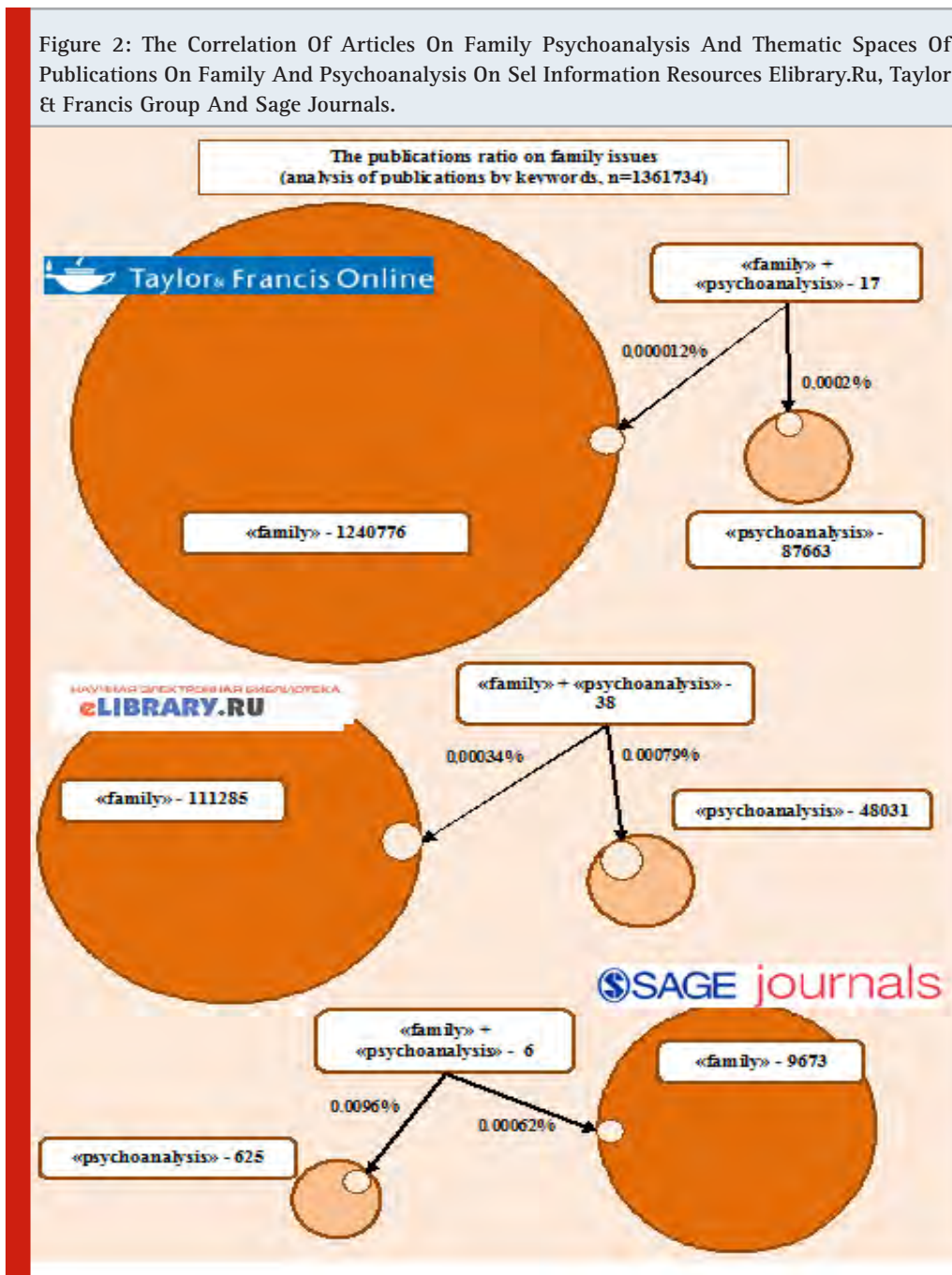
Search in databases, information platforms for the keyword and "family" (as well as language databases), allowed to highlight in the array of SEL articles eLibrary eLIBRARY.ru – 111285 articles, and in resources Taylor & Francis Group and SAGE JOURNALS – 1240776 and articles 9673, respectively. The arrays of articles differ by an order of magnitude and allow to assess the topics of interest in articles within the arrays of different volumes. The selection by the keyword "psychoanalysis" allowed us to select in the SEL eLIBRARY.ru – 48031 articles, in Taylor & Francis Group resources - 87863 articles and in SAGE JOURNALS - 625 articles. This stage of the search aimed at a comparative analysis of thematic fields on each of the platforms with an array of psychoanalytic

publications and subsequent comparison with the number of articles on family problems.

At the third stage, the search and subsequent selection of articles on the combination of keywords ("family" + "psychoanalysis"); on the SEL platform eLIBRARY.ru -38 articles, in the resources of Taylor & Francis Group and Sage Journal - 17 and 6 articles, respectively. The time period for publication of articles (n=61) is between 1991 and 2020. After three stages of work with the keywords, we determined the comparative indicators of articles information spaces ratio, which are in Fig. 2.

The presented ratios (see Fig. 2.) allow us to note a small percentage of articles on family psychoanalytic studies in the field of publications on family problems and separately within the framework of psychoanalysis. We should also note that the share of articles shows a general trend that is typical for information platforms of various national affiliations, content and dimensions. After the selection of articles by the keywords "family" + "psychoanalysis" (n = 61), in accordance with the research strategy, we performed a quantitative and semantic analysis of the abstract content in respect to 56 articles (91.8%), since 5 articles had no abstracts.

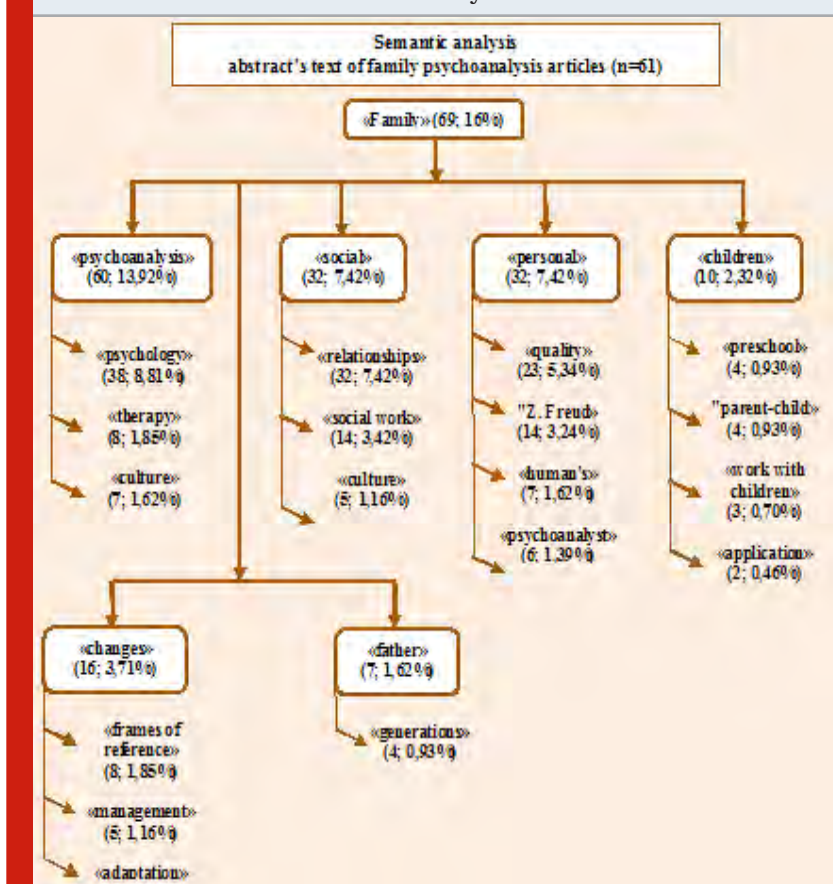
Figure 2: The Correlation Of Articles On Family Psychoanalysis And Thematic Spaces Of Publications On Family And Psychoanalysis On Sel Information Resources Elibrary.Ru, Taylor & Francis Group And Sage Journals.



The quantitative analysis of the abstracts content showed that the average number of words  $x=130.31$ ,  $SD=84.78$ , with  $min = 18$  and  $max = 467$ . It seems interesting that in the text of their articles abstracts, the authors noted the following names of psychoanalytic school representatives (we note them alphabetically, without consideration of incidence degree, with consideration of ethical provisions): A. Adler, W. Bion, J. Bowlby, I. D. Ermakov, F. Dolto, J. Lacan, E. Pickler, R. Fairburn, V. Fliss, Z. Freud, E. Fromm, K. Horney, D. Sharff, J. Sharff,

D. Stern, R. Spitz, M. Ainsworth. Semantic analysis of the abstract articles text by the program TextAnalist v2. 01, allowed us to assess the network of basic (most significant) concepts contained in the text of abstracts. We realized this analysis by the correlation of all abstract texts in the articles into a single text space and further it's assessment by the "semantic analysis" function of the TextAnalist v2. 01 program. The resulting semantic network that reveals the meaning of a single text space is in the form of a semantic tree (see fig. 3).

Figure 3: Semantic tree of terms from the text of abstracts' articles on family psychoanalysis within SEL information resources eLIBRARY.ru, Taylor & Francis Group and Sage Journals. Note:we indicate the semantic analysis parameters in the brackets next to the key terms: the first digit indicates the number of semantic nodes that have the term; the second digit ( % ) indicates the percentage of the semantic nodes number within the total number of nodes in the total volume under the analysis.



Note:we indicate the semantic analysis parameters in the brackets next to the key terms: the first digit indicates the number of semantic nodes that have the term; the second digit ( % ) indicates the percentage of the semantic nodes number within the total number of nodes in the total volume under the analysis.

We should note that we represent the semantic tree in a single semantic space, which has a common term – "Family" (tree trunk) with parameters: 69 – the number of semantic nodes that we combine in accordance with the term "Family" with a share of 16% among

the total number of semantic nodes in the combined text length. The semantic tree of abstract articles on family psychoanalysis has six main branches, which we represent by semantic load: (a) "psychoanalysis" (60; 13.92%); (b) "social" (32; 7.42%); (c) "personal" (32; 7.42%); (d) "children" (10; 2.32%); (e) "changes" (16; 3.71%); (f) "father" (7; 1.62%). Each of these branches has smaller branches that show: the scope of the basic concept development; semantic connections of each concept with mention only in passing and connect a very small share of information related to this concept.

## DISCUSSION

In the presented systematic review of articles on psychoanalytic research of family problems, which one can combine into the problem space of family psychoanalysis study, we analyzed about 1500,000 articles on three national information platforms, which combine more than 17,000 scientific journals of multidisciplinary orientation. As a result of the articles selection on these platforms, in accordance with certain criteria, we selected 61 scientific articles, that coincide with the main criterion – the combination of the keywords "family" + "psychoanalysis" within the article. All these material passed publications in magazines over the past 30 years (1991-2020) and only 9.8 % (n = 6) of them passed publications in specialized journals on psychoanalysis ("The International Journal of Psychoanalysis", "Psychoanalysis, Self and Context", "International Forum of Psychoanalysis" and "Psychoanalytical bulletin"). Probably, this fact is decisive in that in most articles, the representation of psychoanalytic terminology is rather blurry. This is consistent with the assumptions of N. McWilliams that as other areas of psychotherapy develop, one rediscovers, masks, renames and expropriates the basic psycho-dynamic terms and basic psychoanalytic knowledge [56].

At the same time, we should note that within the analysis of abstract articles (n = 56), they include the names of the psychoanalysis school representatives, that had a significant impact on the development of family psychoanalytic research and refer to the basic approaches of family psychoanalysis: A. Adler, W. Bion, J. Bowlby, I. D. Ermakov, F. Dolto, J. Lacan, E. Pickler, R. Fairburn, V. Fliss, Z. Freud, E. Fromm, K. Horney, D. Sharff, J. Sharff, D. Stern, R. Spitz, M. Ainsworth. Of course, the analysis of articles abstracts, due to the small number of open-source articles (n = 11; 18 %), narrows the scope of the study, but, at the same time, allows us to note that the selected articles present provisions in the study of family problems from the position of: classical psychoanalysis by Z. Freud (in accordance with the first experiments of family psychoanalysis); the theory of object relations (R. Fairbairn); the theory of humanistic, interpersonal psychoanalysis (E. Fromm, K. Horney); the French school (F. Dolto) and psychoanalysis of J. Lacan; ideas about marriage by C. G. Jung; provisions of the "family constellation" ("family education") by A. Adler.

Within the qualitative analysis framework in relation to the abstract's texts by the TextAnalist v2. 01 program, we identify a single semantic space, united in the form of a single branched tree. One represents the tree trunk by the term "Family", which is the basis for 69 semantic nodes that constitute a sixth part of the entire semantic space in the text of abstracts throughout 56 articles. It allows us to conclude that the authors of the articles consider the problems of families from the position of psychoanalytic theory, i.e. the basic concepts for them are the concept of family, its dynamics and structure, features of relationships and personal development.

In addition, the single trunk allows us to say that there is no a more detailed concept within this space of the text, and we can say that the selected articles really consider the problems of the family and can combine into a single semantic space. The tree on the basis of the term "Family" has a sufficient number of "large" branches that reflect quite independent directions (semantic connections) of the study on family problems. The most significant of the branches is the branch (a) "psychoanalysis" (60; 13.92%), which reflects the basic of these directions of family studies and fully correspond to the second keyword "psychoanalysis" as a criterion for selection of the articles. The branch includes three constructs "psychology" (38; 8.81%), "therapy" (8; 1.85 %) and "culture" (7; 1.62 %), which reflect the analysis of family problems from the perspective of psychoanalytic theory with an emphasis on the study of psychological problems, features of psychological assistance and the study of modern cultural aspects of family development. This is consistent with the current problems of families, that the authors of the article noted in the introduction and with the provisions of the basic theories of family psychoanalysis, highlighted in the description of the basic concepts. In addition, we should note that these constructs are not final and the constructs of "psychology" and "therapy" have further continuation on the more small branches.

Thus, the construct of "psychology" continues to demonstrate itself in terms of "conflict" (11; 2.55 %) and "parents" (10; 2.32 %), and "therapy" in "family" (5; 1.16 %). The further development of branches indicates the focus of such psychological problems as conflicts and positions of parents, and assistance mainly within the form of family psychotherapy. Branch (b) "social" (32; 7.42 %) includes three branches: "relationships" (32; 7.42 %); "social work" (14; 3.42 %) and "culture" (5; 1.16 %). This combination assumes that the entire social space in the text links to relationships, since the parameters are the same, and the adjective "social" also includes social work for the family support and the inclusion of cultural aspects in social relations. We should also note that only the "relationship" branch (32; 7.42 %) has a further extension, implemented in terms of "couple" (7; 1.62%), "partners" (7; 1.62%) and "goal" (3; 0.7%). It underlines that partner relationships have a key influence on the social relationships of the family and it is the purpose of such dependency's analysis.

Branch (c) "personal" (32; 7.42%) combines: "quality" (23; 5.34%), "Z. Freud" (14; 3.24%), "human" (7; 1.62%) and "psychoanalyst" (6; 1.39%). The content of the branch reveals the meaning of the family study through the quality of the personality, its level of development and it associates with the provisions of classical psychoanalysis and with the help that the psychoanalyst provides. It also implies the coordination of a certain personality quality in the process of psychoanalytic assistance and interaction with the psycho-analyst's personality, as an expert who can help. Branch (d) "children" (10; 2.32%) includes such branches as: "preschool" (4; 0.93%); "parent-child" (4; 0.93%), "work with children" (3;

0.70%) and "application" (2; 0.46%). The semantic space of the branch combines analysis of family problems related to children with consideration of them within the framework of relations with parents and assistance to them. All of these branches are finite.

We represent the branch (e) "changes" (16; 3.71%) within the development of three branches: "frames of reference" (8; 1.85%); "management" (5; 1.16%) and "adaptation" (3; 0.70%). Thus, the semantic field formed by these branches focuses on the study of the family through the study of its changes and as a variant of these changes – adaptation. However, the consideration of changes relates to the ability to manage these changes, which may be a hint of awareness of changes. The branch (f) "father" (7; 1.62%) reflects the role of the father in family life and has a further extension in the problem analysis of "generations" (4; 0.93%). This semantic connection focuses attention to the analysis of the father's leading role in intergenerational relations and indirectly connects it with the problems of childrearing. We should note that the term "mother" occurs only twice in the text space of the abstracts under analysis and the program does not identify it as an independent semantic node. Perhaps it is only due to the fact that we have selected fairly common keywords and in the text of articles, perhaps, we attributed more attention to this term. All branches in this group are finite.

With regard to the recognized branches, we should note that the deepest and most significant relationship is in the branch (a) "psychoanalysis", which sets the main space for consideration of family problems in accordance with the consideration of psychological problems and the provision of psychological assistance, as well as a highly detailed, implemented in three levels of semantic connections. The development of the father's problem has the most weak representation. One describes this topic rather narrowly within the scope of the certain articles. In the presented semantic space, there is a sufficient expression of terms related to the topic of family, and the psychoanalytic terminology has less expression.

The limitations and strengths of the articles reviews on family psychoanalysis Our review has limits by the quality of the included studies, which involve a combination usage of only two, but main keywords "family" + "psychoanalysis" for the perimeter of study. We have not standardized the data collection and analysis, and the comparative analysis has fairly common character, but at the same time it demonstrates certain patterns of research in the field of family psychoanalysis. Despite these limitations, it is the first review on this issue that underlines the main problems of family psychoanalytic research in accordance with the keywords and on the basis of basis of detailed qualitative analysis in relation to the text of abstract articles. This study can serve as a guideline for conceptualization of the basic family psychoanalysis provisions and further analysis in respect to their combination with the relevant frame of reference within the scientific publications for the reasonable support to families and individual family members.

## CONCLUSIONS

As conclusions on the systematic review of articles on family psychoanalysis we note the following statements:

1. The problem space presented in the selected articles reflects the main provisions of family psychoanalytic studies, that allow them to enter the problem field of family psychoanalysis. This combination will clarify the content of the basic definitions and recognize those phenomena and problems of family life that have already been under the study within the framework of psychotherapeutic practice and formulated under the psycho-dynamic terms, but due to modern requirements one have transformed, renamed and expropriated them in favor of other goals.
2. The coordination of family psychoanalytic studies in the space of family psychoanalysis will stop the blur of analytical terminology and stop the process mentioned by N. McWilliams [56] in regard to transformation, rephrasing of analytical terminology or its unjustified inclusion in other areas of psychotherapeutic and counseling support to the family.
3. The keywords of scientific publications reflect the boundaries of the thematic space and are consistent with the topic of the publication, but it is always the responsibility of the publication's author and his comprehension of the need to mention it, and even more the understanding of the content in relation to each keyword.
4. The authors of publications do not always associate their research with the main terms or do not consider it necessary to specify them as keywords, which often does not allow to find and include the articles by such criteria of search that really relate to family psychoanalysis and include them into the specified research space.
5. The scientific publications on family psychoanalysis in sufficient detail describe the study of social problems family relations, child development and the parent-child relationship, the role of the father and its impact on intergenerational relationships, realization of personal approach and the study of the family development dynamics.

(N. 2007) (Chrestomathy / Ed. E. G. Eidemiller 2007) (Ackerman N.Ed. E. G. Eidemiller 2007) (Balint 2009) (N. 2007) (P. 2013) (R. 2009) (Brushlinsky 2003) (F. 2004) (F. 2005) (M. 2007) (M. 2018) (S. 1991) (S 2008) (N. 2007) (M. 2007).

## REFERENCES

- Ackerman N.Ed. E. G. Eidemiller, NVAVJ (2007). Family approach to marital disorders// Family psychotherapy.', Saint Petersburg, pp. 178-191.
- Balint, M (2009). 'Primary narcissism and primary love// Psychoanalytic concepts of narcissism/ Ed. A.V. Litvinov, A. N. Kharitonov. ', Russian psychoanalytic

- society, pp. 104-148.
- Brushlinsky, AV (2003). 'Psychology of the subject.', Saint Petersburg: aletheia, p. 244.
- Chrestomathy / Ed. E. G. Eidemiller, NVAJ (2007). Ackerman N. Role of the family in the display of disorders among the children// Family psychotherapy., St. Petersburg, pp. 244-288.
- Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5). – Arlington, VA (2013): American Psychiatric Publishing. – 992 p.
- Emerson L.E (1914-1915). The psychopathology of the family // The Journal of Abnormal Psychology. –No 9(5). – P. 333-340.
- F., KO (2004). Relationships of love: norm and pathology / Trans. from English. M. N. Georgieva', Moscow: Independent firm "Class", p. 256.
- F., KO (2005). Severe personality disorders: strategies of psychotherapy, Moscow: Independent firm "Class, p. 464.
- Fiese, B. H., Connell, A., Doss, B., Kaugars, A. S., Rhoades, G. K., & Trentacosta, C. J. (2017). Introduction to the special issue: Advances in methods and measurement in family psychology. *Journal of Family Psychology*, 31 (8), 969-971. <http://dx.doi.org/10.1037/fam0000410>
- Flugel J.C (1921). The psycho-analytical study of the family. - Vienna: Printed by the society for graphic industry, 259 p.
- Freud Z (2007). Famous cases from practice / TRANS. with German-M.: Kogito-Center. - 538 p.
- Freud Z (2009). About narcissism // Psychoanalytic concepts of narcissism / Edited by A.V. Litvinov and A. N. Kharitonov, Moscow: Publishing project "Russian psychoanalytic society, P. 11-34.
- Heyman R.E., Slep A.M.S., Beach S.R.H., Wamboldt M.Z., Kaslow N.J., Reiss D (2009). Relationship problems and the DSM: needed improvements and suggested solutions // *World Psychiatry*, 8 : 7-14.
- Jiang, X., Wang, J., Sun, W. et al (2019). Frequency of narcissistic personality disorder in a counseling center population in China. *BMC Psychiatry* 19, 212. <https://doi.org/10.1186/s12888-019-2185-5>
- Keith W. Campbell, Joshua D. Miller (2011). The Handbook of Narcissism and Narcissistic Personality Disorder: Theoretical Approaches, Empirical Findings, and Treatments. Print ISBN : 9780470607220 |Online ISBN:9781118093108 |DOI:10.1002/9781118093108
- Kharitonov A. N (1997). Psychoanalysis of family problems // Psychotherapy: from theory to practice: Materials of the II all-Russian educational and practical conference, M.: Publishing house of the Institute of psychotherapy, P. 127-129.
- Kharitonov A. N (1999). Family psychoanalytic interview// Psychotherapy today: Materials of the III all-Russian conference on psychotherapy. Institute of psychotherapy, P. 118-119.
- Kharitonov A. N (1999). Psychoanalytic approach in family psychotherapy // Psychotherapy today: Materials of the III all-Russian conference on psychotherapy. Institute of psychotherapy, P. 120-122.
- Kharitonov A. N (2002). Family psychoanalysis / / Mental health of a person – spiritual health of the nation: Materials of the V all-Russian scientific and practical conference on psychotherapy and clinical psychology. Institute of psychotherapy, P. 58-60.
- Kharitonov A. N (2002). Family psychoanalysis as a scientific and practical direction// *Psychoanalytic Bulletin*, no. 10, P. 62-78.
- Kharitonov A. N (2002). Methodology of difficult family situations // Mental health of a person – spiritual health of the nation: Materials of the V all-Russian scientific and practical conference on psychotherapy and clinical psychology. Institute of psychotherapy, P. 60-62.
- Kharitonov A. N (2002). Object-theory, as a methodological basis of family psychoanalytic psychotherapy // Mental health of the person-spiritual health of the nation: Materials of the V all-Russian scientific and practical conference on psychotherapy and clinical psychology. - M.: Publishing house of the Institute of psychotherapy, P. 54-56.
- Kharitonov A. N (2003). System analysis of difficult family situations / / Practical psychology in the conditions of modernization of education: Collection of theses of participants of the all-Russian Congress of practical psychologists of education. On may 28-29, 2003. Vol. 2. - Moscow: Polygraph Service. - P. 366-367.
- Kharitonov A. N (2004). Family psychoanalysis – a new direction in Russian psychoanalysis// Materials of the all-Russian scientific and practical conference after memory of Prof. A. I. Belkina, Moscow, P. 431-440.
- Kharitonov A. N (2004). Timchenko G. N. Psychodiagnostics in family psychoanalytic psychotherapy // Materials of the all-Russian scientific and practical conference in memory of Prof. A. I. Belkina, Moscow, P. 369-372.
- M., K (2007) . Psychoanalytical works: in VI Vol. English and German. edited by S. F. Sirotkin and M. L. Melnikova, p. 386.
- M., K (2018). Psychoanalytical works: in VI Vol. / M. Klein. Vol. III: Psychoanalysis of the child.', TRANS. from English and German. edited by S. F. Sirotkin and M. L. Melnikova. , p. 370.
- M., N (2007) . Comparative analysis// Family psychotherapy. ', St. Petersburg: Rech, pp. 79-122.
- McWilliams, N. (2020). The future of psychoanalysis: Preserving Jeremy Safran's integrative vision. *Psychoanalytic Psychology*, 37 (2), 98-107. <http://dx.doi.org/10.1037/pap0000275>
- Morf, C.C. Die Paradoxa des Narzissmus - ein dynamisches selbstregulatorisches Prozessmodell / C.C. Morf, F.Rhodewalt // *Narzissmus Grundlagen - Störungsbilder - Therapie*. – Stuttgar. – N.Y.: Schattauer, (2009).
- N., A (2007). Linked pathology in family relationships// Family psychotherapy., St. Petersburg, pp. 250-261.

- N., A (2007). The diagnosis of neurotic marital interaction// Family psychotherapy., St. Petersburg, pp. 219-226.
- N., M (2007). Psychoanalytic diagnostics., Class, p. 480.
- Nichols M (2007). Theoretical context of family psychotherapy// Family psychotherapy. Chrestomathy / Ed. E. G. Eidemiller, N. V. Alexandrova, V. Justitskis. - St. Petersburg: Rech, P. 24-47.
- Nichols M. (2007). Theoretical context of family psychotherapy// Family psychotherapy. Chrestomathy / Ed. E. G. Eidemiller, N. V. Alexandrova, V. Justitskis. - St. Petersburg: Rech, - P. 24-47.
- Nichols M., Schwartz, R (2004). Family therapy. concepts and methods / TRANS. from English. O. Ochkur, A Shishko. - M.: Eksmo Publishing house, 960 p.
- Operationalized psychodynamic diagnostics (OPD) - 2. Guidelines for diagnosis and treatment planning. (2019).-4th edition. - M.: Academic project. - 454 p.
- P., B (2013). Psychoanalytic pair and family therapy: Association, separation/non-Union and re-Union of connections', Journal of practical psychology and psychoanalysis., < HYPERLINK "https://psyjournal.ru/articles/psihoanaliticheskaya-parnaya-i-semeynaya-terapiya-obedinenie-razedinenieneedinenie-i (Date of access: 10.05.2020)." <https://psyjournal.ru/articles/psihoanaliticheskaya-parnaya-i-semeynaya-terapiya-obedinenie-razedinenieneedinenie-i> (Date of access: 10.05.2020). >.
- Press release # 3708 of ACSPO. Problem families: who is to blame and what to do?<https://wciom.ru/index.php?id=236&tuid=9200>.
- Press release # 4002 of ACSPO Attitude to marriage and divorce: monitoring <https://wciom.ru/index.php?id=236&tuid=9793>.
- Program Time, March 25, 2020 <https://tsn.ua/ru/tsikavinki/poka-koronavirus-ne-razluchit-nas-v-kitay-pary-massovo-razvodyatsya-vo-vremya-karantina-1509654.html>
- Psychodynamic diagnostic manual. Second Edition. PDM-2. Volume 1 / Edited by V. Lingardi, N. McWilliams Trans. from English O. perfileva, N. Saburova, V. Snigura. - M (2019). Independent firm "Class", 792 p. 792.
- Pulver S. Narcissism. The term and concept// Psychoanalytic concepts of narcissism/ Edited by A.V. Litvinov and A. N (2009). Kharitonov, Moscow: Publishing project "Russian psychoanalytic society Pp. 161-183.
- R., B (2009). 'Narcissism and narcissistic disorders// Psychoanalytic concepts of narcissism / Edited by A.V. Litvinov and A. N. Kharitonov. ', Russian psychoanalytic society, pp. 390-445.
- Roepke, S., Vater, A (2014). Narcissistic Personality Disorder: An Integrative Review of Recent Empirical Data and Current Definitions. Curr Psychiatry Rep 16, 445. <https://doi.org/10.1007/s11920-014-0445-0>
- Rosenfeld G( 2009). Psychopathology of narcissism. Clinical approach // Psychoanalytic concepts of narcissism/ Edited by A.V. Litvinov and A. N. Kharitonov, Moscow: Publishing project Russian psychoanalytic society P. 149-160.
- S, K 2008, '. Psychotherapy of marital relations.', "Medicine, p. 328.
- S.,K 1991, 'Psychotherapy of family-sexual disharmonies / TRANS. ', Czech-M.: Medicine, p. 332.
- Shamshikova O. A., Shamshikova E. O (2009). Narcissistic effects of personality as forming a continuum of transitional forms of existence "Boundaries of the Ego" // World of science, culture, education. No. 7 (19). - p. 265-270.
- Sharff D. E (2008). Sexual relations: Sex and family from the point of view of the theory of object relations / Trans. from English-M.: Kogito-Center. 304 p.
- Sharff D. E (2017). Family therapy of object relations, Moscow: School of professional psychology, , 600 p.
- Sharff D. E. and Sharff D. S (2008). Therapy of pairs in the theory of object relations / TRANS.Cogito-Center, 384 p.
- Smadja E. Pairs: a Multidisciplinary approach / Trans. from FR. - M.: Kogito-Center, 2017. - 198 p.
- Smadja E., Braham K, Garcia V., Solis-Ponton L (2018). Pairs in psychoanalysis / TRANS. from French-M.: Kogito-Center, 173 p.
- Sokolova E. T., Chechel'nitskaya E. P (2001). Psychology of narcissism: a Textbook. - M.: Educational and methodological collector "Psychology, 140 p.
- Tikhonova O. S., Yanovsky S. S (2015). Features of family psychoanalytic psychotherapy // Journal of practical psychology and psychoanalysis. URL <https://psyjournal.ru/articles/osobennosti-semeynoy-psihoanaliticheskoy-psihoterapii> (Date of access: 10.05.2020).
- Timchenko G. N (2004). Family psychoanalytic psychodiagnostics in the structure of family psychoanalysis // Materials of the all-Russian scientific and practical conference after the memory of Prof. A. I. Belkina, Moscow, P. 416-421.
- Timchenko G. N (2004). Psychoanalytic psychodiagnostics in the system of psychological assistance to the family// Psychoanalytic Bulletin, no. 12, P. 150-166.
- Yomans F., Klarkin D., Kernberg O. (2018). Transference-focused psychotherapy for borderline personality disorder. Washington [etc.]: American psychiatric publishing / F. Yomans. D. Klarkin. O. Kernberg. / Perevodchik Snegur Vladimir Sergeevich. / Nauchnyy redaktor Kovalets Anna Sergeevna. - M. - 498 p.

# Experience As a Predictor of the Level of Professional Responsibility of Primary School Teachers

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## ABSTRACT

Works on responsibility are found in pedagogy, sociology, political science, philosophy, law and, of course, psychology. At the same time, interpretations of this concept are so different in different areas that there is conceptual and methodological inconsistency that complicates understanding of the content of the phenomenon of "responsibility". This can be a quality of personality, a skill, an emotional state, and sometimes all at once. At the same time, responsibility may be an important indicator of the level of professional development of a specialist, or may characterize the degree of personal development. This article considers how the length of service and the level of acceptance of responsibility in primary school teachers are interrelated. Understanding that the level of a child's development, safety and behavior depends largely on your actions will determine how the teacher will interact with his subjects and how he treats them. The aim of this study was to identify a pattern of change in the level of responsibility depending on the length of service and how it manifests itself in professional life. As a hypothesis, it was suggested that the more seniority the teacher has, the higher the level of responsibility and the more control he will have over the pupils' behavior.

Psychodiagnostic methods were used as research tools to identify the level of professional responsibility and strategies for interaction with students in primary schools. In order to determine how the length of service can influence the level of responsibility and its way of working, a comparison of teachers with different work experience (up to 5 years, 6 to 10 years, 11 to 20 years) was made. The study proved that the level of responsibility does not change linearly, with the highest level of responsibility recorded for teachers who have worked for less than 5 years and the lowest level for teachers who have worked for 5 to 10 years. While teachers do not increase their level of responsibility as their experience increases, they are more likely to adopt an authoritarian style of interaction with learners. On the other hand, teachers with no more than 5 years of experience are more likely to focus on children as independent subjects of the pedagogical process and give them more freedom.

**KEY WORDS:** PROFESSIONAL RESPONSIBILITY, ATTITUDE TOWARDS CHILDREN, TEACHER, PRIMARY SCHOOL, WORK EXPERIENCE.

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## INTRODUCTION

Understanding the consequences of your actions is an important skill for any person. It guides a person on the right path, helps to anticipate the result and avoid mistakes. There is nothing wrong with mistakes themselves, there is a popular axiom "learning from past mistakes". A mistake is an experience and new knowledge. But there are a number of professions where



this learning tool will be considered inadmissible. Of course, inadmissibility of an error is associated first of all with the profession of a doctor. A mistake in this profession can cost the patient's life. We can name one more profession where a specialist's mistakes can also have a great impact on a person's life, but unfortunately, they cannot be seen immediately. This is the profession of a teacher. Unprofessional behavior of the teacher, incorrect attitude towards students often lead to the formation of non-adaptive behavior in students. This is especially noticeable in primary school, when children are in a sensitive period of development [4].

Nevertheless, the ability to understand the consequences of one's actions should be an important attribute of a primary school teacher's professional performance. As an independent phenomenon, this skill is not considered, but is highlighted as a component of professional responsibility [6]. The study of professional responsibility in modern psychology is a popular direction; it is given an important place in the structure of the study of the subject of labor, but there are still many contradictions to be studied.

One of such contradictions is the study of manifestation of professional responsibility in primary school teachers. The essence of the problem is that professional responsibility is formed gradually, in the process of adaptation to labor activity [12], but the teacher's profession is characterized by a high level of professional burnout, which reduces the level of responsibility. Hence, the question arises: how do changes in the level of responsibility take place depending on the length of service and how does this manifest itself in professional activity? The search for an answer to this question was the aim of our research. As a hypothesis, it was suggested that the more seniority the teacher has, the higher the level of responsibility and the more he will control the pupils' behavior.

**Literature Review:** Responsibility" is a complex and multifaceted notion. There is no single understanding of this term in psychological science. It can be considered both as a property of the person and as a process, in some works - as personal belief [22]. One of the first psychologists who began to consider the problem of responsibility was J. Piaget. He focused on the cognitive aspect, observed how children from 7 to 11 years old think about responsibility. As a result, he came to the opinion that responsibility is the ability to experience guilt for certain deviations, violations of actions, acts that do not meet the requirements of others [11]. L.Kolberg and K.Helkam continued to reveal the cognitive aspect of responsibility in their works. They singled out two important characteristics of responsible behavior: the acceptance of the results of their actions and the awareness of the social role for which it is necessary to be accountable [17]. It is worth noting that many authors note the role not only of the cognitive component, but also of the emotional one. The process of accepting responsibility often involves strong emotions and doubts; on the other hand, responsibility gives a sense of control and self-satisfaction [21].

An equally interesting direction in understanding responsibility lies in the plane of freedom. This is an area of existential psychology in which the condition for responsibility formation in a subject is the presence of freedom. Only autonomy and possibility to act independently allow a person to feel responsibility for his or her actions [26]. From the point of view of the humanistic direction, freedom is not enough; one still needs personal maturity. Scientists such as A.Maslow, K.Rogers, A.K.Abulkhanova, M.V.Gamezo argued that responsibility is expressed in the need to be a part of society, to self-fulfillment in society, in the aspiration to conscious freedom of choice and to find the meaning of life [1; 16; 22;]. In modern theories and concepts considering responsibility, the central element is causality, i.e., awareness of oneself as the cause of events, understanding how your actions affect others and what consequences they may bring [18; 24].

In relation of current research, works that considered the manifestation of responsibility in professional activity are interesting. For example, Professor W. Hochwarter argued that assumption of responsibility by employees of organizations increases efficiency and productivity [20]. G. Ball points out that the level of competence of an employee is directly related to his level of responsibility [2]. The most complete and interesting model of responsibility was suggested by V.Schlenker [25]; it describes in sufficient detail how the subject of labor manifests responsibility within the framework of labor functions. Responsibility is the interaction of three elements: the personality of the subject, which is in a situation where the choice of actions adequate to the situation is made; the situation itself, which implies a certain behavior; and the regulations governing the actions in the situation. In this case, responsible behavior is when all three elements are closed, the subject acts according to instructions, thus adequately resolving the situation [5]. The same three elements often act as criteria for the subject's responsibility [8].

An important element in considering accountability is the factors that influence its formation. One of the most popular factors is the presence of an internal locus of control - is the consciousness that the events taking place are largely dependent on the employee. Working badly, ignoring the requirements of management - there will be a small salary and no career progression, and if you are a good specialist and strive to comply with the job duties in full - it will promote professional advancement [19]. Another factor is the anxiety property of the personality. In the study of V.P. Pryadeyin [13], a correlation of anxiety was revealed at different stages of the nascent responsible action. He comes to the conclusion that only substantial characteristics (cognitive, motivational) of responsibility increase in troubled individuals, but the practical realization of this orientation does not occur, but rather an increase in behavioral passivity, negative emotions, and unwillingness to take responsibility.

A number of Russian authors (D.A. Leontiev, L.I. Dementius, K. Muzdybaev) point out the value structures

of personality as an important attribute of responsibility formation in the process of professional activity. Personal values act both as motivational elements and cognitive elements. They guide and organize human behavior for certain purposes and are quite stable psychic regulators of social behavior of people [3; 7; 9]. Nevertheless, it can be argued that the presence of responsibility directly influences the exercise of professional activity, and factors such as personal values, internal locus of control and low levels of anxiety will determine its presence.

## MATERIAL AND METHODS

To confirm the hypothesis, a comparison was made of three groups of subjects (primary school teachers) with different length of service by the level of responsibility. Measurements were made in three groups. The groups were formed on two grounds: length of service (up to 5 years, from 5 to 10 years; from 10 to 20 years) and age (under 30 years; from 31 to 44 years; from 45 to 64 years). This division was based on periodization by the American psychologist D. Super [27]. He singled out the stages of personality development, and we took only those periods directly related to labor activity. There are three of them: the trial stage, during which a person "tries" himself or herself as a full-fledged specialist capable of "competing" with more experienced workers (20-30 years); the stage of stabilization, assertion of himself or herself as a reliable and successful specialist (from 30 to 44 years); the stage of maintaining, preserving the achieved positions (during career efforts). At this stage, a person strives to create a stable professional and social position (from 45 to 64 years).

To reveal the level of professional responsibility in this research, the method "Acceptance of Responsibility" developed by V.P. Prjadein was used [14]. In this technique, the author, using stimulating material from the Rosenzweig test, reveals two factors of responsibility: acceptance of consequences of his actions in a situation of accusation (Factor 1) and the subject's actions in a situation of acceptance of responsibility by another person (Factor 2). In total, these two factors determine the level of responsibility manifestation (Factor A). To reveal the method of communication between teacher and students, the authors A.Y.Varga and V.V.Stolin used the Method of Diagnostics of Parental Relations [15]. The wording of the questions was corrected in accordance with the research objectives.

**The method allows to reveal five types of teacher's attitude towards children:** acceptance (positive attitude towards the pupil), cooperation (interest in the pupil), symbiosis (minimum level of distance with the pupil), control (requirement of obedience), and small failure (attitude as a nonthinking creature). The obtained results have been processed using methods of mathematical statistics: descriptive statistics, Kruskal-Wallis one-way analysis of variance [10]. The calculations were performed using SPSS 21 for Windows. The empirical study was carried out on the basis of secondary educational institutions. It involved 97 primary school teachers. The sample was divided into three groups: work experience up to 5 years and age up to 30 years - 32 people; work experience from 5 to 10 years and age from 31 to 44 years - 36 people; work experience from 10 to 20 years and age from 45 to 64 years - 29 people.

Table 1. Comparison results on the reliability of differences between the three groups in the research

	Acceptance	Cooperation	Control	Factor 1	Factor A
Chi-square	29,757	43,697	9,557	16,688	11,863
Asympt. value	,000	,000	,008	,000	,003
			Average		
Group 1	30,8	5,6	3,3	6,3	15,8
Group 2	26,6	6,4	4,17	6,5	12,6
Group 3	24,3	5,2	4,6	7,3	13,2

## RESULTS

In order to determine whether there are differences in the level of responsibility and attitude towards students among primary school teachers with different backgrounds, the Kruskal-Wallis criterion was applied, the results of which are presented in Table 1. The comparison did not reveal reliable differences in Factor 2, the Acceptance of Responsibility methodology and the Symbiosis and Little Loser scales, and the Parental Diagnostic methodology. This testifies to the fact that the actions of the subject of labor in the situation of acceptance of responsibility by another person and the treatment of students as unintentional and non-

dependent objects are not connected with age and experience variables. Accordingly, there is no reason to argue that the more experienced a primary school teacher, the more often or less often he or she treats children as non-self-contained beings, rather than as an autonomous person.

On other scales of applied methods, reliable differences were found. In order to determine the direction of change, the average score for each group of study was calculated. As a result, it was shown that the attitude of a primary school teacher can change depending on experience and seniority. On the "Acceptance" scale, we can see a bright decline in scores from fairly high (30.8) for teachers who

have worked for less than 5 years to average (24.3) for teachers who have worked for more than 10 years.

**Table 2. Factor analysis results of the first group of study (work experience up to 5 years and age up to 30 years)**

Components matrix	Factors	
	1	2
Acceptance	,877	
Cooperation	,865	
Symbiosis		-,841
Control	,836	
Failure	,692	
Factor 1	,880	
Factor 2		,628
Factor A	,931	

**Table 3: Factor analysis results of the second group of study (work experience from 5 to 10 years and age from 31 to 44 years)**

Components matrix	Factors	
	1	2
AAcceptance	-,877	
Cooperation	,731	
Control		,867
Failure	,820	
Factor 1		,916
Factor 2	,981	
Factor A	,904	

The opposite picture is observed on the "Control" scale (from 6.3 to 7.3). Quite an original picture of changes is presented on the "Cooperation" scale; the most popular is the attitude to students among primary school teachers with 5 to 10 years of experience (6.4), while the least interest from the sample is shown by teachers who have worked more than 10 years (5.2). Professional responsibility is even more confusing. The peak of the level of responsibility is shown during the first five years of work (15.8), while the lowest level is shown by teachers who have worked for 5 to 10 years. After ten years, the level of responsibility starts to increase (13.2).

In order to reveal the regularities and interrelationships between the presented factors and scales, data for each group of subjects were processed by means of factor analysis (method of determining factors: analysis of main components). The results of the first group of investigated are presented in table 2, the second group- in table 3, the third group - in table 4. The results of the factor analysis of the first group of teachers with up to 5 years of work experience showed two groups of interrelated elements. The group of the first group of factors explains 60% of the variance, the second group - 20%. In total, both groups explain 80% of the sample's dispersion.

The first group of factors includes the largest number of variables (acceptance, cooperation, control, failure, factor 1 and factor A), this indicates the relationship of responsibility with the choice of strategy of action. At the same time, the general level of responsibility in this group is conditioned by the desire to understand the situation and choose a suitable strategy of behavior. The group of second factors includes only two elements (symbiosis and factor 2), their interrelation shows that distance between themselves and pupils is not reduced, but teachers understand and accept their desire for distance. Factor analysis in the second sample (5 to 10 years of work experience) also revealed two groups of factors, but the content is different. The revealed interrelations in total explain 79% of the dispersion, of which the first group of factors accounts for 56% and the second group for 23%.

**Table 4: Results of the third factor analysis group under study (length of service from 10 to 20 years and age from 45 to 64 years)**

Components matrix	Factors		
	1	2	3
Acceptance	-,910		
Cooperation			,619
Symbiosis	,800		
Control		,739	
Failure	,991		
Factor 1	,871		
Factor 2		,902	
Factor A	,678		-,827

The picture of the revealed interrelationships in the second group of investigated differs from the first group, though they overlap in many respects. The main feature of teachers who have worked from 5 to 10 years is the inverse correlation between the level of professional responsibility and positive attitude towards students. For this group of teachers, the level of responsibility is related to the interest in and treatment of students as non-supervisory subjects of the educational process, and it is more difficult for teachers to accept students as they are. The second group of factors includes only two variables - the desire to control students' activities and the desire to take responsibility in pedagogical interaction. For the third group, the results of factor analysis provide a more interesting picture. Firstly, three groups of factors were grouped together, the sum of total dispersion is 89% (1 group - 52%, 2 group -25%, 3 group - 12%); secondly, each group demonstrates more specific interrelation of variables.

The first group of factors (acceptance, symbiosis, failure, factor 1, factor A) shows the interrelation between the desire to take responsibility in the process of pedagogical interaction and the attitude to students as non-thinking beings unable to act autonomously. At the same time, the main antagonists in this group of variables are the

positive attitude towards students and the desire to manage the pedagogical process. The second group of variables shows the relationship between the desire to control students and the assumption of responsibility by other participants in educational interaction. On the one hand, the relationship is difficult to explain, but on the other hand, it shows a desire to give more tasks to students and at the same time to increase control over their performance.

The third group of variables demonstrates the inverse relationship between cooperation and responsibility. It turns out those primary school teachers with more than 10 years of experience show their responsibility by controlling students, perceiving them as an object of pedagogical influence rather than a subject. Summarizing the results of the Kruskal-Wallis method and factor analysis, it can be stated that a higher level of responsibility among teachers who have worked at school for no more than five years is associated with acceptance of children as they are, orientation towards student autonomy, and a desire for dialogue. More experienced primary school teachers are less learner-centered and more control-oriented, thus demonstrating a responsible attitude to their work.

## DISCUSSIONS

Based on a comparison of the validity of the differences, it can be seen that experience, on the one hand, negatively affects the acceptance of responsibility by primary school teachers and, on the other hand, provokes teachers to be more controllable and less accepting of students as they are. It may be due to both external and internal factors. More control from the teacher reduces the risks of error and the level of freedom of learners, which can increase their absorption of material. The strategy saves the teacher's effort, uses less energy and minimizes creativity. Savings can also explain the reduction in responsibility among teachers who have worked for more than five years. Whereas in the first five years primary school teachers rely on empathy for the subject and try to understand students and accept their point of view when dealing with complex situations and making decisions, a clear strategy of responsibility is not evident with experience.

In some situations they take responsibility and in others they can delegate it, but a high factor of 1 in teachers who have worked for more than 10 years shows that they try not to blame others for their failures, but to correct the situation. Nevertheless, it can be stated that experience and experience influence both positively and negatively the teacher's activity. On the one hand, experienced teachers are more oriented to control in their activity and try to correct them in case of possible mistakes or problems; on the other hand, they give less autonomy to students ignoring their individual and personal characteristics.

The factor analysis allowed revealing internal regularities of primary school teachers' activity for each group

separately. It can be stated that the first group of the study, which has no more than five years of work experience, has non-deterministic professional responsibility for a certain style of activity. This may be due to the fact that, in such a short period of time, a specific style of activity has not yet been formed, and, perhaps, small experience of activity and lack of knowledge is compensated by lability and mobility in choosing strategies for interaction with students.

Two important factors characterizing the interrelation of responsibility and attitude towards students were found in the second group of the study. The first one is that the higher the level of responsibility, the lower the level of acceptance of students and the more often teachers show interest in students, but at the same time perceive children as non-dependent; the second shows the relationship between the desire to take responsibility in pedagogical interaction and authoritarian style of activity. All of this evidence suggests that, after more than five years of service, primary school teachers are more focused on controlling students, thus allowing them to feel responsible in the pedagogical process but still retain an interest in students.

For a third group of primary school teachers with more than 10 years of experience, a relationship was found between levels of responsibility and the desire to control the teaching process. Teachers in this group are less interested in students, but are more concerned with managing the teaching process than with interaction. With experience, teachers try to be more in control of the teaching process, which makes them feel more responsible.

## CONCLUSIONS

As a result of the conducted research, it can be stated that the level of acceptance of responsibility by primary school teachers is, firstly, related to their attitude towards children in the process of pedagogical interaction; secondly, it is conditioned by experience. This conclusion is fully consistent both with the requirements of the profession and with professional standards. Understanding that a child's level of development, safety and behavior depends largely on your actions will determine how the teacher interacts with learners. At the same time, if at the beginning of your career teachers do not yet have a clear strategy for action, then, having worked five years in school, it manifests itself, but unfortunately transforms into an authoritarian style of management, limiting the freedom of students and depriving them of autonomy.

Most likely, this is due to the "simplicity" of such a strategy, which requires less effort and energy. Only when they start working at school, teachers are still full of energy and can allow them to give freedom to children, and to interact with students they use different strategies, while with experience they can accumulate fatigue and activity strategies begin to transform. Teachers who have worked for more than 5 years are more likely to use

control to achieve the same result but spend less effort. The transformation of strategies of interaction with students is conditioned by a high level of responsibility, i.e. the understanding that the teacher is responsible for the pedagogical process is related to the attitude towards students, but it is manifested differently at different stages of professional activity.

Nevertheless, the goal has been achieved. It was shown that the level of responsibility does not change linearly, but by waves, with the highest level of responsibility recorded for teachers who have worked for less than 5 years and the lowest level for teachers who have worked for 5 to 10 years. The hypothesis has been partly proven: as the length of service increases, the level of (L.I, 2001) more to an authoritarian style of interaction with learners. On the other hand, teachers with no more than 5 years of experience are more likely to focus on children as independent subjects of the pedagogical process.

## REFERENCES

- (Abulkhanova, 1985; D.A, 2016) (G.A., 2010) (L.I, 2001) (G.S., 2013) (G.S., 1988) (S.I., 2014) (N.Y., 2014) (K., 1983) (A.D., 2007) (J, 2006) (A.S, 2019) (V.P., 2001) (V.P., 2014) (Karelina, 2000. ) (Rogers, 2000) (K, 1987) (Brief, 1991) (Griffith, 2005) (Hochwarter, 2005) (M., 2007) (Kohns J.W., 2006) (A., 1987) (Rotter, 2014) (T. W., 1994) (Gordeeva T. O., 2018) (Super D E, 1978)
- A., M., (1987). Motivation and personality.
- A.D., N., (2007). Mathematical methods of psychological research: analysis and interpretation of data. p. 392.
- A.S, P., (2019). Level of Acceptance of Responsibility as an Element Defining the Attitudes towards Children by Teachers of Preschool Educational Institutions. pp. 466-472.
- Abulkhanova, K., (1985). Typology of the personality activity. pp. 3-19.
- Brief, A. D. a. D. L., (1991). Resolving Ethical Dilemmas in Management.
- D.A, L., (2016). Concept of a motive and problems of qualitative motivation. p. 18.
- G.A., B., (2010). Choice in human life as a subject of systemological and psychological analysis. pp. 197-208..
- G.S., K., (1988). Selected psychological works. p. 304.
- G.S., K., (2013). Emotional burnout in professional pedagogical activity: protective and controlling aspect. pp. 175-181.
- Gordeeva T. O., L. D. O. E. N. R. E., (2018). Freedom and Responsibility Go Together: Personality. Journal of Research in Personality, Volume 73, pp. 63-74..
- Griffith, R. & B. & H., (2005). Measuring Competition.
- Hochwarter (2005). Linear and Non-Linear Effects and Affectivity.
- J, P., (2006). Moral judgment in a child. p. 480.
- K, H., (1987). Moral development and personality. pp. 27-30.
- K., M. (1983). Psychology of responsibility: monograph. p. 240.
- Karelina, A., (2000) . Psychological tests. pp. 144-152..
- Kohns J.W., P. M., (2006). Understanding responsibility. a self-directed learning application of the triangle model of responsibility, Volume 20, pp. 16-27. .
- L.I, D., (2001). Responsibility: typology and personal basis: monograph. Omsk. p. 192.
- M., K., (2007). Integrating the Triangle Model and Self-Determination Theory. 75(2), p. 359-382 .
- N.Y., M., (2014). Psychological structure of professional responsibility of pension specialists. p. 232.
- Rogers, (2000). Several important discoveries. pp. 58-65..
- Rotter, J. A. P. & M.-H., (2014). Exploring Political Corporate Social Responsibility in Global Supply Chains.
- S.I., K., (2014). Investigation of emotional burnout at teachers with different levels of responsibility. pp. 34-40. .
- Super D E, (1978). Career Development: Exploration and Planning.
- T. W., P. B. R. S. K. M., (1994). The Triangle Model of Responsibility. Psychological Review,. pp. 632-652. .
- V.P., P., (2001). Responsibility as a systemic quality of personality. Yekaterinburg. p. 118.
- V.P., P., (2014). Psychodiagnostics of personality. p. 215.

# Specifics of Studying Changes in Individual Case of Psychological Counseling

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## ABSTRACT

At the current development stage of researches in the field of psychological therapy and counseling, both scientific and professional therapeutic organizations and communities are largely involved in solving the following problems: accuracy of practice activities and determination of efficiency criteria for psychological therapy and counseling. In recent years, this problem is being tackled within the framework of pilot scientific projects in the Department of Psychological Counseling. Based on the analysis model of one individual case, the study on personal psychoanalytic counseling of five clients (three women and two men, age of 27-48) was carried out. Each of five counseling therapies lasted from 1.5 to 4.5 months. To represent an individual case, a client was chosen who demonstrated the most strongly pronounced level of anxiety during the previous and the sequent observation. The clients of psychological counseling filled in the psycho-diagnostic procedure forms before and after the process. They were warned that the process would be based on the psychoanalytic approach and all the sessions would be recorded. The results of the study were based on a time series plan with the involvement of quantitative and qualitative data processing methods.

**KEY WORDS:** INVESTIGATION OF AN INDIVIDUAL CASE, PSYCHOLOGICAL COUNSELING, TIME SERIES, QUALITATIVE STUDY, DISTRIBUTION-FREE METHODS.

## INTRODUCTION

Today, psychotherapy is a complex field that includes diverse practices and a wide range of theoretical approaches to the provision of psychological assistance. Relationship between theoretical principles and counseling practices has always been quite tense, which is associated with attempts to comprehend it from beyond and explain

the uniqueness of a plethora of individual practices in the context of psychological assistance.

One of the main issues regarding counseling was the question of its efficiency and possibility to estimate this efficiency in each particular clinical case. H. Kächele assumed that exactly this combination of a particular case and its efficiency was one of the stress points in course of psychotherapy development in the context of psychoanalytic tradition [19]. According to A. S. Lenz, D. L. Morgan, R. K. Morgan, W. C. Sanderson [21; 22; 24; 27] a sufficient number of socio-psychological, economic and scientific standards in the modern world entailed the need to revise the criteria for evidence of counseling practice efficiency.

When talking only about scientific standards, it is worth noting that academic psychologists consider the study based on the analysis of individual cases to be

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scientifically groundless and having low scientific status. However, N. P. Busygina, referring to such reputable authors as B. S. Bratus, F. E. Vasilyuk, L. Wittgenstein, S. Kvale and A. V. Yurevich, offers some solid arguments for this method [4; 5].

E. S. Kalmykova indicates the benefits of the analysis of individual cases in the framework of psychological counseling or psychotherapy [16]:

1. a deep and thorough study of an individual case in a counseling practice may raise doubts about the theory and lead to its refinement, completing or revision;
2. during the analysis of an individual case, a heuristically valuable technique may be worked out, which could be applicable for studying the method of providing assistance in the framework of a stricter empirical study;
3. the study of an individual case allows a thorough analysis of several rare, yet practically important phenomena;
4. the study of an individual case can be organized in such a way that data obtained will be fairly actual and reliable;
5. the analysis of an individual case can be an assistive instrument that, first, helps a theoretical framework acquire more "flesh", and second, helps theoretical statements get the applied relevance.

This opinion corresponds to beliefs of J. Brockmann, H. Kirsch, K. Dembler, D. König, I. de Vries, M. Zabolitzki, G. Silberschatz, J.M. Doran, C.E. Hill, W.B. Stiles, J.Z. Goldsmith [2; 7; fifteen; 29], who deem case researches to be a fairly complicated method that can clarify many processes observed in the field of psychotherapy and psychological counseling. This method allows carrying out a detailed analysis of changes that occur during the process of psychotherapy [7; 15; 29] and distinguish separate details of these changes, which are considered the results [11; 26]. In order to adapt and coordinate the results of an individual counseling case with the requirements of research based on the natural science paradigm, it is necessary to estimate this method's capacity and to provide specific contextual working knowledge instead of universal theoretical knowledge, which is usually not related to the context [11].

Thus, to this day, there remains some inconsistency between theoretical principles of scientists and practical activities of psychotherapists and counselors, who base their activities on provisions from guidelines and instructions related to various directions of counseling [23; 26], which imply that researches and processing of results are executed according to other standards. In order to increase the effectiveness of the estimating psychotherapy and psychological counseling, it is proposed to use coherently both qualitative (techniques of phenomenology and hermeneutics) [5; 17; 18; 25; 30] and quantitative methods (distribution-free methods of mathematical statistics) [10; 28] for processing research information.

Our study is aimed at scrutinizing the effectiveness of individual cases of psychoanalytically oriented psychological counseling, when clients with different anxiety degree get professional help in overcoming their problems associated with tension in their relations with friends and acquaintances [6; 14]. As part of the study, the paper presents the consistent use of both qualitative research methods and distribution-free methods of mathematical statistics designed to determine minor changes that occur in a fairly short time of work with clients.

The purpose of the study is to estimate capabilities of psychoanalytically oriented psychological counseling using the example of a single-case analysis with the implementation of quantitative and qualitative methods for processing research data. Hypotheses of the empirical study were the following assumptions:

- psychoanalytically oriented psychological counseling contributes to the reduction of personal anxiety degree of the client, which entails the decrease in tension in their social relations;
- the use of distribution-free methods of mathematical statistics and methods of qualitative analysis of data obtained via session recording allows detecting minor changes in manifestations of the client's problems.

The present research relates to the scientific theme of the Department of Psychological Counseling: "Research on Urgent Problems of Theory and Practice of Counseling Psychology", which was registered in 2018 (its state registration number in CITiS (Center of Information Technologies and Systems) is AAAA-A17-117121950077-9). This work explores the opportunities of studying individual cases of the psychoanalytic approach to counseling and psychotherapy of adults.

## MATERIAL AND METHODS

Participants of the research: The empirical study on anxiety manifestations involved 54 people (10 men and 44 women, aged 29-55) representing different educational organizations. In the course of the study, after some psycho-diagnostic procedures were performed, 5 people addressed the research organizers to express their intention to undergo counseling in order to discuss their problems related to broken relationships with friends or relatives. The characteristics of study participants are summarized in table 1.

The study presents individual psychoanalytic counseling that lasted 4 months (11 sessions) for a client (female, 44 years old) with severe personal anxiety.

Research procedure: The experimental study was conducted from 2018 to 2019. Data on anxiety manifestations and relationships with family and friends were collected via the following psycho-diagnostic techniques: anxiety assessment methods of Charles Donald Spielberger and Yuri Hanin; methods for

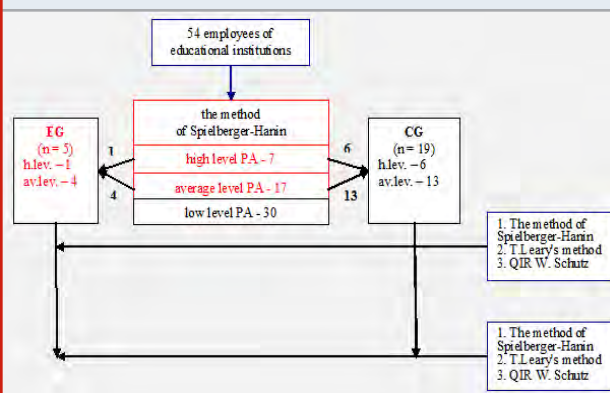
diagnosing interpersonal relationships (Timothy Leary); the Questionnaire of Interpersonal Relations (QIR) – a methodology of W. Schutz; categorization method for

session text senses [9]. Personal anxiety level (according to Spielberger-Hanin method) was the main criterion for dividing study participants into groups. The study procedure is shown in Fig. 1.

Table 1. Description of characteristics of the study participants.

Sex	Age range	Personal anxiety level (Spielberger-Hanin test)	Duration of psychological counseling
Men (n = 1)	30 years old	1 – moderate	10 sessions (1 session per week, 2.5 months)
Women (n = 4)	29-44 years old	1 – severe 3 – moderate	6-14 sessions (1 session per week, 1.5-4.5 months)

Figure 1: The procedure for examining an individual case of a client with severe anxiety.



Note. The following abbreviations are used in the figure: EG- experimental group, CG - control group, PA - personal anxiety, h.l.e.v. - high level (severe anxiety), av.l.e.v. - average level (moderate anxiety), l.l.e.v. - low level (mild anxiety),

To fulfill the experimental study, 5 clients who agreed to participate in psychological counseling made up the experimental group (EG), while the rest of participants with severe and moderate level of personal anxiety (n = 19) comprised the control group (CG). Only 3 of 5 clients from the EG gave their consent for the use of session records (except for the records of counseling) in the experimental study. In both the EG and CG, two measurements were executed with the use of three psycho-diagnostic methods. The EG had all sessions recorded for further qualitative processing. The following strategies were used for data collection: collection of quantitative parameters at both the beginning and end of psychological counseling and collection of qualitative parameters when recording all sessions held by a counselor. The transcription of counseling sessions was executed after the end of the sessions.

In course of the study, quantitative parameters were distinguished, which were represented by scale indicators of various psycho-diagnostic techniques. Words and

phrases spoken by clients about their anxiety and relationships with relatives, friends and acquaintances were defined as qualitative parameters. Those words were mentioned when clients described their state of mind and relationships in their stories or when answering questions during the counseling sessions. Psychoanalytically oriented counseling, which was executed on the basis of theoretical and practical principles formulated by Kachel H., Tome G. [19], A. N. Kharitonov [12; 13], R. J. Ursano, S. M. Sonnenberg, and S. G. Lazar [31], acted as the experimental impact. Counseling sessions lasted for 50 minutes and were performed like a direct interaction with a client who was sitting (the agreed frequency of sessions – once per week; breaks were discussed in advance; warning of the need to skip a session was 24 hours before the meeting).

The impact made by psychoanalytic counseling in order to reduce clients' personal anxiety level acted as an independent variable in the experiment. This fact determines the change in social relations of a client with their relatives and friends. Dependent variables were identified on the basis of a theoretical conclusion that clients' social relations are mediated by their level of personal anxiety and taking into account, first, tasks and objectives, which are fulfilled through psychological counseling, and, second, the possibility to study this impact in the framework of psychological assistance. The dependent variables were presented by: - level of personal anxiety of a client, as the main indicator associated with the request of customers. Personal anxiety characterizes a stable tendency to perceive a wide range of situations as threatening and respond to such situations with a state of anxiety (indicators: stress, anxiety, nervousness). Severe level of personal anxiety is directly related to the presence of a neurotic conflict, which in the context of social relations is supplemented by emotional and neurotic breakdowns.

- social relations, which are evaluated according to 8 types of relations depicted on the scales of the T. Leary methodology, as well as the assessment of relations in three areas of interpersonal needs: inclusion (I), control (C) and affect (A) according to QIR method of W. Schutz.



In each area the following aspects are taken into account: the expressed behavior of an individual (e), i.e. the intensity of personal behavior in this area is assessed; the behavior, that a person requires from others (w), i.e. a person assesses the intensity of others' behavior in relation to them (according to QIR method of W. Schutz). As a technique for processing qualitative information, the method of categorizing values is selected. This method allows estimating the manifestation of certain categories in a session text, which are encoded proceeding from the purpose of the study by a counseling psychologist.

The method of categorizing senses implies the reduction of long sentences in the text to simple categories of "+" and "-" types (presence or absence of a phenomenon) or a simple introduction of numbers/a scale from 1 to 5 for the indication of the severity of a phenomenon. In this case, these are the parameters of personal anxiety and social relations of a client. Thus, categorization makes a large text shorter and more structured reducing

it to several tables and figures. The categories under analysis were worked out before the counseling process based on theoretical constructs of personal anxiety and relationships started. The following parameters of the studied categories are identified: a) for category "personal anxiety":

For a quantitative analysis of the session texts, the following indicators are defined: - frequency of certain indicators being said (the number of words reflecting a certain indicator); - relative frequency of certain indicators (the ratio of frequency a certain indicator being said to the total amount of words in a text. Estimation of indicators and the experimental study itself were carried out on the basis of a methodology of single-case analysis, which was described as a possible design for a study by such authors as D. Campbell, V. N. Druzhinin [8; 20], N.P. Busygina [3; 4] and particularly in details by I.E. Zhmurin and V.V. Kuzovkin [32] as part of a possible study on psychological counseling and psychotherapy.

Indicator (words, phrases) - (nouns, adjectives, verbs)	Words and phrases spoken by a client that refer to: themselves (3 points)    others (2 points)    disclaiming those (1 point)
statements about tension, aggression, irritation, negative self-criticism, insult, offence, moral disapproval, guilt or threat, statements about mockery, deficiency, shame, embarrassment, humiliation, excessive emphasis on personal shortcomings or private details, or the threat thereof	
<b>b) for category "social relations":</b>	
Indicator (words, phrases) - (nouns, adjectives, verbs)	Words and phrases spoken by a client referring to: themselves (3 points)    others (2 points)    disclaiming those (1 point)
positive emotions, conversations, actions (for example: joy, satisfaction, good, kind, pleasant, etc.)	
negative emotions, conversations, actions (tension, horror, fear, anxiety, negativity, etc.)	

To prove the hypothesis of an empirical research on the influence of personal anxiety level on social relations of clients, the method of discriminant function analysis was used, which was implemented in IBM SPSS Statistics 25.0 software package. Information obtained at the beginning and at the end of the research was processed using the Wilcoxon T-test for both the experimental and control groups. To prove the impact of personal anxiety level on social relations of clients, the discriminant function analysis was used. All methods of mathematical statistics

used during the research were applied via statistical software package IBM SPSS Statistics 25.0.

## RESULTS

Description of data on psycho-diagnostic techniques used for the first measurement (based on data collected from 54 participants), which served as the basis for dividing the test subjects into the EG and CG. According to Spielberger-Hanin methodology, the following data

were obtained: a high level of personal anxiety was detected in 7 study participants (13.0%); a medium level – in 17 people (31.5%); a low level – in 30 people (55.5%). The study participants, who showed a low level of PA and belonged to the CG, were enticed into the second measurement executed according to psycho-diagnostic techniques after the psychological counseling was completed. According to method of Interpersonal Diagnosis of Personality (IDP), the data collected in the group of study participants with a high and medium level of personal anxiety showed that the following types of relationships dominate there (we indicate the first three places in trend hierarchy in the group): the 3rd trend is “exactingness – intransigence – cruelty” (9 people, 33.3%); the 1st trend is “dominance – power – despotism” (4 people, 14.8%); the 4th trend is “skepticism – contrariness – negativism” (4 people, 14.8%).

Table 2. Comparative analysis of the results by the Wilcoxon T-test according to the method for assessing anxiety of Spilberger-Hanin\*

	PA	SA
EG (n=5)	0.008	0.155
CG (n=19)	0.133	0.773

According to the method of IDP, in the group of participants with a low level of personal anxiety the dominant types of relationships are: the 5th trend is “flexibility – meekness – passive subordination” (8 people, 26.7%); 8th trend “sympathy – benevolence – self-sacrifice” (8 people, 26.7%); 2nd trend is “self-confidence – self-assertion narcissism” (5 people, 16.7%). Psychoanalytically oriented counseling was organized and conducted for the participants belonging to the EG. Data on three clients, who gave their consent to use information obtained during their counseling, are presented below: - the 1st client (female, 52 years old, high PA level), 11 sessions held (work proceeds). The data obtained during counseling of this client are presented in the work as part of a qualitative analysis. - 2nd client (female, 41 years old, medium PA level), 9 sessions held (work completed). - 3rd client (female, 34 years old, medium PA level), 14 sessions held (work proceeds).

Mathematical processing of data of the first and second measurements in both the EG and CG for the assessment of progress in two groups. The results of the first and second measurements in both the EG and CG were assessed using the Wilcoxon T-test for all indicators of all three psycho-diagnostic methods. The data of this analysis are presented in tables 2, 3, 4.

Table 3. Comparative analysis of the results by the Wilcoxon T-test according to the method of Interpersonal Diagnosis of Personality (T. Leary)

	1	2	3	4	5	6	7	8
EG (n=5)	0.045	0.009	0.014	0.029	0.122	0.013	0.144	0.311
CG (n=19)	0.224	0.699	0.138	0.099	0.148	0.048	0.186	0.669

Table 4. Comparative analysis of the results by the Wilcoxon T-test according to the QIR methodology of W. Schutz\*

	Ie	Ce	Ae	Iw	Cw	Aw
EG (n=5)	0.053	0.007	0.017	0.139	0.008	0.013
CG (n=19)	0.234	0.719	0.132	0.149	0.144	0.044

\*Note: values in bold type indicate significant differences in the groups determined by the Wilcoxon T-test from the 2nd and 1st measurements.

The results of the analysis by the Wilcoxon T-test allow concluding that clients have experienced significant changes in their PA parameter ( $p = 0.008$ ), which is not observed in the CG, where no significant difference was observed for any of the parameters.

The results of the analysis by the Wilcoxon T-test of data obtained in accordance with IDP method show

that the EG has significant changes in 4 of 8 indicators of relationship types. These changes are statistically important for such types of relationships as: the 2nd trend “self-confidence – self-assertion narcissism” ( $p=0.009$ ); the 3rd trend “exactingness – intransigence – cruelty” ( $p=0.014$ ); the 4th trend “skepticism – contrariness – negativism” ( $p=0.029$ ) and the 6th trend “trustfulness – obedience – dependence” ( $p = 0.013$ ).

Table 5. Results of discriminant function analysis according to psycho-diagnostic techniques for both the EG and CG

Indicators of psycho-diagnostic methods Methodology of T. Leary	Wilks' lambda	Lev. value
Real-self – 1st trend	,969	,452
Real-self – 2nd trend	,833	,010
Real-self – 3rd trend	,938	,197
Real-self – 4th trend	,586	,000
Real-self – 5th trend	,944	,220
Real-self – 6th trend	,602	,000
Real-self – 7th trend	,834	,110
Real-self – 8th trend	,669	,000
Ideal-self – 1st trend	,978	,540
Ideal-self – 2nd trend	,977	,552
Ideal-self – 3rd trend	,926	,139
Ideal-self – 4th trend	,786	,002
Ideal-self – 5th trend	,987	,711
Ideal-self – 6th trend	,942	,222
Ideal-self – 7th trend	,987	,711
Ideal-self – 8th trend	,650	,000
Partner – Real – 1st trend	,964	,389
Partner – Real – 2nd trend	,976	,541
Partner – Real – 3rd trend	,930	,156
Partner – Real – 4th trend	,893	,055
Partner – Real – 5th trend	,897	,057
Partner – Real – 6th trend	,896	,057
Partner – Real – 7th trend	,927	,145
Partner – Real – 8th trend	,886	,046
Partner – Ideal – 1st trend	,964	,389
Partner – Ideal – 2nd trend	,991	,790
Partner – Ideal – 3rd trend	1,000	,992
Partner – Ideal – 4th trend	,974	,509
Partner – Ideal – 5th trend	,998	,800
Partner – Ideal – 6th trend	,961	,420
Partner – Ideal – 7th trend	,998	,800
Partner – Ideal – 8th trend	,965	,488
QIR method of W.Schutz		
Ie – trend to be in a group of other people	,955	,049
Ae – trend to establish close relationships with others	,989	,755
Ce – trend to control 933 relationships ,with others	,043	,973
Iw – the desire of an individual to receive interest from others and to be accepted into their society	,497	
Aw – an individual wants to be engaged in profound and emotional relationships with others	,933	,043
Cw – trend to obey others in communication	,972	,497

According to the QIR methodology of W. Schutz, it should be noted that an increase in participants' indicators on scales Ie, Ce, Ae and a decrease in the indicators on the scales Iw, Cw, Aw were observed as the expected

(experimental) effect. This is caused by the peculiarity of interpreting data on the indicators specified by the author.

Table 6. Quantitative indicators of clients' comments in the process of counseling

category	indicators	Session number													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1st client Personal anxiety	of oneself (3 points)	11	12	9	8	8	6	4	3	3	4	3			
	of others (2 points)	8	7	8	5	5	5	3	2	1	1	1			
	disclaiming those (1 point)	4	3	5	2	2	0	2	2	0	0	1			
	average	7.7	7.3	7.3	5.0	5.0	3.7	3.0	2.3	1.3	1.7	1.7			
Social relations (negative)	of oneself (3 points)	9	7	8	5	6	3	2	2	2	3	2			
	of others (2 points)	7	5	5	6	5	5	3	4	3	3	3			
	disclaiming those (1 point)	4	3	3	4	6	5	2	4	3	3	1			
	average	6.7	5.0	5.3	5.0	5.7	4.3	2.3	3.3	2.7	3.0	2.0			
Social relations (positive)	of oneself (3 points)	0	2	0	3	4	3	5	5	4	5	6			
	of others (2 points)	1	0	0	0	2	2	1	3	4	2	4			
	disclaiming those (1 point)	0	0	0	0	0	1	3	1	2	3	3			
	average	0.3	0.7	0.0	1.0	2.0	2.0	3.0	3.0	3.3	3.3	4.3			
2nd client Personal anxiety	of oneself (3 points)	6	5	5	3	2	2	1	0	2	2				
	of others (2 points)	4	4	3	2	2	2	1	1	1	1				
	disclaiming those (1 point)	2	3	3	4	1	1	1	0	1	1				
	average	4.0	4.0	3.7	3.0	1.7	1.7	1.0	0.3	1.3	1.3				
Social relations (negative)	of oneself (3 points)	4	2	5	5	4	3	3	2	2	3				
	of others (2 points)	2	2	2	3	2	2	3	5	4	5				
	disclaiming those (1 point)	0	0	1	1	1	1	4	3	2	1				
	average	2.0	1.3	2.7	3.0	2.3	2.0	3.3	3.3	2.7	3.0				
Social relations (positive)	of oneself (3 points)	0	0	1	2	4	3	6	6	5	7				
	of others (2 points)	1	1	0	2	2	2	3	5	4	5				
	disclaiming those (1 point)	0	0	2	1	2	1	4	3	2	1				
	average	0.3	0.3	1.0	1.7	2.7	2.0	4.3	4.7	3.7	4.3				

3rd client																
Personal anxiety	of oneself (3 points)	6	5	5	6	7	7	6	3	2	2	1	1	0	2	
	of others (2 points)	7	6	6	6	5	8	8	4	4	1	0	1	1	0	
	disclaiming those (1 point)	4	3	3	4	4	5	1	0	1	1	0	0	2	0	
	average	5.7	4.7	4.7	5.3	5.3	6.7	5.0	2.3	2.3	1.3	0.3	0.7	1.0	0.7	
Social relations (negative)	of oneself (3 points)	9	2	5	5	4	3	3	2	2	3	4	2	0	0	
	of others (2 points)	7	6	7	9	4	2	3	1	1	1	2	2	2	0	
	disclaiming those (1 point)	3	5	2	4	5	2	4	3	2	1	0	0	1	1	
	average	6.3	4.3	4.7	6.0	4.3	2.3	3.3	2.0	1.7	1.7	2.0	1.3	1.0	0.3	
Social relations (positive)	of oneself (3 points)	2	1	1	2	4	3	6	6	5	7	9	9	4	7	
	of others (2 points)	1	1	0	2	2	2	3	5	4	5	6	6	5	8	
	disclaiming those (1 point)	4	0	2	1	2	1	4	3	2	0	0	0	2	3	
	average	2.3	0.7	1.0	1.7	2.7	2.0	4.3	4.7	3.7	4.0	5.0	5.0	3.7	6.0	

Figure 2: The dynamics of the first client's level of personal anxiety and social relations (negative manifestations).

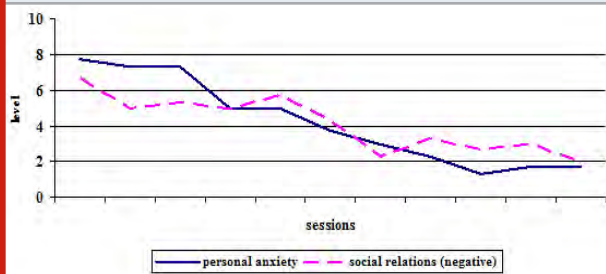


Figure 4: The dynamics of the third client's level of personal anxiety and social relations (negative manifestations).

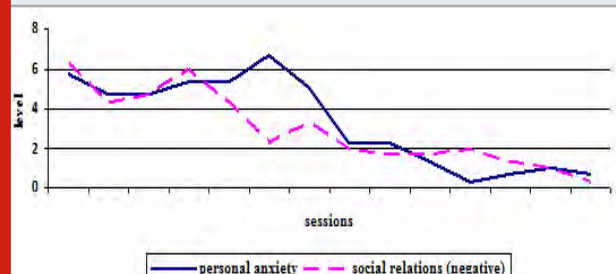
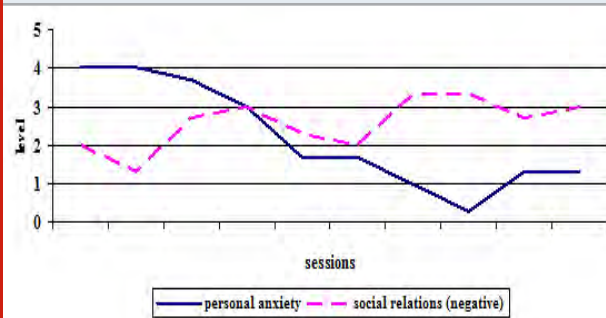


Figure 3: The dynamics of the second client's level of personal anxiety and social relations (negative manifestations).



This interpretation suggests that low performance (0-1 points) leads to the manifestation of deficit behavior of partners, while the highest performance (8-9 points) leads to the manifestation of excessive behavior of partners.

The results of the discriminant function analysis of the data on the EG clients for proving the hypothesis of an experimental study and a qualitative analysis of the results of psychoanalytic counseling. The results of the discriminant function analysis are presented in table 5.

The table gives important values of the discriminant function analysis in bold type, the cells of those are marked grey. For each social relations parameter under analysis, the table provides a Wilks' Lambda value and a value of the importance level, which allow evaluating the differences for each indicator of social relations in the EG and the CG. Thus, discriminant function analysis allows defining indicators of social relations that determine the difference between the groups of participants, and also observing effects of the criterion of difference between them (psychoanalytic counseling) on specific indicators of clients' relations. The results of discriminant function analysis showed the following dependences of indicators of clients' social relations from their PA level:

- the decrease in their PA level that occurs during the process of counseling affects the dynamics of 10 indicators of a client's social relations: "Real-self" – 2nd trend ( $p=0.010$ ), "Real-self" – 4th trend ( $p=0.000$ ), "Real-self" – 6th trend ( $p=0.000$ ), "Real-self" – 8th trend ( $p=0.000$ ), "Ideal-self" – 4th trend ( $p=0.002$ ), "Ideal-self" – 8th trend ( $p=0.000$ ), "Partner – Real" – 8th trend ( $p=0.046$ ), Ie – trend to be in a group of other people ( $p=0.049$ ), Ce – trend to control one's relations with other people ( $p=0.043$ ), Aw – an individual wants to be engaged in profound and emotional relationships with others ( $p=0.043$ ); - while PA level is decreasing, the dynamics of a client's Self-real is observed: it is fulfilled through the increase in self-confidence, independence and efficiency ( $p=0.010$ ); through the decrease in incredulity, suspiciousness ( $p=0.000$ ), increase in the level of respect, gratitude ( $p=0.000$ ), increase in the desire to take care of relatives, as well as in tolerance for their defects and ability to forgive them ( $p=0.000$ ).

At the same time, Ideal-self of a client changes less dynamically, which is quite expected. However, changes in the Ideal-self are manifested through exactly those components (relationship types 4 and 8) that also take place in the Real-self, which means that there is an increase in the identity of particular components and illustrates the growth of personal identity as a whole.

- when PA level decreases, clients start expecting tolerance for their shortcomings, as well as the ability to forgive them, from their partners, close friends and relatives ("Partner – Real" – 8th trend, ( $p=0.046$ ); - the decrease in PA level has an effect on clients' social relations, which is manifested through the decrease in the tendency to control their relations with others (indicator Ce,  $p=0.043$ ), a client's desire to be engaged in profound emotional relationships with others increases (indicator Aw,  $p=0.043$ ), a client's desire to be in a group of other people (indicator Ie,  $p=0.049$ ) arises more often. Qualitative analysis of session proceedings from psychoanalytic counseling of 3 clients. Table 6 presents results of the analysis of qualitative data on manifestation of both personal anxiety and social relations according to the selected criteria.

For clarity, the analysis of data obtained is presented in the form of graphs that allow comparing the dynamics of indicators of personal anxiety and of social relations (for example, negative manifestations of this indicator are considered) (see Fig. 2, 3, 4).

## DISCUSSION

The experimental study showed that psychoanalytic counseling causes a decrease in the level of personal anxiety of clients, which affects the reduction of tension in social relations with their friends and acquaintances. The coherent use of quantitative and qualitative methods allows recording these changes. The results obtained via the Spilberger-Hanin method in the study group of education workers allow noting that almost every second participant of the study has a moderate or severe

level of personal anxiety, which implies their poor preparedness for alarm reactions, permanent anxiety and no confidence in their future. According to the IDP methodology of T. Leary, workers with a high and medium level of personal anxiety showed that they have such qualities prevailing as irritability, criticality, intolerance to a partner's mistakes, as well as the desire for dominance, independence, which is accompanied by incredulity, suspicion, jealousy, susceptibility and rancor in social relations.

Thus, the group with a high PA level has those types of behavior in the social environment prevailed that are focused on the desire for dominance, irritability, criticality, intolerance to a partner's mistakes, incredulity, suspicion, susceptibility and rancor. This group almost does not use such relationship options as respectfulness, gratitude, desire to bring joy to a partner and has weakly manifested ability to mutual assistance, sociability, kindness and attentiveness. According to the IDP methodology of T. Leary, the group of participants with a low level of personal anxiety has such behavioral states prevailing as criticality, modesty, timidity and shyness, which indicates the willingness to manifest delicacy, tenderness, the desire to take care of close friends and relatives, as well as tolerance for others' defects and ability to forgive. Self-confidence, independence and general proficiency are peculiar to them.

It is unusual for this group to use such relationship options as: the desire for dominance, independence, the ability to take responsibility, self-confidence, independence, efficiency, suspicion, jealousy, resentment and vindictiveness. The results obtained by the QIR method of W. Schutz showed that the following trends are more pronounced in the group with a high level of PA: - low indicators for Ie ("the trend to be in the group of other people") were defined, which means that people from this group do not feel comfortable among people and try to avoid them. - rather low indicators for Iw ("the desire of an individual to receive interest from others and to be accepted into their society") allow concluding that people from this group tend to communicate with a small number of people.

- low indicators for Ae ("the trend to establish close relations with others") show tension when establishing close relations. Relatively to the group of participants with a low PA level, it should be noted that the results on all indicators of scales of W. Schutz's QIR method are in the middle range, which means that these indicators are the balanced. Thus, it can be considered that people with a low PA level do not have extreme manifestations of indicators of interpersonal relationships and they do not tend to attract others in relationships by all means, to excessively control relationships or affectively respond even in hard situations. This allows noting that the level of relations differentiation, selectivity and trust in relations are more peculiar to this group.

The results of mathematical processing of data obtained in the first and second measurements executed in both

the EG and the CG with the use of the Wilcoxon T-test according to the Spielberger-Hanin method of assessing anxiety allow noting the significance of changes in personal anxiety only for the EG. The dynamics of changes in a clients' PA level may be associated with the fact that this personality trait acts as an indicator of the assessment of various social situations and is responsible for a person's reactions to threatening situations in the shape of anxious state. In the process of working with clients, considerable attention was paid to discussing situations that trigger client's tension and anxiety and start their conflict with everyone involved in the situation.

For instance, in the process of working with clients, they discussed such situations concerning their relatives and friends, when clients had nervous breakdowns. As the result of this work, two clients experienced a decrease in their anxiety during the repeated discussions on problematic and conflict situations, and all the clients acquired ability to discuss the details of such situations.

The results of a comparative analysis of the data of T. Leary's methodology show that in the EG there were significant differences in 50% of the indicators of the relationship types. The presented changes should be more connected with the dynamics that occurred in the hierarchy of the presented types of clients' relations. Of course, this cannot be recognized as changes associated with the dynamics in relations of the clients themselves in their actual relationships with friends and relatives. At the same time, it should be noted that these differences allow noting the high dynamics of these indicators for such a small number of counseling sessions (11.3 sessions conducted on the average).

Despite this, it should be noted that in the process of work, changes in the hierarchy of types of social relations were manifested in the clients mentioning that they had become: less irritable and more tolerant to the mistakes of relatives and friends (for example: "... at least I can listen to a story about it..."); independence in relationships is manifested more often (for example: "... I often can just say what I want.... not what they expect from me..."); the level of distrust, suspicion, resentment has decreased (example: "...I can just tell...", "... I listen and .... for some reason I understand, especially now .... The last time it is so!").

The results of a comparative analysis conducted according to the QIR method of W. Schutz before and after psychological counseling in the EG and between the measurements in the CG allowed drawing up the following conclusions: 1. In the EG, more significant changes occurred on 4 scales of the methodology, while in the CG – only on one scale. The most significant changes (decrease) in the EG are observed on the scales Cw "need for control" and Aw "need for affect". This dynamics (the decrease in parameters of Cw) indicates that obtaining information by clients during the process of counseling significantly reduces the perception of

excessive control by their relationship partner, suggesting a more harmonious satisfaction of a person's need for mutual control.

According to N. Ackerman, N. Mc-Williams and O. Kernberg, a high level of control in relations gives rise to distrust in the relations of partners, tight control over their one's own emotions. Sometimes control can be expressed through moralizing or guilty statements like (examples from clients' description of their relationship): "...I'm very upset that he is not responsible..."; "...such thoughtful person like you should be more understanding..."; "...I would not have liked it if someone had treated me like that." Clients usually supplement their actions by explanations that they do right things: "I don't want to do this that, I just have to...", "...it should be scrupulously discussed, not a detail should be missed...". The decrease in data of the EG by the Aw indicator ("need for affect") suggests that the clients want to create satisfactory relationships with a partner based on love and positive emotions. Harmonization of these relationships is between the two poles: sensually deficient behavior (very low rates) and excessively sensual behavior (very high rates). Thus, R. Fairbairn believes that the decrease in higher Aw indicators ("need for affect") implies an important adaptive function, preparing a partner in communication to a corresponding reaction to external or internal events in relationships, to the contact of internal state of one partner with another's internal state. The partner's level of perception and intrapsychic representation (valued, integrated, and consistent with past relationships) plays an important place in this process.

2. Less significant changes, not in terms of importance, but in the scale of changes (clients of the EG), are defined on the Ie scale ("need for inclusion"). Increase in the indicator on the Ie scale suggests that expanding the partner's knowledge of the issues considered during the process of counseling activates the partner's need to build and maintain satisfactory relationships with another partner, which become the basis for the development of their interaction and cooperation. This implies that in the relationships of partners, the range of joint opportunities for overcoming problems will expand, the resistance to disintegrating effects of interaction will increase, the complementarity of relations will improve, and the partner will be encouraged to make positive changes. S. Bich, E. Sandin, K. O'Liri assume that a high level of demnad for establishing a psychologically healthy relationship with a partner can be expressed in the cohesion of these people, acceptance and encouragement of emotional expression of a partner, help in overcoming the conflict situation, direct support of partner's self-esteem, presence of trust-based relation to each other [1].

Thus, it should be noted that clients from the EG have statistically significant changes observed in most indicators of W. Schutz's methodology "Questionnaire on Interpersonal Relationship", which allows mentioning the possible impact of counseling on changes in personal

relationships with family and friends. A more thorough analysis will be carried out with the use of discriminant function analysis, which allows identifying the level of influence of one variable on changes in other variables. The results of the discriminant function analysis presented in Table 5 allows pointing out that the effect of a PA level of clients and the features of their real life social relations is identified, which confirms the hypothesis that a client's severe personal anxiety affects their social relations.

It appears in the growth of tension, in conflicts, excessive control of the client over their acquaintances, friends, in sensually deficient behavior with partners, in a low level of resistance to disintegrating factors of a conflict interaction, in the decline in complementarity of relationships and identity disturbance. However, for a more complete picture of the impact of reducing the level of personal anxiety on the social relations of clients, qualitative analysis of the results of counseling is to be executed.

A qualitative analysis of the proceedings of psychoanalytic counseling sessions provided for 3 clients, which was presented according to the criteria listed in table 6, allows mentioning that all the clients experienced changes manifested as the decrease in their PA level and, consequently, reduction of negative emotions expressed in their relationships, of tension that formerly occurred in actions and conversations with their friends and acquaintances. As part of the discussion, it should be noted that a longer interaction with clients reveals more visible manifestations of established patterns, which implies a certain prospect of this type of research and studies on more significant changes in clients with similar problems.

In addition, it is worth mentioning that the decrease in a PA level within the process of counseling and the observed tendency to decrease in the negative description of social relations of clients may be associated with the awareness of possible options for their own response and behavior when discussing hard and stressful situations. In the process of psychoanalytic counseling, a client perceives the atmosphere of psychotherapeutic relations as the safe one and detects attention of a counselor to their problems, which in turn increases the level of trust and enables safe discussion of social problems. Several phrases from sessions of the 1st client can be an example: "...now it is much easier for me to talk about it, although I'm not sure if everything is over" or "...for some reason I felt relief when I spoke this out... this is probably because you are here with me...". At the session, the client said that she was thinking about the problem more calmly then: "...I kept my mind off the problem", "...why did I felt such a stress....", "...something annoys me, but only now I finally said about this conflict".

At the last sessions, the client said that at that moment she felt the freedom in the discussion, and there was no fear of thinking about that: "... I feel relief and freedom, it's easy and possible to say...", "...even dreams don't

scare me, it's like watching a movie and then everything passes ...". The client associates her condition with her relationship with family: "Many things have become much easier for me now... probably this is because the negative emotions have gone...", "I did not notice what was happening in a conflict, probably because my tension was like a wall...", "...why I spoke to them like that, I could just listen to them after all."

## CONCLUSION

The following conclusions drawn up from the experimental study on changes in an individual case of psychoanalytic counseling are to be noted:

1. An experimental study on an individual case of psychoanalytic counseling, which was carried out to reduce the level of personal anxiety, confirmed that psychological counseling is an elaborately structured interaction, which is aimed to create favorable conditions for reconstruction of clients' early memories. This creates a space for changes in the client's level of personal anxiety within such a short period.
2. When the level of personal anxiety decreases during the process of psychoanalytic counseling, there appears a tendency to the reduction of client's negative descriptions of social relations, which is associated with the fact that as far as they discuss difficult situations with their friends and relatives, they become aware of possible options for their own responses and behavior.
3. The discriminant function analysis helped determine the dependence between a client's personal anxiety level and their social relations in real life. This proves the hypothesis that a high level of personal anxiety of a client affects their social relations, which is manifested in the increase in tension, conflict, excessive control of their acquaintances, friends, sensually deficient behavior with partners, a low level of resistance to the disintegrating effects of conflict interaction, worsening of complementarity of relations.
4. The coherent use of both distribution-free methods of mathematical statistics and methods of qualitative analysis of data from the records of counseling sessions allows one to identify small, but statistically significant changes in manifestations of a client's problem, as well as within a fairly short duration of psychotherapy enables estimating micro-changes in qualitative indicators that appear in a client's description of their hard relationships with their social group.

## REFERENCES

- (Dsm-5), Fifth Edition. 2013. Arlington, Va. American Psychiatric Publishing., P.992.  
304, Metodologiya Kachestvennyh Issledovaniy V Psihologii(2013)Uchebn. Posobie.  
362, Noss I.N. (2014) Kachestvennye I Kolichestvennye Metody Issledovaniy V Psihologii [Tekst] : Uchebnik Dlya Vuzov. – M. : Yurajt. –.



- A.N., Haritonov. (2002). Dusevnoe Zdorov'e Cheloveka – Duhovnoe Zdorov'e Nacii: Materialy V Vserossijskoj Nauchno-Prakticheskoj Konferencii Po Psihoterapii I Klinicheskoj Psihologii. M.: Izd. Instituta Psihoterapii. Semejnyj Psihoanaliz., Pp.58-60.
- Arlington. (1992). Va2013american Psychiatric Publishing.
- B., Flyvbjerg. 2006. Five Misunderstandings About Case-Study Research. *Qualitative Inquiry*. 12(2), Pp.219-245.
- Beliefs, Effects.Of Interventions Promoting Mentalization And Interventions Disconfirming Pathogenic. (2018). A Comparative Single Case Study Of Three Patients. *Clinical Psychology & Neuropsychology*.
- Bich S., Sandin E.. (2007). Model' Depressii Na Osnove Supruzheskoj Diskordantnosti. Semejnaya Psihoterapiya. Hrestomatiya., Pp.191-219.
- Brockmann J., Kirsch H., Dembler K.,König D.. (2018).. Effects.Of Interventions Promoting Mentalization And Interventions Disconfirming Pathogenic Beliefs. A Comparative Single Case Study Of Three Patients. *Clinical Psychology & Neuropsychology*.
- D., Kempbell. (2006). Modeli Eksperimentov V Social'noj Psihologii I Prikladnyh Issledovaniyah. – Spb.: «Social'no-Psihologicheskij Centr», P.392.
- Doran, J. M. (2016). The Working Alliance: Where Have We Been, Where Are We Going? *Psychotherapy Research*. 26, Pp.140-163.
- E.S., Kalmykova. 2012. Opyty Issledovaniya Lichnoj Istorii: Nauchno-Psihologicheskij I Klinicheskie Podhody. – M.: Kogito-Centr., P.182.
- E.V, Sidorenko. (2007). Metody Matematicheskoy Obrabotki V Psihologii. Spb.: Rech', P.350.
- Heyman R.E., Slep A.M.S., Beach S.R.H., Wamboldt M.Z., Kaslow N.J., Reiss D. (2009). Relationship Problems And The Dsm: Needed Improvements And Suggested Solutions. *World Psychiatry*. 8, Pp.7-14.
- Hill, C. E. In J. C. Norcross, L. E. Beutler, & R. F. Levant (Eds.). (2006). *Qualitative Research. , Evidence-Based Practices In Mental Health: Debate And Dialogue On The Fundamental Questions*. Washington, Dc: American Psychological Association., Pp.74-81.
- Kalmykova E.S., Mergentaler E., Stinson C.H. (1996). *Transkripty Psihoterapevticheskikh Seansov*. Psihologicheskij Zhurnal. 3, Pp.129-136.
- Kekhele H., Tome G. (2001) *Sovremennyy Psihoanaliz: Issledovaniya: Per. S Nem. / Obshch. Red. A. V. Kazanskoj*. – Spb.: Izdatel'stvo «Veip». – 304 P.
- Lenz, A. S. (2013). Calculating Effect Size In Single-Case Research: A Comparison Of No Overlap Methods. *Measurement And Evaluation In Counseling And Development*, 46, 64-73.
- Morgan D. L., & Morgan, R. K. (2009). *Single-Case Research Methods For The Behavioral And Health Sciences*. Thousand Oaks, Ca: Sage.
- N.P., Busygina. (2009). Nauchnyj Status Metodologii Issledovaniya Sluchaev. *Moskovskij Psihoterapevticheskij Zhurnal*., Pp.9-34.
- N.P., Busygina. (2013). Metodologiya Kachestvennyh Issledovanij V Psihologii. Uchebn. Posobie., P. 304.
- N.P., Busygina. (2016). Uchebnik Dlya Bakalavriata I Magistratury., P. 423.
- Otnoshenij, Diagnostika Mezhlichnostnyh. 2010. Psihologicheskij Praktikum.
- P., Lyuborski L. (2003) *Principy Psihoanaliticheskoy Psihoterapii*. – M.: Kogito-Centr. – 256.
- Piter, Eksperimental'naya Psihologiya: Uchebnik Dlya Vuzov2003spb. 2019.
- Planning., Operationalized Psychodynamic Diagnosis (Opd)-2. *Manual Of Diagnosis And Treatment*. 2019. 4-E Izdaniye. – M.: Akademicheskij Proyekt., P.454.
- Psihoterapiya., Model' Depressii Na Osnove Supruzheskoj Diskordantnosti(2007)Semejnaya. 2007. Hrestomatiya. 1, Pp.191-19.
- S., Kvale. (2003). Issledovatel'skoe Interv'yu. – M.: Smysl., P.301.
- S., Lenz A. (2015). Using Single-Case Research Designs To Demonstrate Evidence For Counseling Practices. *Journal Of Counseling & Development*. 93, Pp.387-393..
- S.V., Duhnovskij. (2010). Diagnostika Mezhlichnostnyh Otnoshenij. Psihologicheskij Praktikum., P.141.
- Sanderson, W. C. (2003). Why Empirically Supported Treatments Are Important. *Behavioral Modification*. 27, Pp.291-299.
- Stiles, W. B., & Goldsmith, J. Z. (2010). The Alliance Over Time. In J. C. Muran & J. P. Barber (Eds.), *The Therapeutic Alliance: An Evidence-Based Guide To Practice* (Pp. 44-62). New York, Ny: Guilford Press.
- The Working Alliance: Where Have We Been, Where Are We Going? 2016. *Psychotherapy Research*., Pp.26140-163.
- Ulanovskij A.M. Kachestvennye Issledovaniya: Podhody, Strategii, Metody// Psihologicheskij Zhurnal. – 2009. – Tom 30. – 2. – S. 18 – 28.
- Ursano R., Zonnenberg S. Lazar S. 1992. Psihodinamicheskaya Psihoterapiya. *Kratkoe Rukovodstvo / Pod Red. Professorov Belkina A.I. I S"Edina Si. M.: Rossijskaya Psihoanaliticheskaya Associaciya*., P.58.
- V.N., Druzhinin. (2003). Eksperimental'naya Psihologiya: Uchebnik Dlya Vuzov. Spb.: Piter., P.319.
- Zhurnal, Nauchnyj Status Metodologii Issledovaniya Sluchaev (2009). *Moskovskij Psihoterapevticheskij Zhurnal*. 2009., Pp.9-34.

# Organization of Teacher Training in the Context of A Competency-Based Approach In Modern Education Conditions

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## ABSTRACT

The article deals with the role of a professionally competent teacher in the intellectual and spiritual and moral development of the young generation of the XXI century in the conditions of reforming the national education system. Raising the level of professional training of teachers in the discourse of the main provisions of the competent approach is one of the narratives of the reforms in higher education. One of the factors ensuring the effectiveness of the teacher's work is his professional competence as the ability to self-realization in creative and innovative pedagogical activity on the basis of intellectual competence, possession of modern educational technologies and availability of a system of necessary personal qualities to organize a holistic educational process.

**KEY WORDS:** MODERNIZATION OF EDUCATION, QUALITY OF EDUCATION, PEDAGOGICAL PROCESS, COMPETENCE, COMPETENCE, PEDAGOGICAL ACTIVITY, MASTERY OF THE TEACHER.

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## INTRODUCTION

The social, economic, scientific and technical status of the state and the level of spiritual and moral culture of its population are directly dependent on the quality of training provided by educational institutions. Improving the competence of teaching staff is one of the fundamental factors in improving the quality of education in modern society. Formation of the professional and personal status of a teacher is a complex and continuous process, which does not end after graduation from a teacher training institution, but continues throughout the formation of a professional career.

Today we have the right to confirm that only a teacher can become professionally competent and sustainably motivated for the profession, and if the state and society ensure the prestige of the status of the teaching profession. The transition of domestic education to a competency-based professional model for the training of future specialists is a condition for its modernization, making it possible to remove the contradictions between the requirement for the quality of education imposed by the state, society, labor market, educational institutions and the results of teacher training.

**Main points:** Competent-oriented model of education is quite effectively implemented in the pedagogical practice of foreign countries, which includes such basic updated components as organizational structure, systems of goal setting and planning, objective assessment of the educational process. As the main educational result of the model are considered competences, the content of which is specified by professional and key competences. In the countries of Europe competence education is implemented in different variants, but they are united by factors that allowed its rapid implementation in the practice of professional training of future specialists, these factors are as follows:

- Reformatting the requirements for a graduate's level of training from knowledge, skills and abilities to training a competent specialist;
- Ensuring social adaptation of graduates and increasing their competitiveness in the labor market;
- Cooperation between educational institutions and employers aimed at solving the problems of the quality of vocational education;
- Recognition of educational documents as part of the creation of a single European educational space;
- Development of cooperation in the field of education aimed at ensuring its quality using modern technologies in the organization of training and education;
- Development of common criteria for assessing the quality of vocational training of future specialists.

The Bologna Process, which aims at reforming the higher education system, plays a special role in the implementation of these provisions [4, pp. 81-82]. Russia has embarked on the path of modernization of domestic

education by analogy with the European education system, ratifying the Bologna Declaration in September 2003 in Berlin. This document indicates that in the conditions of globalized world processes, the European education system acquires a world status based on the best cultural and scientific traditions. In the context of this document, most Russian universities have started to make the transition to a system of training: Bachelor's and Master's degree. To ensure this process, higher education standards were developed on the basis of a competency-based approach as a methodological basis for improving the quality of training of future specialists, including in education.

Today in science and practice of professional pedagogical education the competent approach is highly recognized, it is considered as a methodological construction of formation and development of social institute of pedagogical profession. In the conditions of modernization of the national education, addressing the problems associated with the implementation of the competency-based approach model is determined by the development of competencies of two subjects of the pedagogical process: a teacher and students in their symbiosis. Issues related to the competence approach are reflected in the works of V.N. Vvedenskiy, E.V. Bondarevskaya, A.A. Derkach, I.A. Zimneya, N.V. Kuzmina, A.K. Markova, N.V. Myasishev, L.A. Petrovskaya, A.V. Khutorsky, V.D. Shadrikov and other researchers.

Competence means a set of problematic issues in which the individual is sufficiently informed, endowed with knowledge and not without empirical experience in the implementation of a particular activity. A person who is competent in this or that sphere has adequate and important information, required abilities to carry out actions in this sphere, which allow making reasonable and argumentative judgments and act effectively in this sphere.

An integral element of the competence is also personal qualities that are conducive to the self-realization of the person in solving a certain range of issues and problems, in qualitative and creative actions to resolve them. Competence is regarded as an individual's possession of the relevant competence or a group of competences, which includes positive motivation for the object of the activity being performed. Thus, a competence should be understood as a given, necessary imperative for a teacher's professional training, while competence should be understood as an existing, accomplished and qualitatively personal acquisition of it [7, p. 21].

The competence of a teacher is formed and developed in direct experience and practice based on the available knowledge. In this regard, one of the important conditions for the professional training of teachers is their desire for constant self-education and self-learning. Today we are talking about the need not so much to provide ready-made information to students, as to teach them to find it on their own, which means "learn to learn". The ability of a future teacher to independently generate

meanings, judgments, solutions to certain problems will contribute to the future formation and development of his competence in a number of pedagogical tasks, including creative and innovative character.

It is important to concretize educational competences taking into account the requirements for the level of training of students for each educational area, discipline, level of education in the context of the principles of systematic and continuity. Selection from the point of view of expediency and importance of educational competencies is carried out on the basis of priority target goals in modern education, taking into account the existing social experience of students, their abilities and capabilities to perform various types of practice-oriented actions as an important factor of self-realization to the living conditions in modern society.

In modern pedagogical science, the notion of "professional competence", which is a defining result of the professional work of a teacher, has become widespread. It includes not only the system of his knowledge, skills and abilities, but also the personal qualities of the teacher, the vector of his self-realization in the profession, aspirations for self-education, the ability to organize his own creative and innovative activity. The introduction of the definition of "professional competence" is conditioned by the integrative characteristic of its essence and the breadth of its content; it includes such notions as qualification, professional abilities and personal qualities, professionalism, professional orientation and others [2, p. 20].

V.N. Vvedenskiy identifies the following types of professional competence of a teacher:

1. Intellectual and pedagogical competence, which is expressed in the ability to acquire knowledge, to find necessary information for the organization of innovative activity, in the use of available knowledge for regulation and self-regulation in establishing pedagogically appropriate relationships with the subjects of the educational process.
2. Communicative competence- personal quality of a teacher, which is manifested as a result of professional development, the components of which are adaptability as emotional stability, leadership, construction of direct and feedback communication, culture of speech, tactfulness and sensitivity, ability to organize conflict-free communication.
3. Informational competence includes the ability of a teacher to acquire general cultural and scientific information, information about students and their parents, the generalization of good pedagogical experience.
4. Regulatory competence of a teacher is aimed at managing his or her own activities. It includes abilities for goal setting, planning, sustainable activity in achieving results, their evaluation and reflection. Moral values are the mechanisms of activity, and in this regard, the structure of professional competence of the teacher includes

his fundamental goals and values. Pedagogical reflection serves as professional self-development and self-realization.

5. Operational competence shall be determined by the system of actions of a teacher which are appropriate for organizing and carrying out professional activity. In connection with the types of pedagogical work, the following competences are singled out: subject-methodical, design and technological, prognostic, organizational, expert [2, pp. 21-22].

In the context of the problem of preparing future teachers for the profession in the context of the competence approach, the statements of A.K. Markova are of particular value, which defines the types of competence of a teacher, linking them with the effectiveness of their manifestation in the activities carried out in the profession:

1. Special competence as the organization of qualitative and effective performance of pedagogical activity, design of the career in a profession;
2. Social competence - carrying out group or collective activities on the basis of cooperation, using interactive methods in pedagogical communication;
3. Personal competence - establishing barriers to personal deformation in the profession, the ability to improve oneself, the obligation to perform professional duties; responsible attitude towards one's own professional work;
4. Individual competence - use of methods of creative self-actualization, manifestation of individual style of activity, striving for personal growth, resistance to professional aging [6, p. 34].

In forming the professional competence of a teacher, researchers emphasize the formation of his personal qualities. Organizational personal qualities include purposefulness as the ability to set goals and a clear desire to achieve them; work ability as a personal quality, which is characterized by the manifestation of endurance in a long immersion in the work with achieving effective results; persistence as a manifestation of will in the implementation of the goal, despite the difficulties encountered; independence as the ability to carry out activities, relying only on their own forces, without the help of "outside"; disc. The communicative personal qualities of the teacher include the ability to adapt in a difficult situation, objective assessment of the conflict situation and finding a compromise solution to its exit; easy establishment of contacts with the subjects of the educational process on the principles of dialogue communication, empathy and tolerance, the desire to find a friendly attitude to themselves on the basis of attraction; the ability to listen to the "other", to show tactfulness, the ability to take the initiative in communication [3, p. 34].

Necessary and determining component of a teacher's professional training is his methodical competence, which at the same time serves as a prerequisite for the effectiveness of a holistic pedagogical process. This

concept is not unambiguously interpreted. Methodological competence is defined as a teacher's operating methods of organization of training, innovative ways of transferring knowledge, skills and abilities to students (N.V. Kuzmina); as a personal characteristic of a teacher, which is expressed by orientation to the profession as a value in symbiosis with professional knowledge, skills and abilities (T.V. Syasina); as an integrative education of teacher's qualities in a systematic relationship with methodological culture and methodological training, experience and orientation to creativity in professional activity (T.A. Zagrivnaya); as a system of possession of teaching methods and professional personal qualities in the organization of educational process (T.S. Mamontova) and others.

In the pedagogical literature it is noted that the methodological competence is a developed system of knowledge on the specific process of organizing training in this or that discipline. At the same time, today it is recognized as competent a teacher who not only has a sufficiently high level of knowledge of the methods of teaching discipline, but also is well aware of the content of existing and recognized methodological systems and programs. At the same time, he is interested in learning about them, objectively analyzes their merits, determines his attitude to the choice of the most effective methods on the basis of analysis and objective evaluation, and is ready to apply them [8, pp. 10-11].

Such fundamental components as cognitive, activity and social-personal components are highlighted in the structure of teachers' methodical competence. The cognitive component is defined by the complex of the teacher's methodological knowledge and its value for his professional and personal growth. The activity component includes a teacher's ability to carry out various types of methodological activities, their modification on the basis of reflection and self-assessment of the results of his/her own activity. The social-personal component assumes the necessary personal qualities set by the parameters of methodological activity in the context of active interaction with the subjects of the educational process.

Methodological competence and pedagogical skills of teachers are interrelated and interdependent concepts. A.S. Makarenko pointed out that the pedagogical skill implies knowledge about specific features of the pedagogical process, the ability to "organize, build and set in motion". He noted that the teacher's skill is formed and developed on the basis of empirical experience acquired by the teacher in specific and diverse practical activities. The scientist noted that comprehension of the mysteries of pedagogical skill is available to every teacher if he is interested in purposeful self-development [5, p. 105].

Y.P. Azarov considers the skill of the teacher in terms of his professional potential. He defines the mastery of a teacher as an integrative personal quality, as the art of teaching and raising children at a high level with his

constant striving to improve professionalism. The scientist notes that a teacher - master - is a person who has a high personal and professional culture, deep knowledge of his discipline, interested in scientific discoveries close to the subject being taught, well versed in psychological and pedagogical issues, possessing modern methods and technologies in organizing the educational process and teaching methods [1, p 46].

## CONCLUSIONS

One of the characteristic features of the educational process is the provision that there is an active interaction between two subjects of "teacher-tutor" and "pupil-pupil". On this basis, one of the criteria for a teacher's professional competence is the personal development of his or her pupils. The teacher as a potential "carrier of pedagogical essence", passing through self-realization and self-improvement in pedagogical work, has a positive impact on students. In this regard, it can be argued that the indicator of professional competence of a teacher is the level of education and upbringing of his students. Formation and development of professional competences of a teacher is a complex and long-term process, success of which depends on creation of necessary pedagogical conditions. Such conditions may include the following:

- Expansion of the set of knowledge, skills and abilities, the level of psychological and pedagogical literacy in the context of modern requirements to the teacher;
- Creation of an adequate image of "I am a teacher" as one of the main parameters of professional self-consciousness necessary for the development and implementation of the model of personal development of a teacher, the formation of individual style of pedagogical activity;
- Forming competencies for self-governance and internal control over one's emotional states;
- Mastering the skills of self-diagnosis of the level of personal development and professional attitudes, emotional and value attitude to the profession;
- Awareness of the importance and value of interaction with the subjects of education based on humanistic principles, creating a conflict-free and comfortable environment;
- Usage of interactive methods and technologies in organizing the educational process;
- raising the scientific and methodological status, participation in scientific and practical conferences, competitions of pedagogical skills, innovative projects.
- Realization of a competency-based approach in pedagogical sphere imposes completely new requirements on the teacher, the acquisition of fundamentally new educational experience, significant changes in professional outlook, attitudes, behavior and communication. The competent approach focuses on the creation of innovative educational environment enriched with modern pedagogical ideas and concepts, which

implies its organization and functioning in such a way that it contributes to the emergence of innovative pedagogical experience, stimulating new approaches and technologies in the organization of the educational process.

## REFERENCES

- (Azarov, 1971) (V.N., 2004') (Voloshina, 2013) (Gluzman, 2017) (Makarenko, 1985) (Markova, 1996) (Shevchenko, 2013) (Shkerina, 2004).
- Azarov, D., (1971). Mastery of tutor / D.P. Azarov. p. 164.
- Gluzman, N., (2017). Foreign experience of pedagogical professionalism formation / N.A. Gluzman. Problems of modern pedagogical education, 56(2), pp. 79-88.
- Makarenko, A., (1985). Ped. Comp. 8(4), p. 236.
- Markova, A., (1996). Psychology of Professionalism. International Humanitarian Fund "Knowledge", p. 308.
- Shevchenko, N., (2013). Cultural aspect of professional teacher training. LAP LAMBERT Academic Publishing, p. 168.
- Shkerina, L., (2004). Monitoring the quality of professional and pedagogical training of future teachers in a teacher training college: educational-methodical manual. Krasnoyarsk State University, p. 244.
- V.N., V. (2004). Professional competence of a teacher: Manual for a teacher. Petersburg branch of the Enlightenment Publishing House, p. 159.
- Voloshina, T., (2013). Formation of entrepreneurial qualities of pedagogical university students in the process of interactive learning: monograph. Karelian State Pedagogical Academy, p. 222.

# Development of Systematic And Self-Reflection of Students by Training Course

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## ABSTRACT

Reflection undergoes significant qualitative changes throughout a human's life, starting to shape in primary school age. Self- and systematic types of reflection are the core ingredients that define career success for students. Self- and systematic reflection are described by sophisticated orientation of consciousness of a human to the environment and oneself, what makes them different from other reflection types: quasi-reflection, areflexia and introspection. A training course is used as a tool to help tertiary students develop reflection skills. The course, including art therapy techniques and possible problem situations, which can be faced in practice, proved its effectiveness. Students of psychological and pedagogical departments took part in the study. On completion of the training, students revealed significant improvement on the scales of personality and systematic reflection; there were no meaningful changes on the scales of quasi-reflection and introspection. Further refining of the proposed curriculum is planned in order to reduce non-constructive types of reflection – quasi-reflection and introspection.

**KEY WORDS:** REFLECTION, SELF-REFLECTION, INTROSPECTION, SYSTEMATIC REFLECTION, QUASI-REFLECTION, AREFLEXIA, TERTIARY STUDENTS, TRAINING COURSE.

## INTRODUCTION

Plenty of philosophers have paid attention to the problem of self-reflection. Nowadays, it has become a matter of study in theoretical and applied psychology. Usually, the problem of self-reflection is put under scrutiny from primary school age. It is driven by the development of cognitive abilities and their success, regarding capability to analyze and grasp the content. One of the branches in psychology investigates reflective practices in education [1-5]. Reflection is an amount of attention that people pay to themselves, their consciousness. It is a complicated

psychological formation, the discovery of which in mentality refers to primary school age [5]. Self-reflection allows a person to find their place in the world and transcend the boundaries of determinism [6;7]. Success of future psychologists and teachers dwell on the level of development of various types of reflection [8].

The following main types of reflection can be noted: self-reflection, quasi-reflection, areflexia, systematic reflection and introspection. Self-reflection begins to appear, as a rule, in late teens [9-10]. It reduces proneness to conflict of a person [11-12] and facilitates personality integration [10]. Development of self-reflection is crucial for students to tackle problem-based situations and make decisions that may be not apparent. Thus, one of our objectives is to teach students self-control and self-regulation of their activity, which contribute to self-correction, self-development and ability to find ways out of tight corners [10;13]. Systematic reflection helps a person gain a new perspective and obtain more objective picture, matching the focuses on the subject and the object.

## ARTICLE INFORMATION

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Advanced systematic reflection is a must for successful future of psychologists in the questions of counseling, treatment and assessment. Systematic reflection sustains adaptability in professional environment of personality and facilitates self-determination, personal freedom and independence of social approval. There are two more types of reflection that are distinguished by orientation of consciousness – introspection and areflexia. Introspection, as a “soul searching”, implies a focus on one’s feelings and state. It can become a ground for aggravation of mental health since fixation on negative experience and distress symptoms push a person deeper in depression, etc. Whereas, areflexia is characterized by concentrating on external intentional object and poor self-control.

This negatively affects a psychologist as a professional since it can aggravate state of a patient who is in crisis and seeks support of a specialist. Quasi-reflection is the last type of reflection to be discussed. Quasi-reflection does not refer to the reality and alters focus on an object that is outside of the immediate situation. Distraction from the present and withdrawal to their fantasies are not always productive for a professional, hindering ability to face and deal with obstacles within an optimum time [14-17]. Tailor-made training program includes various exercises and techniques to help students of psychological and pedagogical majors develop self- and systematic reflections.

2. Materials and methods. The study on self- and systematic reflections was conducted in the period from 2016 to 2019. 69 students of psychological and pedagogical major studying in Moscow universities (Russian State University for the Humanities, Moscow Region State University) participated in the work. The age of the students under test ranged from 18 to 21 years. The goal of the study was to develop self-reflection in tertiary students by a specially designed author’s training. The following objectives were set:

1. identification of reflection types of students;
2. design of the training on the development of self-reflection;
3. reflection;
4. identification of significant changes in the level of self- and systematic reflection of students of psychological and pedagogical majors.

The work drew on the methods of O.I. Kayasheva “Level of self-reflection” [10], Questionnaire “Differential type of reflection”, designed to diagnose types of reflection (systematic reflection, quasi-reflection and introspection) by D.A., Leontyev, E.M. Lapteva, E.N. Osin and A.Zh. Salikhova [14-15]. For mathematical data processing, elementary descriptive statistics (mean or arithmetic mean value  $M$ ) and the Wilcoxon T-test were used to compare results measured under two different conditions on the same sample of subjects.

## RESULTS

According to the first objective of the study, there were

identified types of reflection for students of psychological and pedagogical majors. The methodology “Level of self-reflection” was instrumental in determining a high level of self-reflection in 13.04% and an average level in 86.96% of students. The results of the questionnaire “Differential type of reflection” (mean values on the scale of systematic reflection – 30.1, on the scale of quasi-reflection – 27.5, on the scale of introspection – 23.3) showed the need for additional development of systematic reflection in students with training tools. The development of self-reflection was also included in the objectives of this work.

Figure 1: An example of a resource art-therapeutic technique using colored wool.



We developed a training program on the development of self- and systematic reflection in students, which involved four meetings with group members (the work was carried out with five student study groups (69 participants in total)). During the study, there were used various visual materials and tools (wax crayons, paints, paper of A4 and A3 size, sets of photographs on various topics, film playlist, colored sand, etc.). The program consists of 3 stages: introductory, main and final.

Figure 2: An example of a resource art-therapy using colored sand, wax and felt.



Introductory stage (1 meeting). At the first stage, the participants were introduced to the features of the training. In addition to warm-up exercises, resource and reflective art therapy techniques were used (Self-portrait, My Strengths and Weaknesses, Resource Photography, Garden of My Soul) [16]. In addition, participants were asked to work with parables (“Two Friends”, “Everything



is in Your Hands”, etc.). At the introductory stage, the participants’ attention was focused on their psychological characteristics, on how others perceive them, what are the differences in self-perception and perception of the participant by other people.

Figure 3: Students’ drawings made at the training.



The main stage consisted of 2 meetings. At the second stage, the exercises and techniques offered to the participants became more complicated. The coach’s goal was to facilitate the objectivity of the participants’ perspective on themselves in difficult professional situations [13]. It was also planned to identify strengths and weaknesses of the students to correct them and to strengthen the parties necessary for further successful professional activities. Group art-therapy was proposed (“Wall mural”, “My inner world and reality”, “My profession and my choice”, “Mandala”, “Sand painting”, etc.); watching films about people dealing with intrapersonal conflicts and interpersonal ones (“Bez svideteley” (Without Witnesses), “Makeup”, etc.); figurative associative cards (“Fire flickering in a vessel ...”), role playing of parables (“Traveler”, “Nail”), phototherapy, etc.).

Figure 4: Sand painting from the main stage.



Figurative associative cards are an additional tool in the professional activities of psychologists and are widely used in trainings. The set “Fire flickering in a vessel ...” by T. Ushakova is represented by 16 stencil cards and 48 background cards. The purpose of using these cards: work with the self-concept of a person, their ideas about themselves; study of personality traits - boundaries, openness-closedness, flexibility-rigidity, etc. A vessel is a metaphor for a person and their condition, the background is a person’s environment. The choice of a vessel by a participant, who is similar to it, and the story about the vessel help them to realize their qualities and traits. The choice of filling for the vessel allows them to identify possible intrapersonal conflicts, self-rejection, the issue of self-understanding, violation of the integrity of the self-image and others. The background chosen by the participants symbolizes the social environment and the peculiarities of its perception.

Figure 5: Group mandala with the use of colored sand.



The drama-therapeutic parables “The Traveler” and “The Nail” offer participants various results of a plot set by a specialist. A parable “The Traveler” allows the main character to reflect on the basic problems of life, non-constructive lifestyles and coping strategies. The parable reveals unresolved internal conflicts, a person sees what their torpor or assuming unnecessary obligations and inability to delegate them to other people may result in. “Nail” is a parable-provocation in which a passer-by gets a chance to observe a rather absurd and uncomfortable situation, which is felt differently by family members: the victim remains in the role of the victim and has no motivation to change anything in the life, but their relatives and friends remain ignorant and merely watch what is happening (which can be narrowed down to the phrase of the grandmother from the parable: “She does not hurt enough to get up and leave”).

The final stage (1 meeting) summarized the gained experience and its application. There were conducted exercises “Who am I and what am I like?”, “What do others think of me?”, “What do I want for myself and others?”, “What future do I plan?”, etc. A purposeful analysis of themselves and their place in the system of interpersonal relations and the future professional world provides participants with the opportunity to work with

their resources, strengthening professionally important aspects and timely correcting those that will impede successful entry into the profession.

After the training, the participants underwent repeated diagnostics (the methods “Level of self-reflection” and the questionnaire “Differential type of reflection”). To solve the third research problem, aimed at identifying significant changes in the levels of self- and systematic reflection in students, the Wilcoxon T-test was used for mathematical data processing. The results showed that: the obtained empirical value of Temp is in the zone of significance in terms of self-reflection (Temp = 151, at n = 69) and systematic reflection (Temp = 149, at n = 69). There were no significant changes in introspection and quasi-reflection, which suggests the further development of training programs, including lowering the levels of non-constructive types of human reflection - quasi-reflection and introspection.

Figure 6: Individual drawing with inclusion of colored sand.



## DISCUSSION

Training is one of the cross functional methods of deliberate changes in psychological phenomena, based on the principles of activity, creativity, awareness and subject-to-subject interaction (i.e. partner communication) [17-19]. The training program was aimed at developing self- and systematic reflection of students studying psychology and education sciences

Figure 7: Examples of authors’ materials for phototherapy.

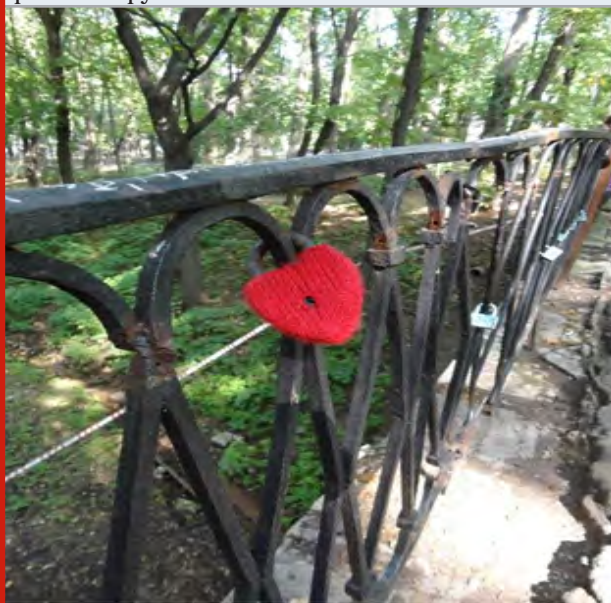


Figure 8: Example of a group mandala of students (combination of drawing and collage).



(psychology of professional activity, clinical psychology, special psychology and pedagogy). The mean values M before and after the training on the types of reflection of students and the standard deviation  $\sigma$  are shown in table 1.

Table 1. Mean value M before and after the training on the types of reflection of students and standard deviation  $\sigma$ .

Scale	M (before training)	M (after training)	M (mean value according to the authors of the questionnaire)	$\sigma$
Systematic reflection	30.1	35.2	39.58	5.15
Quasi-reflection	27.5	26.4	25.11	5.68
Introspection	23.3	21.1	27.39	5.69

Figure 9: Example of mandala with decorative materials.



The proposed training proved to be effective according to the results. The mean value *M* grew for systematic reflection and decreased for quasi-reflection and introspection. Meaningful changes were confirmed with the Wilcoxon T-criterion on the scale of self- and systematic reflections.

## COCLUSION

The conducted work lead to the following conclusions:

1. Reflection, as a reference to self-consciousness, is a complex psychological phenomenon, the substantive aspects of which are reflected in various approaches of researchers. Reflection contributes to shaping attitude and to being able to reach the limits of existing determinants. Reflection contributes to the control and objective perception of one's life.
2. The main types of reflection are self-reflection, systematic reflection, quasi-reflection and introspection. In positive context systematic reflection is understood, whereas in negative context, quasi-reflection and introspection are understood since the latter reduce socio-psychological adaptability of an individual and scale up the risk of developing mental health disorders. Systematic reflection appears to be one of the complex forms of reflection and facilitates to take a mature position in professional activity, combining the contradictions of subjective and objective perspectives. Self-reflection drives an active scrutiny of self, which reveals itself in tight moments when students take decisions and fully accountable for them as a future specialist. Development of self-reflection reduces the degree of internal conflicts of personality and promotes its integrity.
3. Our tailor-made training program sustains shaping of constructive reflection types – self-reflection and systematic reflection. This training consists of 3 stages and uses art-therapy (drawing, bibliotherapy, acting) problem situations that may be faced in future counseling. Efficiency of the program was proved with the Wilcoxon T-test: meaningful changes in the

level of self- and systematic reflections of students were obtained.

4. Development of self- and systematic reflections is vital for future professional success. They contribute to attainment of self-understanding, objective perception of themselves in difficult situations that are driven by internal and external conflicts. It is necessary to work with students to reduce non-constructive types of reflection - quasi-reflection and introspection.

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## REFERENCES

- (05.01.2020)., Oprosnik «Differentsial'nyy tip refleksii». Entsiklopediya psikhodiagnostiki. <https://psylab.info>.
- A.V. Karpov (2004). Psikhologiya Refleksivnykh Mekhanizmov Deyatel'nosti (Moskva: Institut Psikhologii Ran,).
- D.A. Leont'yev, Ye.N. Osin (2014) Refleksiya «Khoroshaya» I «Durnaya»: Ot Ob"Yasnitel'noy Modeli K Differentsial'noy Diagnostike. Psikhologiya. Zhurnal Vysshey Shkoly Ekonomiki, 11(4), Pp.110-135.
- I.N. Semenov, S.Yu. (1983) Stepanov, Problema Predmeta I Metoda Psikhologicheskogo Izucheniya Refleksii. Issledovaniye Problem Tvorchestva., Pp.154-182.
- I.N. Semenov, S.Yu. Stepanov (1887) Refleksiya V Organizatsii Tvorcheskogo Myshleniya I Samorazvitiy Lichnosti. Voprosy Psikhologii,83, Pp.35-44.
- M. Walker, R.A. Mann.(2016) Exploration Of Mindfulness In Relation To Compassion, Empathy And Reflection Within Nursing Education. Nurse Education Today., 40, Pp.188-190.
- M.G. Kuczewski, M.P. Mccarthy, A. Michelfelder, E.E. Anderson, K. Wasson, L. Hatchett. (2014) «I Will Never Let That Be Ok Again»: Student Reflections On Competent Spiritual Care For Dying Patients. Academic Medicine: Journal Of The Association Of American Medical Colleges. 89(1), Pp.54-9.
- N.N. Vasil'yev (2007). Trening Professional'nykh Kommunikatsiy V Psikhologicheskoy Praktike (Sankt-Peterburg: Rech.
- N.Yu. Khryashcheva (2007) Psikhogimnastika V Treninge (Sankt-Peterburg: Rech.
- O.I. Kayasheva (2015) Art-Terapiya: Teoriya I Osnovnyye Metody V Psikhologicheskoy Praktike (Sankt-Peterburg:

Nits Art.

O.I. Kayasheva (2015) Razvitiye Lichnostnoy Refleksii Kliyentov V Protsesse Psikhologicheskogo Konsul'tirovaniya I Psikhokorreksii (Sankt-Peterburg: Nits Art.

O.I. Kayasheva, G.G. Kravtsov (2006) Lichnostnaya Refleksiya Kak Vozrastnoye Psikhologicheskoye Novoobrazovaniye. Vestnik Rgggu. 1, Pp.116-125.

O.I. Kayasheva, M.B. Pozina (2019) Development Of Personal And Intellectual Reflection In University Students In Challenging Learning Situations. Revista Espacios.. 40(33).

O.Kayasheva, Z. Khanova. (2019) The Role Of Psychology Students' Reflexivity In Securing Professional Success. Eurasian Journal Of Biosciences. 13, Pp.2051-2056.

Quinton, S., & Smallbone, T. (2010) Feeding Forward: Using Feedback To Promote Student Reflection And Learning - A Teaching Model Innovations In Education And Teaching International. 47(1), Pp.125-135.

S.L. Rubinshteyn (2003) Bytiye I Soznaniye. Chelovek I Mir (Sankt-Peterburg: Piter.

T. Blakemore, K. Agllias (2019) Student Reflections On Vulnerability And Self-Awareness In A Social Work Skills Course. Australian Social Work, 72(1), Pp.21-33.

V.V. Davydov (1991) Psikhologicheskaya Teoriya Uchebnoy Deyatel'nosti I Metodov Nachal'nogo Obucheniya, Osnovannykh Na Soderzhatel'nom Obobshchenii.

Ye.V. Sidorenko (2006) Trening Vliyaniya I Protivostoyaniya Vliyanuyu (Sankt-Peterburg: Rech.

# The Influence of Intra-Family Relationships on Smoking Initiation of University Students

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## ABSTRACT

The article describes the public perception of teachers who are required to possess certain personal and professional qualities. The presence of socially disapproved qualities in a teacher does not contribute to the teacher's profile and professional competence. These traits could include smoking among teachers. It should be noted that an indicator of the social and professional maturity of a specialist is the awareness of the social consequence, as well as the responsibility for the fact that the addiction to smoking does not contribute to the professional profile. The article presents the intra-family relationships between students and their parents and the causes of smoking initiation among students of pedagogical majors at institutions of higher education. The attention is paid to the problem of smoking and the causes of tobacco addiction. The fact that students of pedagogical majors need to form the anti-smoking attitude from the first days of study at the university, that is, from the moment of their professional formation, is pointed out. The major causes of smoking initiation of future teachers in advance of their choice of teaching profession are analyzed. Techniques and methods of working with smoking students during their studies at the university are considered. Recommendations on minimizing the tobacco addiction of students during the education process are presented. It is noted that in the research of the professional demand for teachers, an important criterion might be the teacher's desire for a healthy lifestyle. The purpose of the article is to study the influence of intra-family relationships between students and parents on smoking initiation of future teachers.

**KEY WORDS:** ADDICTION; TOBACCO SMOKING; TOBACCO USE; NICOTINISM; HEALTHY LIFESTYLE; STUDENT FAMILY; PROFESSIONAL NEEDS; SOCIAL AND PROFESSIONAL MATURITY; TEACHER TRAINING; SYSTEM RELATIONSHIPS; RETHINKING AND REBUILDING THE PURPOSE OF LIFE; EMERGING PROPERTIES; PSYCHOBIOLOGY.

## ARTICLE INFORMATION

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## INTRODUCTION

Smoking is a socially disapproved factor in the life of the global community. In a number of countries with a high level of social consciousness, the society actively opposes people who smoke in public places and impact health of both themselves and others. Russia, in the context of this issue, is not an exception. This country is a supporter of such a combat and actively opposes tobacco-addicted citizens. For instance, in the field of education, systematic work is carried out, rather than separate anti-tobacco campaigns in order to strengthen the promotion of a healthy lifestyle among the population (among the younger generation, in particular). Tobacco use is one of the causes of a number of diseases and an early death. Tobacco addiction leads to the loss of approximately 15 years of a healthy life.

Social conscience suggests that teachers must not have bad habits, such as smoking, alcoholism, drug addiction. The worldwide average smoking prevalence is 21% (35% of men and 6% of women), the worst rates are discovered in countries with low and middle income. In the Russian Federation, 31% of adults (51% of men and 14% of women) smoke [7]. In the studies of Borodulin B.E., Amosova E.A., Povalyaeva L.V., Mokina N.A., Berezin I.I., Sakharova G.M., Antonov N.S., Radkevich N.V., it is stated that a level of tobacco use is consistently high among young people based on the analysis of university students [1, 5, 8]. Statistics of factors and causes of smoking among students of non-medical and medical universities are known [1, 8, 9]. Among future doctors, there are 52, 38% of male and 34.09% of female smokers [1].

In non-medical institutions, 40% of male students become heavy smokers. The separate so-called cluster of smoking student emerges. Thus, the rate of smoking initiation increases from the first year of studies to the last [1, 2, 9]. The issue that the addiction under discussion affects young students, especially of pedagogical majors of universities, causes great concern. There are special requirements for future teachers and educational psychologists. It is reasonably considered that their future work is directly related to the conditions for the development of a physically, mentally and morally healthy person from an early age.

One of the objectives of the research is to search for the causes of tobacco addiction. In order to prevent and eliminate tobacco addiction, it is necessary to analyze the psychological aspects of the addiction. A number of studies examine the causes of smoking initiation and cessation among young people. The major socio-psychological aspects of smoking are identified [1, 2, 3, 4, 7, 10]. In the opinion of the authors, these data are superficial, since the area of primary socialization, social maturity and development of the smoker's personality, that is the family, is not paid attention to. Therefore, an important factor might be the space and a kind of relationships between young people and their parents, which would affect the personality traits, motivation and

smoking initiation of young men and women.

It is assumed that the result of our research propositions to psychologists that work with tobacco addicts, as well as to the professional community and the public, might lead to a change in the opinion on teachers who have a harmful tobacco addiction. This idea instigates a scientific research in the field of expansion of conditions of social and professional maturity of young specialists, self-education in the sphere of prevention of tobacco addiction among smoking teachers; the development of appropriate recommendations to the modern information society, ideas, techniques and methods on the formation of positive habits and skills, through the prism of existing, developing and forming systems. Under these conditions, there is a need to review educational and pedagogical ideas, as well as to expand approaches to work with tobacco-addicted students of various universities, especially the pedagogical ones.

Modern Russian society prioritizes the formation of health-preserving consciousness and a healthy lifestyle of the individual. The objective of our research is to identify the important causes of smoking that might have been formed previously in the family. Unfortunately, the problem of minimization of tobacco use among teachers requires great efforts on the part of both psychologists and the society. Therefore, the organized work of social institutions is crucially important in the process of overcoming the harmful habits. The described situation could be rectified by the teachers' formation of the qualities that contribute to the development of professional competence, as well as the awareness and their influence on the behavior of other people, and thereby to the advance of their professional profile.

Thus, the study would allow to establish the priorities for the formation of the attitude of smokers to the perception of the smoking process and their influence on the profile of all teachers and specialists who are responsible not only for their own health, but also for the health of other people. The problem considered in our research is relevant to the professional training of future teachers. The research materials would be important to the study of the disciplines of the psychological module, within the themes of the psychological-pedagogical support of students, since early initiation of smoking addiction among schoolchildren is a problem of both high and primary school, and is the subject of pediatricians' work. Primary school teachers and parents collaborate to find solutions to the problem.

The result of the research could be a study of the social environment and space of an addict. The social environment and space of each smoking student have their own history and length, within the framework of which the socio-psychological and clinical features and vectors of personality development of the addicted student are formed. The determining information might be statistical data that demonstrate a significant addiction to the acquired harmful habits in families in which one

or both parents smoked and the relations between family members were built in a certain way. The method used in the study, which is the professional analysis of biographical data, the writing of a medical history, could allow to more accurately determine the causes of smoking initiation. The involvement of biographical materials in the study of nicotine use of the individual could provide a real basis for making an anamnesis and conclusions, as well as the substantiation of the causes of tobacco addiction. The analysis of biographical questionnaires provides a number of important conclusions and contributes to the determination of reliable vectors of helping tobacco addicts and preventing the phenomenon under discussion.

The examples of some conclusions made from the analysis of biographical questionnaires of tobacco-addicted students are given: as a result, these children (the students who smoke) might have had only one example, which was supported by unpunished actions, or served as a model for respect and imitation. An indicator of a positive evaluation of the action could be the persistent reinforcement of parents' example; mother's smoking in advance of the birth of a child (the future smoker) and mother's smoking during the individual's childhood and youth, at the stage of active formation of self-awareness of the child. Smoking by the addict's mother could not be an independent factor, it would define the style of communication with the smoking subject.

And these communication styles could stimulate the smoking process, both for mothers and young respondents, and could differently affect young men and women and form persistent negative habits and attitudes. The same could be stated about the relationship and inter-influence between the behavior of smoking fathers and their children. In general, smoking is regarded as a result of the systematic correlations among many variables in family and non-family systems of relationships that could possess special emergent properties, along with the typical ones, in each particular case of tobacco-addicted students of pedagogical majors. The main method of prevention and correction of tobacco use is the study of the own systems of developing social relationships (including family), the self-search of the causes, their definition and the involvement of addicts in the prevention process.

The study could be a step-by-step plan as well as the reflection for specialists who work with the problem of tobacco use as an important element of the prevention system. It would be important for specialists to find out what the preventive system for working with tobacco use is based on and what it leads to. Thus, a demonstration of the anti-smoking slogan might be excessive and ineffective. The descriptive statistics of the values of smokers and non-smokers have been conducted, the causes originating in childhood have been analyzed, the correlation analysis has been carried out, leading factors and causes of smoking among students of pedagogical majors of universities have been identified; recommendations and programs on the involvement

of tobacco-addicted students in an active anti-tobacco campaign led by universities and public organizations have been proposed.

The purpose of the study is to develop a cognitive positive evaluative attitude to the problem of smoking among tobacco-addicted students of pedagogical majors of universities, taking into account their life experience, personal resource characteristics and the modern educational environment.

## MATERIAL AND METHODS

**The study involved 197 respondents:** 105 young men and 92 young women. At the time of the study, the respondents were 17-18 years old. Diagnostic, standardized and semi-projective methodologies were applied:

**Personal differential:** the personal differential technique is a connotative tool for studying the subjective attitude towards oneself and other people, it consists of three scales. The "Rating" scale displays the level of self-esteem and self-acceptance. The "Strength" factor in self-esteem indicates the level of development of strong-willed sides of the personality as well as the subject's awareness of it. The values of the "Activity" scale are regarded as evidence of the extraverted personality. Sack's Sentence Completion Test is a methodology that allows to identify the person's attitudes which the individual is aware and unaware of. All test sentences are combined into several groups reflecting the individual's attitude to the family, interpersonal relationships, self-perception and smoking.

**Eysenck methodology:** the values of the scales of neuroticism and extraversion were applied. The Horn's questionnaire: the methodology allows to determine the type of smoking of the subjects. The types of smoking are revealed: "Stimulation" (AGM), "Tension Reduction" (DJP), "Handling" (BHN), "Craving" (EKQ), "Pleasure" (CIO), "Habit" (FLR). The Fagerstrom methodology is aimed to diagnose the degree of smoking addiction. The basis of the methodology is the severity and strength of a drug withdrawal syndrome, obsessive actions and thoughts. There are three degrees of a smoking addiction: the first, the second and the third one.

**Psychobiographical questionnaire:** the data from psychobiographical questionnaires and essays were applied.

In descriptive statistics, in order to identify the degree of significance between the variables of the mean values of two experimental groups: young men and women, Student's t-test ( $p < 0.01$ ;  $p < 0.05$ ) and r-critical ( $0.5 = 1.97$ ;  $0.01 = 2.6$ ) were used. Furthermore, the samples were compared according to the frequency of occurrence of a particular effect by the criterion of the Fisher transformation. In order to study the correlation between two variables measured in metric scales on the same sample, the Pearson correlation coefficient  $r$  ( $p < 0.01$ ;  $p < 0.05$ ) was applied, for young men  $r$  crit. ( $0.05$ ) = 0.192,

$r$  crit. (0.01) = 0.250; for young women  $r$  crit. (0.05) = 0.205,  $r$  crit. (0.01) = 0.267. The statistical analysis was performed with the application of the Statistical Package for the Social Sciences (SPSS 22) and Microsoft Excel. The methods selected for the study of the problem presented a visual material of the truthful overview. From the beginning of the study, the interpretation of the basic concepts and the main phenomenon was carried out. The main phenomenon is the definition of tobacco-addiction. Introduction to tobacco behavior and the associated state and traits of a person must be defined as a result of personality development. Undoubtedly, this development would be different from the formation of an independent personality. It was appropriate to use methods of a biographical analysis: thematic essays and questionnaires. The research process involves:

1. The identification of the main typical variables of personality development, which include the elements of self-perception, perception of the events of one's own life, the state of relationships within the family and outside of it at various stages of age formation of the addicted respondents. For instance, these variables are: the living conditions of addict's parents in advance of his/her birth, the features of the parents' attitude to the child from an early age, the features of the deviant behavior of the parents before the birth of a child and during the family life together with the smoking subjects in the early childhood and adolescence, the attitude towards the mother, father in adolescence, etc.
2. The determination of problem areas of development of addicts by identifying the significance of differences between smokers and non-smokers according to the discovered variables with the use of appropriate test of descriptive statistics. The correlation analysis of the needed variables was used for a more elaborate description of the attitudes of the smoking subjects.
3. The creation of socio-psychological systematic model of meanings, as well as historical and dynamically developing socio-psychological environments of addict's life.
4. The introduction of students to these typical life paths, scenarios of socio-psychological relationships between smokers and non-smokers and the involvement in rethinking of the life situation, reflection, imagining various "quests" aimed to rationally and creatively describe the scenarios of their future.

## RESULTS

The obtained results indicate that in order to solve the problem of overcoming tobacco use among tobacco-addicted people, it is needed to shift from the conventional attitudes towards the addiction; from psychoactive drugs to the game practice of the creative modeling which is only possible with the involvement of the creative reflective thinking, as well as the necessary dedication to the goal, the search for the ways to enhance productivity and satisfaction in achieving results through concentration on both prevention measures and anti-tobacco campaign. The discussed approach to the education and upbringing would lead to the beneficial effects as the improvement of health of the tobacco-addicted students; would allow to redirect and transform the energy of creative cognitive abilities and concerns of smokers to a useful course of self-fulfillment, and also to form a healthy lifestyle for future students in the process of the pedagogical activity.

Table 1. Assessment of the attitude of smoking young men to their fathers

Group	Assessment of the father's actions in relation to the subject		
	willingness to cooperate with the subject's father	complaints against the father	neutral attitude to the father
main group, n=105	35	45	25
control group, n=80	15	35	30
$\phi$ * p<0.05	2.26*	0.12	2.01*

## DISCUSSION

Some of the data obtained from smoking students, as well as the relationships within the families of respondents, the impact of these relationships on the personality of a developing addict were considered and analyzed. The study revealed certain important causes of smokers that contribute to smoking initiation: a number of their psychological personality complexes was discovered. The majority of the students involved in the study revealed peculiar family and non-family relationships, which is corresponding with the data of Russian and foreign

scientists [2, 3, 5, 6, 12]. The high level of development of conflict-ridden and contrasting relationships with parents in smokers' adolescence reflects the fact that the respondents experience a certain degree of negative and positive feelings towards the parents.

According to the results of the "Sentence Completion Test", on the one hand, smoking young men consider them to be "...unsuccessful, unworthy people", as smoking young women typically refer to their fathers; on the other hand, both young men and women refer to their fathers with emphatic sympathy. Smoking young men are more likely to strive to communicate with their fathers



than the non-smoking ones. A symbol of the desire for cooperation was the completion of the sentence "If only my father wanted..." with phrases like "I would smile at him, ..then I would do; .. would do everything for him; .. I would help, etc." (Table 1). In Table 1, the main group consists of smokers, the control group consists of non-smokers.

Along with reproaches to their fathers, young men sympathize with them, wish for the father's greater participation in their lives, such dreams often turn out to be unrealizable. Young women also negatively react to the fact of the achievements of their fathers, but are internally emotionally attached to them and dependent on them. At the end of the sentence "I would like my father..", significant differences in the assessment of expectations of the father are presented (Table 2). More non-smoking young women wish their father "to be the same way that he is now", "to be in good health" and "to live a long life" in comparison to smoking young

women. Smoking subjects during the completion of the sentence present their wishes to fathers with resentment, reproach and use phrases like: "to spend more time with me, to visit me more often, to finally come to his senses, to protect me, to be smarter, to be kinder, etc."

Thus, more frequently non-smokers complete the sentence "I think my father.." with expressions: "loved me very much, misses me, etc.". In Table 2, the main group consisted of smoking young women, the control group consisted of non-smoking young women. The results of the study were revealed by "Sentence Completion Test" and biographical facts: addicted young women consider themselves to be the "daddy's" daughters to a greater extent. In the context of the significance of the parents, smoking young men are ahead of the peers from a non-smoking environment (Table 3). In Table 3, smoking young men are classified into the main group, and non-smokers are classified into the control group.

Table 2. Expectations of smoking young women from their fathers

Group	Complaints against the father	General wishes		
		positive	negative	neutral
main group, n=92	30	17	40	5
control group, n= 97	14	72	9	2
$\phi$ * p<0.05	3.00*	8.16*	5.64*	1.25

Table 3. Assessment of important people of the subject's environment

Group	Mother	Father	Sister	Significant other (boyfriend, fiancé)
main group, n=105	81	64	28	5
control group, n=80	73	58	37	9
$\phi$ * p<0.05	2.67*	1.66*	2.77*	1.64*

Table 4. Assessment of nicotine use by parents and other smoking individuals in advance of birth of the subject

Group	Father	Mother	Grandfather	Other relatives
main group, n=197	133	36	46	6
control group, n=177	121	9	40	2
$\phi$ * p<0.05	0.18	4.14*	0.17	1.33

The result might differ from the conventional opinion about the solely negative type of relationships between the addicts and the parents, as well as about a low assessment of their presence in the lives of young people.

A biographical research of the subjects, smokers of both sexes, led to the conclusion about the crucial role of mother's smoking in advance of the birth of the subject (Table. 4). Table 4 displays significant distinctions in the

samples in terms of the Fisher transformation. The main group consists of 197 smokers and the control group consists of 177 non-smokers.

During the study of the relationship between tobacco-addicted young women and their mothers, it should be noted that mothers' smoking in front of the adolescent girls forms certain perceptual characteristics of mothers. Addicted young women form an image of the mother, which they often semantically describe with the following expressions: "...she's such an interesting person, she's a strong person, we are not alike, etc...". It accurately indicates the distant, well-defined perception of their mothers. Mothers are more important and are presented in the perception of young women as self-sufficient independent respected women. Young women emphasize their mothers' sexuality, uniqueness, and individuality. They regard them as friends, and, thus, indicate their own independence. Moreover, mothers view their daughters as rather mature individuals, they treat them as adults, provide them with an opportunity to demonstrate responsibility for decisions and actions.

Thus, we could conclude that mothers' smoking plays an important role in the life of their smoking daughters, it is an integral part of a certain type of communication, which supports a certain style of behavior of addicted young women. This style of behavior to a greater extent consists of the attitudes to their own social maturity, as well as current and future independence, in comparison to the behavior of non-smoking young women. Therefore, in order to eliminate the habit of smoking, for instance, among young women, it is necessary to take this into account, since smoking is an important symbol, an element of the system of personal development of these subjects. Further consideration of the influence of mothers and fathers on the lives of the female subjects demonstrates the correlation pleiades.

With an increase of the value of mothers, the indicators of family values of female tobacco-smokers ( $r=0.548$ ; at  $p<0.05$ ) and their attitudes to employees ( $r=0.523$ ; at  $p<0.05$ )  $r$  crit. (0.05) = 0.205, significantly increase; similarly, with increasing values fathers, there is an increase in the value on the same scales ( $r=0.353$ ;  $r=0.283$ ; at  $p<0.05$ ), crit. (0.05) = 0.205. It could be explained by the fact that smokers' acceptance and high evaluation of mothers and fathers increase the value of social relationships, engagement with working in a team, and sets the young woman to prioritize empathic attitude in current and future teaching activity.

It is an important resource for the future professional self-determination of a smoking student, as well as her professional demand. In the opinion of the authors, it would serve as a solution to the external and internal conflict situation of communication with parents. "Tension Reduction", the dominant type of smoking behavior, indicates a desire for social support from others, which explains, in comparison to non-smokers, a high degree of the activity, cheerfulness and extroversion under the conditions of the relatively low evaluations on

the scales of self-acceptance and the ability to influence someone. And it could also become a necessary resource for the socio-psychological and professional maturity of female smoking students. Young women could learn to recognize the origins of the compensatory activity, cheerfulness and optimism. In addition, they would seek to stabilize the self-esteem, self-acceptance, and willpower through other appropriate methods.

The majority of female and male students who smoke tobacco is characterized by low values on the scales of self-esteem, self-confidence, and strong-willed behavior, which are correlated to low evaluations on the scales of "self-motivation" or "strength" of the personal differential. For smoking young men, the importance of the father's presence is inversely related to the success in other spheres of life. The main factor of the increasing success in various areas is associated with the mother. The higher the value of the mother, the higher the values of employee evaluation ( $r=0.515$ ; at  $p<0.05$ ), as well as family value ( $r=0.463$ ; at  $p<0.05$ ), and  $r$ -crit. (0.05) = 0.192. As the preliminary results, the different content of systematic correlations of family relationships, which determine the socio-psychological conditions of the personality and the tobacco use of young men and women, is observed.

This should be taken into account in order to plan and predict the work with addicts. Young women are personally oriented to a system of relationships consisting of a relationship between the mother and the father. The dependence of success, growth of professional and personal maturity of respondents, adequate social maturity is observed under the conditions of the optimization of positive relationship with the father and mother. Smoking young men are directly dependent on the development of the relationship with the mother, and it is an important and decisive factor that would affect their socio-psychological viability and the prospect of professional and pedagogical growth of the future teacher.

## CONCLUSION

Thus, the selected research methods, based on socio-biographical systematic models, contributed to the identification of important causes of tobacco addiction of the smoking students. The analysis of the statistical data allows to classify the scenario family "quests" of seventeen-eighteen-year-old students of universities with pedagogical majors who smoke. The study revealed the influence of intra-family relationships on the smoking initiation of university students of a pedagogical major: the influence of a smoking father and a smoking mother. It allowed us to build an effective work on the involvement of the addicted students in the process of growing up, taking responsibility for themselves and their future students. The recommendations proposed in the study as well as the methods of elimination of the students' tobacco-addiction would allow to reduce the number of students addicted to tobacco. One of the examples of such work is the framing of a plan for the prevention of

the own tobacco-addiction and its involvement in the prevention of the addiction of others.

During the students-smokers' implementation of the plan of tobacco-addiction prevention, they would be partners in self-development, they would participate in a search for various solutions to the own problems of psychological, social and professional development, which would provide the future teacher with the ability to resist the tobacco-addiction, as well as to be an active promoter of a healthy lifestyle. Such a student, a former smoker would acquire a level of social maturity, would be in a greater demand as a specialist in the educational services market. The technique proposed in the study would contribute to the formation of the respondents' neutral-positive assessment of the attitude to smoking, reflexivity and awareness of the harmfulness of the addiction. The research demonstrates the conditions for the implementation of the mechanism of the behavior development of the tobacco-addicted students from passive observation - to the concern - awareness - evaluation - choice of a variable setting of further systematic correlations of their life without tobacco.

Systematic and consistent activities, as well as the organized eventful educational environment at the university, in terms of tobacco use prevention, in the opinion of the authors, would help to naturally engage a student-smoker in the prevention process and the implementation of the own plan of tobacco use prevention. Otherwise speaking, the solution to the problem of smoking is shifted from an ephemeral society to the addicted individual, from the sphere of ethics and moral to the area of the addict's self-engaging in self-development and self-care. The obtained research data based on the described methods with the use of biographical, actual and gender information would allow to most accurately organize group and individual work with smoking students of pedagogical majors of higher educational institutions.

## REFERENCES

- Borodulin, B.Ye., Amosova, Ye.A., Povalyayeva, L.V. (2016) *Tabakokureniya Sredi Vrachey Goroda Samary I Studentov Meditsinskogo Vuza. Meditsinskiy Al'manakh.* 4(44), Pp.24-27.
- Effect Of A Sport-For-Health Intervention (Smokefree Sports) On Smoking-Related Intentions And Cognitions Among 9-10 Year Old Primary School Children: A Controlled Trial. (2016) *Bmc Public Health.* 1(16), P.445.
- Gromova I.A., Olifirovich, N.I. (2019) *Sobennosti Roditel'skoy Sem'i U Zavisimyykh Ot Psikhooaktivnykh Veshchestv. Yuzhno-Rossiyskiy Zhurnal Sotsial'nykh Nauk.* 2, Pp. 132-141.
- Hughes, J. R. 2016. National Institutes Of Health Funding For Tobacco Versus Harm From Tobacco. *Nicotine Tob Res.* 5(18), Pp.1299-1302.
- Ignat'yeva, E.A.. (2016) *Opredeleniye Urovnya Zavisimosti Ot Kureniya Po Fagerstremu I Tipa Kuritel'nogo Povedeniya Po Khornu. Materialy Mezhdunarodnoy Nauchno-Prakticheskoy Konferentsii.* Pp.90-95.
- Kozlov V.A., Golenkova V.A.. (2016) *Demidov Ye.S., Nikotinovaya Zavisimost' U Studentov Vuzov. Acta Medica Eurasica.* 2, Pp.12-16.
- Kuz'minov N.N., Kobzev Ye.A.. (2018) *Lichnost' I Cherty Kharaktera Kuril'shchikov V Yunosheskom Vozraste. Problemy Sovremennogo Obrazovaniya.* 4, Pp.62-69.
- Maksimenko A.A., Pichugina Ye.G.. (2016) *Sotsial'no-Psikhologicheskiye Faktory. Sposobstvuyushchiye I Prepyatstvuyushchiye Pervichnomu Otkazu Ot Tabakokureniya (Na Primere Issledovaniya Kuryashchikh Devushek) // Znaniye. Ponimaniye. Umeniye.* 2, Pp.267-276.
- Maksimov D.V. *Konsul'tirovaniye Kuryashchego Patsiyenta. Arkhiv Vnutrenney Meditsiny.* 5, Pp.327-332.
- Mokina N.A., Berezin I.I., Sakharova G.M., Antonov N.S.. (2012) *Otsenka Rasprostranennosti I Statusa Tabakokureniya Sredi Samarskikh Studentov. Pul'monologiya.* 3, Pp.55-58.
- Radkevich N.V. (2005) *Sotsial'no-Psikhologicheskiye Aspekty Tabakokureniya Sredi Studentov Meditsinskikh I Nemeditsinskikh Vuzov: Avtoref. Kand.Med. Nauk.*, P.24.
- Reshetko S.A. (2017) *Obzor Sotsial'no-Psikhologicheskikh Issledovaniy Problemy Tabakokureniya. Mezhdunarodnyy Nauchno-Issledovatel'skiy Zhurnal.* 6(60), Pp.142-144.
- Stepanova O.P., Slepukhina G.V., Bezenkova T.A.. (2018) *Psikhologicheskiye Osobennosti Lyudey, Zavisimyykh Ot Psikhooaktivnykh Veshchestv. Azimut Nauchnykh Issledovaniy6 Pedagogika I Psikhologiya.* 4(25), Pp.355-357.
- Stevens, V. J. (2016) *Assessing Trends In Tobacco Cessation In Diverse Patient Populations. Nicotine Tob Res.* 3(18), Pp.275-280.
- Vokhmintseva L.V., Yuzenas T.P., Vanyunina V.V., Tereshchenkov, A.Yu.. (2010) *Rasprostranennost' Tabakokureniya Sredi Studentov Pervykh Trekh Kursov Novosibirskogo Gosudarstvennogo Meditsinskogo Universiteta. Vestnik Novykh Meditsinskikh Tekhnologiy.* 27,(4), Pp.205-208.

# Personal Identity of Marriage Partners as the Determiner of their Conflict

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## ABSTRACT

Modern theories of family conflicts have received a boost for development in a contemporary society. When studying conflicts of married couples according to psychoanalytical approach, much attention is paid to a thorough research into personalities of both spouses, as well as to specifics of building relationships. Personal identity of each of the partners is one of the most significant personal characteristics that determines the level of relationships in a couple and serves as an indicator of personal development of an individual. This problem is being researched by academicians of the Department of Psychological Counseling within the framework of pilot scientific projects. Based on a psychoanalytic model of partners' personal identity, an empirical research into the impact of personal identity of spouses on the parameters of their conflict was carried out in 2016-2019. The participants of the research were married people who declared a conflict with their spouse and stated their willingness to take part in the study. The results are based on the plan of correlation study that involved the use of quantitative methods of processing data received from the couples.

**KEY WORDS:** MARITAL CONFLICTS, MARITAL RELATIONS, CONFLICT DETERMINERS, CORRELATION STUDIES.

## INTRODUCTION

The study on marital conflicts is one of the main areas in the investigation into social conflicts, which has an impressively saturated history in Russia, a solid methodology and a wide range of thematic concerns [2; 3]. 1300 papers were selected via the analysis of publications on eLIBRARY.RU (Scientific Electronic Library) conducted by the authors for the period of 2000-

2019 with the use of such search words and phrases as "conflict", "family", "family conflict" and "conflict in a family". The thematic analysis drew out 818 articles that contained in their titles such keywords as "family" and "conflict" or their variations and combinations. Determination coefficient ( $R^2 = 0.961$ ) forecasts an increase in publications on family conflicts for the next years. The average number of citations per article for 2000-2019 amounted to 1.46, the Hirsch index of these articles was 13, the number of articles indexed in Web of Science or Scopus was 18 (2.2%).

The relevance of scientific publications on marital conflicts is also reflected in the study of Russian families' life. Press release No. 3708 of Russian Public Opinion Research Center (VTsIOM) notes that Russian people distinguished 4% of dysfunctional families among their acquaintances in 2013, and in 2018 the number of such

## ARTICLE INFORMATION

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families reached 16% [18]. According to VTsIOM press release No. 4002, the psychological reasons of strained relations in families have increased over the past 5 years. Selfishness and misunderstanding between spouses are among the reasons that destroy marital relations (19% in 2013 and 21% in 2019) [19].

Within the framework of the psychoanalytic tradition, N. Ackerman, O. Kernberg, M. Nichols, D. P. Siegel assume that studies on conflicts related to marriage partners are associated with the study on the experience of their childhood relationships. This position requires the consideration of influence of spouses' personality traits on a conflict [6; 20]. One of the basic personal characteristics of spouses is their identity, which comprises various options of sense of oneself, of others, of involvement into relationships, work and leisure [20]. According to N. Akkerman, spouse's personal identity implies the orientation of their intentions, expectations and values towards their partner. An important condition for identity of a personality is its stability, which comprises the following characteristics: steadiness in time, conflict control and ability to change, study and develop. These qualities appear in adaptability and complementarity of marital relations [15; 16].

R. E. Heyman, A. M. S. Slep, S. R. H. Beach, M. Z. Wamboldt and N. J. Kaslow, D. Reiss examined the potential of clinical assessment of manifestations of disturbed family relationships, determined by personality characteristics of marriage partners and family members [5]. The importance of family health for the physical and mental health of the world's population is recognized and enshrined in the Diagnostic and Statistical Manual of Mental Disorders DSM-5 and is included in the Relational Problems group [4]. The diagnostic field of partnership problems includes basic and intimate relationships of adult partners, parent-child relationships in the field of education, intergenerational relationships that influence the health of people who are involved in

these relationships. Developers of the manual believe that the categories of psychosocial problems (problems with the primary support group; problems of relations with the social environment) should also be attributed to relationship problems [4].

The study relates to the scientific theme of the Department of Psychological Counseling: "Research on Urgent Problems of Theory and Practice of Counseling Psychology", which was registered in 2018 (its state registration number in CITiS (Center of Information Technologies and Systems) is AAAA-A17-117121950077-9) and is based on psychoanalytic approach to identity and family conflicts. The purpose of the study is to assess the independent contribution of spouses' identities to the development of individual parameters of their conflict. Hypotheses of the empirical study were the following assumptions:

- certain indicators of a marital conflict (duration, periodicity, level of awareness, intensity of emotional experience) will be mediated by the identity level of the parties;
- the level of identity of spouses is connected to the type of their relationship and the features of their interaction in resolving a conflict situation.

The empirical study used questionnaires aimed at the assessment of an identity level of both-sex spouses and the description of a marital conflict in order to assess the impact of spouses' personal identity on their conflict. Determination of a marital conflict by the level of spouses' identity is an important element of assessing the disruption of relations in the context of counseling practice. Thus, there is a demand for research that will enable, first, determining the contribution of certain personality characteristics of two conflict parties to the development of a marital conflict and, second, detailing contribution of these characteristics to certain indicators of such a conflict.

Table 1. Description of characteristics of study participants.

Sex	Age range	Age range of a spouse	Years married	Family structure
Male (n=844)	22-67 y.o. (x=32,81, SD=7,22)	19-67 y.o. (x=31.28, SD=7,53)	2-15 years (n=709, 84.0%)	Couple without children (n=149, 17.7%) Couple with children (n=695, 72.3%)
Female (n=903)	19-65 y.o. (x=36.30, SD=8.20)	19-75 y.o. (x=37.15, SD=8.53)	3-18 years (n=771, 85.4%)	Couple without children (n=99, 11.0%) Couple with children (n=804, 79.0%)

## MATERIAL AND METHODS

**Research participants:** A targeted sample was attracted to participate in the study. The sample corresponded to the following qualitative characteristics:

- only officially married people participated in the study;
- homogeneity of participants' personal characteristics attributed to such essential indicators as age, length of marriage, family structure;

- inclusion of participants of both sexes who announced a conflict with their spouse.

The research involved 1747 people (844 men and 903 women) who declared a conflict with their spouse. Participation in the study was voluntary and anonymous. Before conducting the empirical study, the participants were informed about its purpose. The characteristics of the study participants are summarized in table 1.

77 people of all the participants answered questions together with their spouses (9.1% of men, 8.5% of women), of which 3 couples were without children. The task of researching the identity of both spouses in a married couple was not posed, since within the framework of the object relations theory, representations of Self and Other (a partner) in marital relations are neither exact internal representations nor exact representations of actual relationships they had, but are more filled with affective experiences at early stages of relationships [20].

**Research procedure:** The empirical study was conducted from 2016 to 2019. The data were collected with the use of a questionnaire based on “Methodology for difficult family situations” of A. N. Kharitonov [7; 9; 10], psycho-diagnostic methods “Spouse interaction in a conflict situation” (Y. E. Aleshina, L. Y. Gozman, E. M. Dubovsky) and “Questionnaire of interpersonal relations” by W. Shutz (adapted by A. A. Rukavishnikov) [14]. From “Methodology for difficult family situations”, some components from the section “Description of a difficult situation” were marked, that contain questions on the description of a marital conflict and allow defining certain personality characteristics of a conflict party (identity to a spouse (match/mismatch), mutual satisfaction/dissatisfaction in terms of the key individual/family needs) and indicators of a marital conflict, both external (periodicity of conflicts, duration of conflict) and internal (intensity of personal pervasion of the conflict (emotions), the level of perception of the conflict by a spouse).

After all the questions were answered, the study participants were asked to evaluate the identity level of their spouse. In the group of men, 705 (83.5%) of the participants rated their wife, while in the group of women, 881 (97.6%) of the participants rated their husband. The survey lasted 60–100 minutes and was held in the form of direct interaction with study participants. To increase comfort, the study participants were invited to describe the family conflict in a free form. Then, the study participants answered questions aimed at description of personalities of conflict parties and their behavior in it.

Further, they answered questions from the method “Interaction of spouses in a conflict situation” of Y.E. Aleshina, L.Y. Gozman, E.M. Dubovskaya. The results of this method allowed investigating the degree of agreement (or disagreement) in conflict situations, the level of conflict in a couple. Answers to the questions of W. Schutz’s Questionnaire of Interpersonal Relations

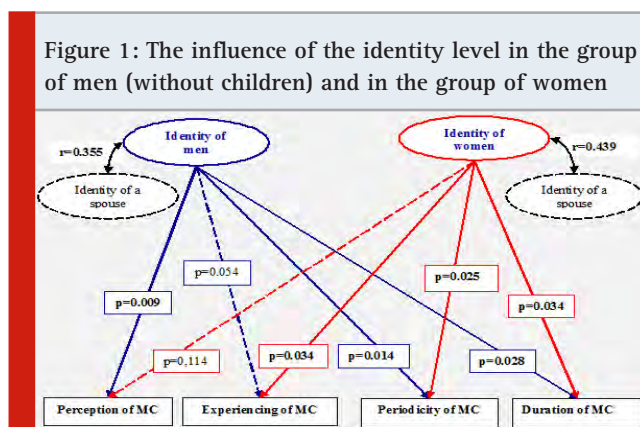
enabled determination of trends of dominance-subordination in marital relations and the degree of the need to be accepted by social environment, to belong to it, which ensured the study on the consistency of interpersonal behavior of spouses.

After the study was completed, participants could ask questions or discuss their own doubts, which was recorded (data from the testing record are not considered in the paper). The information obtained in the study was processed for the groups of men and women using discriminant function analysis, correlation analysis, and Fisher  $\phi^*$ -criterion, which were implemented in the statistical program IBM SPSS Statistics 25.0. The mentioned methods of mathematical statistics enabled assessing the contribution of spouses’ identity level to some certain indicators of a family conflict, determining the structure of interconnection between spouses’ identity and characteristics of their relationships and behavior in a conflict, and defining differences in the conflict parameters in groups of both men and women. In each of the groups, the results of the study were divided into groups depending on the presence of children.

The use of discriminant function analysis was reasoned by the opinion of L. Crocker, J. Algina, and D. Cramer, who considered it possible to determine quantitative variables that can efficiently find cause-and-effect relations [11], i.e. personality characteristics of spouses, which can be defined as marital conflict determiners.

## RESULTS

The results of the discriminant function analysis showed the dependence of the parameters of a marital conflict (MC) on the level of spouses’ identity in groups of men and women who do not have children. The results obtained are presented in Figure 1 in a single space for a comparative analysis of these effects.

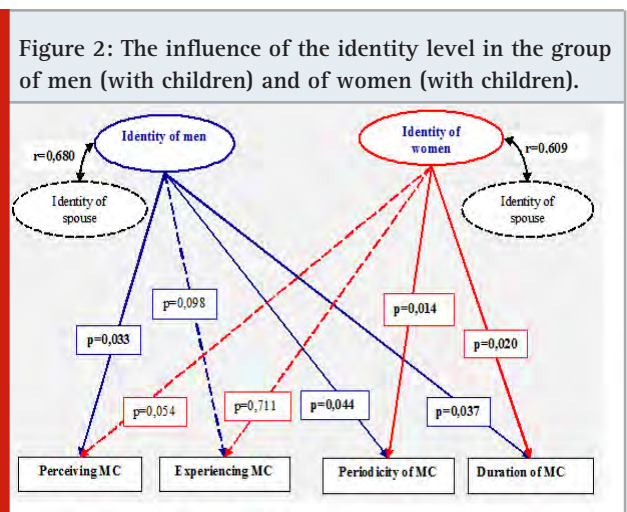


(without children) on the parameters of a marital conflict. The figure shows the standardized coefficients of the identity level of people surveyed correlating with their assessment of a partner’s identity and the levels of statistical significance of the impact of the identity level on the parameters of a marital conflict based on the results of discriminant function analysis.

Note. The arrows show the influence determined by discriminant function analysis (according to IBM SPSS Statistics 25.0) between identity and conflict indicators: dashed lines indicate minor influences ( $p \geq 0.05$ ), solid lines indicate major influences ( $p \leq 0.05$ ). The significance levels of influence of spouses' identity on conflict parameters are shown in boxes.

The level of identity in groups of people who do not have children has a significant impact on the external and internal parameters of the conflict between partners (Fig. 2.). However, the impact on the internal indicators of the conflict, which are defined as the level of perceiving the marital conflict and emotional experiencing of it, is less pronounced. For instance, in the group of men, the influence of their level of identity on perceiving a conflict by them is more pronounced ( $p = 0.009$ ), which is represented by a higher level of awareness of marital problems under the condition of a high level of identity among men. At the same time, the level of their emotional experience of conflict with wife ( $p = 0.054$ ) is less determined by the level of their identity. The group of women also has a less pronounced effect of the identity level on their level of perceiving a conflict with their husband ( $p = 0.114$ ), but there is a significant effect of the level of emotional experiencing ( $p=0.034$ ) stresses and conflicts in relations with a husband.

In groups of participants, the level of identity significantly affects the external indicators of their marital conflicts. The influence of an identity level on a periodicity of marital conflicts is more pronounced in the group of men ( $p = 0.014$ ) than in the group of women ( $p = 0.025$ ), which coincides with the tendency to influence the duration of a conflict: for men ( $p = 0.028$ ) and for women ( $p = 0.034$ ). The correlation of the spouses' own identity level and their assessment of the partner's identity level made up a positive correlation, which is higher in the group of women ( $r = 0.439$ ) than in the group of men ( $r = 0.355$ ). Further, the results of a discriminant function analysis in groups of people who have children are to be considered. The results are presented in Figure 2.

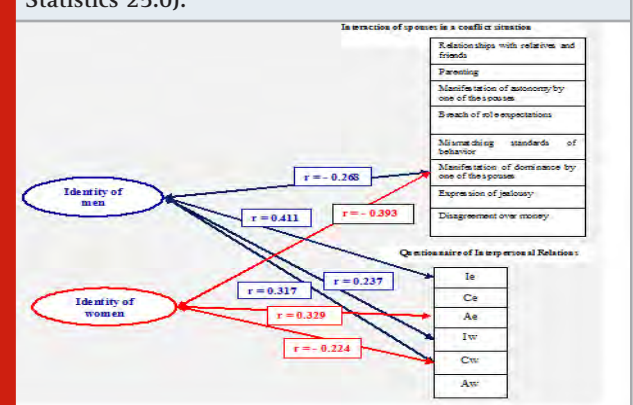


On the parameters of a marital conflict. The figure shows the standardized coefficients of the identity level of people surveyed correlating with their assessment of a partner's identity and the levels of statistical significance of the impact of the identity level on the parameters of a marital conflict based on the results of discriminant function analysis.

Note. The arrows show the influence determined by discriminant function analysis (according to IBM SPSS Statistics 25.0) between identity and conflict indicators: dashed lines indicate minor influences ( $p \geq 0.05$ ), solid lines indicate major influences ( $p \leq 0.05$ ). The significance levels of the influence of spouses' identity on conflict parameters are shown in boxes. The identity level in groups of participants who have children has a less stable effect on the parameters of a marital conflict (Fig. 2.).

Thus, in a group of men, the influence on the internal parameters of the marital conflict decreases, which manifests through the weakening of the influence of identity level on of their perceiving a conflict ( $p = 0.033$ ), as well as through the decrease in emotional experience of a conflict ( $p = 0.098$ ). It should be noted that the influence of identity on the external parameters of a conflict – periodicity of conflicts ( $p = 0.044$ ) and duration of a conflict ( $p = 0.037$ ) – reduces in the group of men. In the group of women, there is a decrease in the influence of the identity level on internal indicators of a conflict, which is manifested in the absence of a major effect on the level of emotional conflict experiencing ( $p=0.711$ ) to more extent, if comparing to the same effect in the group of women without children.

Figure 3: The interconnection between the identity level in the male group (without children) and in the female group (without children) and indicators of spouses' interaction in conflicts and interpersonal relationships. The figure shows significant standardized correlation coefficients with a level of statistical significance  $p \leq 0.05$  (IBM SPSS Statistics 25.0).



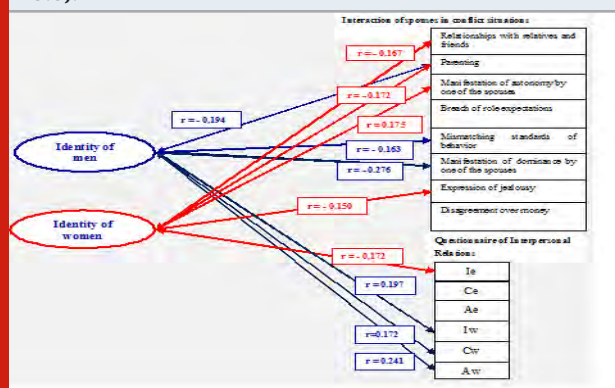
The influence of women's identity on the external parameters of a conflict was found to be significant and more pronounced (the periodicity of conflicts  $p=0.014$ ; the duration of a conflict  $p=0.020$ ) than in the

group of women without children. The correlation of participants' own identity and their assessment of the partner's identity level made up an almost close positive correlation in both the female ( $r = 0.609$ ) and the male group ( $r = 0.680$ ). The results of a correlation analysis of the identity level of partners with indicators of psychodiagnostic techniques showed a complex interconnection system for the groups of men and women with and without children. The interconnections in the group of men and women without children are presented in Figure 3 in an integrated space for comparative analysis.

Note. The arrows show the correlation (according to the Pearson correlation coefficient) between identity and indicators of conflict: dashed lines indicate insignificant correlation ( $p \geq 0.05$ ), solid lines indicate significant correlation ( $p \leq 0.05$ ). Significance levels of correlation are shown in boxes.

The results of the correlation analysis in families without children showed a significant positive correlation between the identity level and the following tendencies in marital relationships: trend to be in a group of other people (Ie scale) for men ( $r = 0.411$ ) and women ( $r = 0.329$ ); desire of men to receive interest from others and to be accepted into their society (Iw scale) ( $r = 0.237$ ); men's trend to obey others in communication (Cw scale) ( $r = 0.317$ ). Negative significant correlation was identified between the identity level and the specifics of a person's behavior in a conflict situation, which manifests itself through the dominance of someone of spouses both in the male group ( $r = -0.268$ ) and in the female group ( $r = -0.393$ ). In addition, unlike in the group of men, in the group of women a negative correlation was determined between the identity level and the trend to obey others in communication (Cw scale) ( $r = -0.224$ ).

Figure 4: Interconnection between the identity level in the group of men (with children) and women (with children) and indicators of spouses' interaction in conflicts and interpersonal relationships. The figure shows significant standardized coefficients of correlation with the level of statistical significance  $p \leq 0.05$  (IBM SPSS Statistics 25.0).



It is also worth mentioning that major interconnections of identities in groups of participants were determined only with a small number of indicators of relationships

(50% of the indicators of W. Schutz's method) and indicators of interaction between spouses in conflicts (12.5% of the indicators belong to the methodology of Y. E. Aleshina, L. Y. Gozman, E.M. Dubovskaya). Interconnections in the group of men and women with children are presented in Figure 4 in an integrated space for comparative analysis.

Note. The arrows show the correlation (according to the Pearson correlation coefficient) between identity and indicators of conflict: dashed lines indicate insignificant correlation ( $p \geq 0.05$ ), solid lines indicate significant correlation ( $p \leq 0.05$ ). The significance levels of the correlation are shown on boxes.

The results of the correlation analysis in families with children showed a significant positive interconnection between the spouses' identity and the trend to obey others in communication (Cw scale) for men ( $r = 0.197$ ), as well as men's desire to receive interest from others and to be accepted into their society (Iw scale) ( $r = 0.172$ ) and men's desire to be engaged in profound and emotional relationships with others (scale Aw) ( $r = 0.241$ ). In the group of women, a positive correlation was determined between their identity and the manifestation of autonomy by one of the spouses ( $r = 0.175$ ) during interaction in conflict situations. In male and female groups with children, a significant number of negative major correlations were found between the level of spouses' identity and indicators of their interaction in conflict situations: connection with the level of wife's relations with relatives and friends ( $r = -0.167$ ); with raising children by husbands ( $r = -0.194$ ) and by wives ( $r = -0.172$ ); with a discrepancy in the standards of behavior ( $r = -0.163$ ) and the manifestation of dominance by one of the spouses ( $r = -0.276$ ) for men; with the expression of jealousy, for wives ( $r = -0.150$ ).

In addition, negative correlation is observed between the identity of wives and their choice to be in the group of other people (Ie scale) ( $r = -0.172$ ). Correlations between spouses' identities (for those who have children) has a complex structure of connections with indicators of family relations (66.7% of indicators of the W. Schutz methodology) and indicators of spouses' interaction in conflict situations (87.5% of the indicators from the methodology of Y.E. Aleshina, L.Y. Gozman, E.M. Dubovskaya).

## DISCUSSION

The empirical research proved that the identity of marriage partners significantly impacts both the external and internal parameters of a marital conflict. The results of discriminant function analysis allow mentioning that married people of both sexes without children experience a more pronounced effect of their identity on the external indicators of a conflict (Fig. 1.). The dependences mentioned are manifested in the fact that spouses with a higher level of identity have a lower periodicity ( $\phi^* = 2.04$ ,  $p \leq 0.05$ ) and a shorter duration of conflicts with their partner ( $\phi^* = 1.91$ ,  $p \leq 0.05$ ).



This distribution is due to the fact that spouses with a high level of identity have a more pronounced focus of their intentions and expectations on their partner, their life values are mainly associated with the partner [1]. In addition, a high identity level and its stability imply manifestations of conflict control, which is mostly expressed as the ability to control only external indicators of a conflict [1], which are more represented and more condemned by the social environment or parents the spouses. The increased periodicity and duration of conflicts may be reasoned by the complexity of the formation of the spouses' identity, which N. Akkerman [1] associates with the coherence of one's own identity and the identity of a partner. This may also be due to crisis periods in life of a couple, which were described by M. Plzak and were proved to exist in Russian families [21; 22].

It should also be noted that an increase in the periodicity of conflicts can be observed in families living together with wife's or husband's parents. The increase in periodicity of conflicts is reasoned by the principle of exchange ("something for something"), which manifests itself in the mutual exchange between spousal and parental families of various services, which are not always positively assessed by that partner who lives with his or her parents-in-law [12; 13]. In addition, it should be noted that living together with parents-in-law does not allow fulfilling family roles independently and completely. Such a situation was taken into account in the research (36.8% of men,  $n=311$  and 45.3% of women,  $n=409$ ), yet it was not introduced as a criterion for calculating the influence of identity on conflict indicators.

Regarding the less pronounced effect of the partners' identity on internal indicators of conflict, it should be noted that this may be entailed by the fact that partnerships require the creation of space for satisfying some needs mutually. A high level of spouses' identity involves the coherence of two levels of its manifestation: the first, which is expressed in the internal identity of a person to their own needs, and the second, associated with the needs of a spouse. It is the balance between these levels that involves the coordination of not only the implementation levels by each spouse, but also the role balance between spouses as well as the family balance [1; 6].

Difficulties in exercising control of a marital conflict, as characteristics of spouses' identity, may be reasoned by the mismatch of spouses' needs and sometimes by their complete contradictoriness. Such a complex interaction of partners' personalities leads to tension and conflicts in their relations. Tension may be associated with the culture of communication, level of mutual awareness of a partner's life and personality traits. These factors complicate the perceiving of a conflict and relations in general, as well as complicate the emotional experience of such an interaction. Talking of couples with children, it should be noted that the decrease in the influence of their identity on parameters of a marital conflict

(Fig. 2.) may be reasoned by the complexity of the identity manifestations and, as a result, by difficulty of establishing the balance between the indicated identity levels of partners.

At the same time, this influence is less pronounced in wives, which may be reasoned by the presence of contradictory self-presentations [17] associated with a sense of insecurity and displeasure peculiar to women with children, when they learn to be mothers and experience self-representations and representations of a child (as another person) [20] on the basis of their own emotional experience from the childhood, regardless of whether this experience was pleasant or painful [6]. It can be assumed that the complication of the structure of family relations, which makes spouses master new roles (the role of father and the role of mother), affects the emotional balance [1] of partners' identity. This, in turn, causes a longer period of adaptation to new conditions, which is manifested in the primary weakening of the influence of identity on internal parameters of a marital conflict due to the complexity of their nature. This can be highlighted as a promising area for further research in the Russian sample of married people.

Another possible indicator that links the complexity of a structure of family relations with the influence of spouses' identity on the parameters of a marital conflict – is interconnection of one partner's identity with their assessment of another partner's identity. Thus, the interconnection between these indicators in couples with children is higher than in couples without children, which may stem from a more pronounced admission of complementarity of relationship with a spouse due to their larger involvement in family life and wider variability of family roles and situations of interaction. However, the level of this interconnection may exceed actual connection between partners' identities due to spouses' focus on a probable or expected coherence with a marriage partner. In favor of this assumption, the assessment of levels of interconnection in 77 couples was made (3 couples without children were excluded from this group): this study involved both relationship partners. The results of the assessment showed less pronounced interconnections between spouses' identities ( $r = 0.233$ ).

The data presented proves the influence of an identity level on various indicators of marital conflict, which allows considering this fact as the confirmation of the first hypothesis. The results of interconnections between spouses' identity level and characteristics of marital relationships and their interaction in conflicts led to the following conclusions:

- the structure of interconnections of these indicators in families with children is more complicated than in families without children, which may be reasoned by more intensive involvement of partners' identities in the processes of satisfying their own needs and solving conflict situations in marital relationships [6].

- interconnection of the identity level and indicators of relations according to the method of W. Schutz deserves attention.
- Therefore, spouses (with or without children) with a high identity level are oriented in their marriage toward the “trend to be in a group of other people” (Ie scale), which allows observing fairly confident behavior, positive feelings within their social environment and intentions to expand this environment. Such behavior may be associated with a possible transfer of successful marital experience to their social environment and with complete satisfaction of their demand for building relationships. Men (without children) with a high identity level go even further and show a desire to receive interest from others and to be accepted into their society (Iw scale), which implies a more open expression of the need to be accepted by others. These trends of married people (without children) may stem from their successful experience of building relationships with their spouse and further spread of this experience to a circle of the closest friends and relatives [6].

In the group of people with children, there is a more pronounced orientation of spouses with a high identity level towards expressing their desires associated with the need to be accepted by a society (Iw scale), as well as with intents to build deep emotional relationships (Aw scale). This may be entailed by the desire of partners to build a deeper and more harmonious marital relationship, as well as by their awareness of the need to understand (“to endure” according to O. Kernberg) a partner [6].

- married people without children are oriented towards a tendency to obey others in communication (Cw scale). However, taking into account gender differences: for men ( $r = 0.317$ ) there is a direct relation, while for women it is inverse ( $r = -0.224$ ). The mentioned dependencies can be recognized as the orientation of men with a high level of identity towards the possible expression of their doubts when communicating with their spouse during making decisions. For women with a high level of identity, these dependencies are recognized as a decrease in self-control.
- when spouses (without children) with a high identity level interact in conflict situations, the desire to reduce the level of dominance of one of the partners is more pronounced. This may be caused by the intent to resolve problems together, as well as by the ability of one partner to provide support to another with their own personality characteristics [17].
- in groups of married people with children, a more complex structure of interconnection of their identity with interactions in conflict situations is observed. This is due to the intensive involvement of each partner’s personality into solving a problem and, may be, with a higher level of responsibility, which stems from taking a role of parents by them.

identity and characteristics of their marital relations and interactions in conflict situations allow concluding that the second hypothesis of the research is confirmed. We also can now agree with the statements of M. Nichols that each spouse’s personality traits dominate when a marital conflict arises, but the problem itself appears due to the interaction of these traits in various areas of family relations [15; 16].

## CONCLUSION

Drawing up the conclusions of the empirical research into the influence of spouses’ identity on indicators of their marital conflicts, we would point out the following:

1. The identity of spouses has a significant impact on both the external and internal parameters of marital conflicts and is interconnected with a significant part of indicators of marital relations, as well as with interaction of spouses in conflict situations.
2. In conflict situations, spouses with a high identity level are focused on reducing the level of dominance of one of their couple, on discussing conflict issues and expressing their doubts about decisions being made.
3. As for married people with children, the complex structure of correlation of their identity level with the characteristics of their marital relationship and interaction in conflict situations involves a larger, more diverse and more pronounced space for manifestations of their identity in a family life.
4. The conclusions given above confirm the suggested hypotheses and contribute to the development of personality-based causality of conflict interactions between spouses. Such a causality focuses on a thorough study of marital conflicts as part of the psychic reality of a family.

## REFERENCES

- Nicholas M. (2007) Teoreticheski Context Semenai Sikhoterapi / Semeiya Sikhoterapia. Khestomatia/Sost. For Example, Idemiller. Nv Alexanderova. V. Eustiskis. Spb.: Rech. - P.
- Akkerman N (2007) Teoria Semenai Dinamici/Semeiya Sikhoterapia. Khestomatia/Sost. E. G. Eydemiller. Nv Alexanderova. V. Eustiskis. Spb.: Rech. - P. 57-63.
- Nicholas M. (2007) Shravintelni Analis / Semeiya Sikhorapia. Khasmatia / Sost. E. G. Eydemiller. Nv Alexanderova. V. Eustiskis. - Spb.: Rech. - P 79-122., Diagnostic And Statistical Manual Of Mental Disorders, Fifth Edition (Dsm-5). 2013. Arlington, Va: American Psychiatric Publishing..
- Heyman R.E., Slep A.M.S., Beach S.R.H., Wamboldt M.Z., Kaslow N.J., Reiss D. (2009) Relationship Problems And Dsm: Improvements And Proposed Solutions Are Needed. World Psychiatry... 8, P.10- 22.
- <https://Wciom.Ru/Index.Php?Id=236&Uid=9200>, Press-Vipusk No. 3708 Vtsiom. Neblagopoluchne Semi: Keto Vinovat I Choto Delat?.
- <https://Wciom.Ru/Index.Php?Id=236&Uid=9793>,

All the above correlations between the level of spouses’

- Press-Vipusk No. 4002 Vtsiom Otoshenie K Bracam I Rajvodam: Observation.
- That Is, Jhamurin. (2012) Lichnostnyye Determinanty Supruzheskogo Konflikta (Sikhoanalitichey Podkhod) Dissertsiya Na Soiskaniye Uchenoy Stepeni Kandidata Psikhologicheskikh Nauk / Sovremennaya Gumanitarnaya Akademiya. - Moscow. - 240 S.
- That Is, Jhamurin. (2013) Lichnostnyye Determinanty Supruzheskogo Konflikta (Sikhoanaliticheskoy Podkhod): Monografiya. / I. E. Zhmurin. M.: Iiu Mgou., P.220.
- Klinich, Kharitonov A. N.N.(2002) Obyekt-Teorii. Kak Metodologicheskaya Osnova Semeynoy Psikhoanaliticheskoy Sighthoterapii/Duchevnoy Jodorvi Chelavka - Duchovnoy Jodorvi Natsi: Metrialily V Viserosiskoy Nouchno-Pract. Conferencing Po Sighthoterapii I.
- Kramer, Kramer D. (2007) Matemeticheskaya Obrabotka Danish Vs Sotsialnik Nuch: Sobermeni Metodi: Ucheb. Posobiye Dlya Stud. Vishwashich Ucheb. Javedeni/Duncan, Per. Iv Timfieva. Ya. I.Kiselevo, R. Nauch. Red. O.V.Mitina. - Master: Izdtelski Ts.
- O. Yomans F. Clerkin D. Kernberg. (2018) Transfer-Focused Psychotherapy For Borderline Personality Disorder. Washington [Etc]: American Psychiatric Publishing / F. Yomans. D. Clarkin. O. Kernberg. / Pervodchik Snegur Vladimir Sergeyevich. / Nauchnyy Redaktor Kovalets Anna Sergeyevna. - Master.
- P., Antspav A.Y. Prasanov SI (2013) Rosiskaya Conflictologia. Ukazatel 1555 Disartasi (1949-2012 God). - M.: Ooo «Tast». - 244.
- P., Antspav A.Y. Shipilov Ai (2007) Conflictologia: Uchebnik Dalia Vuzov. - Master: Unity. - 551.
- P., Carnberg & F.(2004) Love Relationship. Normality And Pathology / Per Ngl. M.N.Georgiyevoy. - Master: Nezavimaya Pharma . - 256.
- P., Kratochkvil S. (1991) Pikhoterapiya Semeyno-Seksualnykh Disgarmoniy / Per. S Chessk. - M. Meditsina. - 332.
- P. Kratochkville S. ( 2008) Siktorepia Supruzhesich Otnosheni. - M.: Oao «Izdatelstvo «Meditsina». - 328.
- P., Lidrs A.G.G.(2006) Pikhologicheskoye Obsledovaniye Semi: Ucheb. Posobiye – Praktikum Dlya Stud. . Psikhhologii Vysh. Uchev. Javedeni. Master: Izdatelsky Tsenter . - 432.
- Psi, Kharitonov An (2002) Metodika Trudnik Semenich Semenich Semeimi / Duchevnoy Jodorvi Chelavka - Duchovnoy Jodorvi Nazi: Material V Viserosiskoy Nouchno-Pretitchskoi - Master: Izd. Insta.
- S. Psychodynamic Diagnosis (Opd)-2. Manual Of Diagnosis And Treatment Planning. (2019). - Master: Academy Project. - 454.
- Syezda, Kharitonov A.N.N(2003) Primeneniye Metodiki «Trudnaya Semeynaya Situatsiya» V Issledovanii Semey Professionalnykh Voyennosluzhashchikh/ Prakticheskaya Psikhhologi V Usloviyakh Modernizatsii Obraznia
- T.2., Kharitonov A. N. N. (2003) Sistemnyy Analiz Trudnykh Semykh Situatsy / Prakticheskaya Pikhologia V Uslovich Modernizatsi Obrazovanya: Sbornik Tezisov Uchastnikov Vseisiyskogo 28-29 Maya 2003.

# The Role of Dispositional Mindfulness in the Person-Developmental Personality Potential

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## ABSTRACT

The concept of the person-developmental potential, which was set forth by K. Rogers, is exposed in the research. The potential is used by the individual with the goal of self-disclosure, self-actualization and living the fulfilling life. An individual is able to reach various levels of development by using his potential. In psychological science, it is traditionally normal to distinguish the spiritual, mental and physical levels. All levels are interconnected, however, personality qualities can be manifested at each of these levels to a greater or lesser extent. The disclosure of person-developmental potential is carried out through the construct of dispositional mindfulness. The five-factor construct of mindfulness is adopted as a basis in the research. An empirical study exposed a strong correlation between the characteristics of person-developmental potential and dispositional mindfulness. It was determined that the following characteristics make the largest contribution to the “totally functional personality” parameter: the spiritual level of personality development, as well as three factors of dispositional mindfulness, such as “non-responsiveness”, “non-judgmental attitude to experience”, and “depiction”.

**KEY WORDS:** PERSONAL-DEVELOPMENTAL POTENTIAL, TOTALLY FUNCTIONAL PERSONALITY, PERSONALITY DEVELOPMENT LEVELS, DISPOSITIONAL MINDFULNESS, MINDFULNESS FACTORS.

## INTRODUCTION

The concept of personality potential arose in Aristotle's philosophy of entelechy. He laid the idea of the holistic matter organization, of the transition from potency to the manifestation of energy, which is a material substance, the cause of itself and the goal of its own development. Aristotle's idea found its development at the beginning of the twentieth century in the vitalism theory of Hans Driesch. The special life force is located in the center of this theory, thanks to this force organic life exists and develops.

The views of K.Goldstein, which arose in the first half of the twentieth century, about the initially existing, innate, self-actualizing potentials inherent in man largely determined the ideas of K.Rogers integrity and self-actualization. K. Rogers considers the possibility of an individual to actualize, to acquire integrity via self-actualization. Lack of vitality impedes personal growth and leads to stagnation, interferes with the fullness of human life with meaning. The concept of totally functioning individual for K. Rogers consists in releasing the tendency towards maturity, in the desire to restructure own personality and life attitude, making the desire for change more mature. It presents in human life in personal-developmental potential, as a tendency to use all human capabilities, both biological and spiritual. K. Rogers sees the purpose of man in "... the desire to restructure own personality and life attitude, making it more mature.

No matter how you call it, a tendency to growth, self-actualization or moving forward, this is the main driving force of life ... This desire, which presents in all

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organic and human life, to spread, to expand, to become independent, develop, mature, is a tendency to manifest and use all capabilities of the organism to such an extent that they strengthen the organism or "Ego" [1]. As noted by W.Wirtz and J.Tsobeli, the key idea for K.Rogers is the search for own destiny, own meaning, "a completely unique pattern of life", for integrity [2]. An in-depth review of the problem by D.A.Leontiev, G.V.Ivanchenko, A.V.Plotnikova et al. (2011) allows tracing the formation of views on the personality potential in a historical context and highlighting several semantic contexts:

1. The possible (as opposed to the factual) that exists along with the real world and expands it.
2. Human potential is an interdisciplinary concept, concretized in its own way in various fields of knowledge, such as socio-organizational, economic, socio-ecological and existential.
3. Personality potential is defined as a modern approach to the problem of "psychological factors and mechanisms of dynamic stability and effectiveness of an individual in a changing world" [3].

Despite the numerous definitions of personality potential, the unifying theory remains the understanding of development, strength, the source of the hidden potential of a person. The potential is manifested in the process of continuous self-improvement, the desire to achieve the peaks of personal, professional development of a person and the realization of creative opportunities and abilities [3-4]. The concept of personal-developmental potential is closely related to the problem of ontological levels allowing one to describe a life of an individual. These levels allow answering the question, to what extent does a person use own potential effectively? According to the priest and psychologist Andrei Lorgus, there are two following descriptions: the bimetry of the soul and body and the trimetry of the spirit, soul and body. From the Orthodox anthropological point of view, "a man manifests himself in all these levels and he is connected ontologically with all these levels and cannot be deprived of any of them, cannot live only in one of these levels" [5].

In the studies of psychologists E.V.Shestun, E.A.Morozova, E.N.Ustyuzhaninova, the personality structure is presented. It includes three levels of personality trends that are interconnected. The spiritual level is defined as "an intangible system-forming principle that allows going beyond "the ego"[6]. The authors attribute creativity, self-sacrifice, love, conscience, and service to the spiritual level. The spiritual level is defined as the totality of the emotional, volitional, and conscious spheres of the personality that are "held together" by spiritual and moral priorities. The bodily level is the orientation of the personality towards the satisfaction of vital needs. Despite the fact that all three levels are interconnected, one of them can prevail over the others. If the concept of trinity personality structure is adopted to the idea of personality-developing potential by K.Rogers, it could be noted that the human desire to be a totally functioning personality are actualized at all levels of its development, biological, psychological and spiritual.

At the organismic (bodily) level, a person needs faith in himself as a biological being. At the psychological level person needs a conscious focus on the inner world, openness of feelings regarding relationships with people, absence of discomfort with them. A totally functioning person has no sense of inferiority, does not have duality in relations with others. At the spiritual level, a fully functioning person, according to C. Rogers, is open to transcendental experiences and is characterized by the presence of religious and spiritual beliefs. In order to achieve total functionality, a person needs to have psychological tools allowing to fully reveal his personal potential. K.Rogers has repeatedly pointed out the need to experience a more conscious lifestyle. To totally function according to him is to live richly and fully consciously. Therefore, mindfulness can become such an instrument.

In modern psychological science, mindfulness is understood as the ability of a person to focus attention on current experience and emotional experiences. It also implies the ability to arbitrarily switch focus from one aspect to another, while feeling that the concentration process is controllable [8]. To be mindful means to have an impassive attitude of accepting everything as it is. Moreover, as noted by J.Kabat-Zinn, this does not mean avoiding the current situation, it is a way to realize own emotional reactions and let them exist. And to make the best decision based on this [9]. In connection with the complexity and multidimensionality of the studied construct, the five-factor concept of mindfulness (R.Baer) seems to be the most developed and reflecting all of its facets. The content of factors reflects the following mindfulness specifics:

1. "Observation" – represents a person's ability to observe both external and internal stimuli (such as bodily sensations, thoughts, emotions).
2. "Depiction" – represents the ability of respondents to describe their inner world in words, their thoughts, feelings, sensations, impressions.
3. "Conscious activity" – according to various researchers, this factor is a central component of the mindfulness concept. Represents the ability of a person to perform actions at the moment, consciously focusing on one subject (phenomenon).
4. "Non-judgmental attitude to own experience". This factor reflects the ability of respondents to accept their thoughts and feelings without judgment, not considering them as good/bad, right/wrong, valuable/useless, and accepting reality as it is, without trying to ignore it or evade it.
5. "Non-responsiveness". This factor reflects the ability of respondents not to delve deeply into their emotions and thoughts, but to leave themselves the opportunity to choose a reaction regardless of the emotional and cognitive assessment of their internal experience [10-11].

In the USA and Europe, meditative mindfulness programs are widely used for medical indications, for example, for stress disorders, addictions, chronic pain,

etc. At the same time, there are numerous evidences of the connection between dispositional mindfulness (personal quality) and the psychological well-being of the individual (Baer, Smith, Hopkins, Krietemeyer, Toney, Brown, Ryan, Chadwick, etc.). The correlations between dispositional mindfulness with indicators that can characterize a person's functioning in a positive vector are described. Such indicators are, for example, the sense of satisfaction with life, self-esteem, empathy, a sense of autonomy, optimism, psychological well-being, building life goals and other characteristics [12-14]. According to researchers S. Bishop, J. Kabat-Zinn, E. Langer, R. Ryan, D. Siegel et al., mindfulness carries a rich resource potential. The same message can be found in the studies of domestic scientists, such as Zelikson D.I., Zotova L.E., Pugovkina O.D., Shilnikova Z.N., Shulga T.I. et al. [8.15-17]. The appeal to the mindfulness concept is due to the fact that the place and role of dispositional mindfulness in the personal-developmental potential has not yet been described in psychological science.

## MATERIAL AND METHODS

The goal of the research was to identify the role of dispositional mindfulness in the personal-developmental potential of a person. The study involved 80 students studying at the Department of Psychology of Moscow region state university, aged 19-26 years, of which 36% are men and 64% are women.

The following methodologies were used in the study:

1. A five-factor mindfulness questionnaire developed by R.Baer, G.Smith et al. (2006), it was validated in Russia by A.M.Golubev and E.A.Dorosheva [18].
2. Questionnaire "Feelings. Reactions. Beliefs.", designed by K.Rogers, adapted by Mironova, Bratchenko [7].

Among the scales suggested by K.Rogers, the following are taken into account in an adapted version:

- conscious focus;
- openness to feelings in relationships;
- confidence in yourself as an organism;
- total personality functioning;
- a feeling of discomfort with people;
- fighting the inferiority feeling.

Methodology "Hierarchy of personality." Authors: Shestun E.V., Morozova E.A., Podorovskaya I.A., Ustyuzhaninova E.N. [6]. Three levels of the personality hierarchy are distinguished by authors:

- spiritual level, at which the priority of individual is spiritual growth, development, the search for one's true destiny;
- soul level, which is characterized by the quality of interpersonal contacts, success in the professional or family aspect, creative self-expression and the peculiarity of person's emotional life;
- body level includes aspects that support the physical self of a person: nutrition, comfortable existence, entertainment.

The empirical study consisted of two stages. At the first stage, it was studied how personal-developmental potential is associated with levels of personality development. Key characteristics of personality potential were determined. At the second stage, we investigated how the parameters of dispositional mindfulness are associated with person-developmental potential and which of them make a significant contribution to the person-developmental potential of a person.

## RESULTS

A correlation analysis of the links between indicators of personal-developmental personality potential and various levels of the personality hierarchy was performed. According to it, the indicator "openness to feelings in relationships" is a key indicator and is manifested at all three levels of the personality hierarchy, but with a different focus. A positive correlation was determined with the spiritual and soul levels of personality ( $r=.248$ ,  $p=0.01$ ;  $r=.308$ ,  $p=0.01$ ), as well as a negative correlation with the body level ( $r=-.487$ ,  $p=0.01$ ). The data obtained indicate that people, who are at a spiritual and soul developmental level are oriented toward understanding, empathy to other people. Respondents who are at the bodily level are closed to the experience of understanding and accepting others.

The correlation between the spiritual, soul and bodily levels with the indicator of personal-developmental potential "totally functioning personality" ( $r=.308$ ,  $p=0.01$ ;  $r=.405$ ,  $p=0.01$ ;  $r=.324$ ,  $p=0.01$ ) was determined. The obtained results indicate that a person fully living the life is actualized at all existence levels. K.Rogers describes such a person as being open to experiences, existentially oriented, trusting his body, creative and free. We proceeded from the fact that dispositional mindfulness, as a personal quality, can be an important predictor and have effect on a personal potential. It was determined that a high awareness level is positively associated with such a characteristic of personal potential as "conscious focus" (Table 1).

Table 1. The correlation between the dispositional mindfulness and the scale "Conscious focus" (Pearson correlation coefficient).

Conscious focus	Correlating coefficient (r)	Level of significance (p)
Mindfulness indicator		
Depiction	0.230	0.01
Conscious activity	0.435	0.01
Integrated index	0.324	0.01
Non-responsiveness	0,181	0,05

The obtained correlations are quite obvious, because K.Rogers understands the clarity of awareness, of sensations, thoughts and feelings by conscious focus. This conceptually intersects with the classical understanding of mindfulness (R.Baer, J.Kabat-Zinn, G.Smith et al.), as

the ability to concentrate and put attention to stimuli, whether it be feelings, thoughts or perceptions of the senses. This developed ability allows a person to focus on solving one problem in a certain period of time, to refuse multitasking, to be successful in performing sequential actions with maximum return. Such respondents are not only attentive to their inner and outer world, they are also attentive and thorough in it's verbal description, verbal expression of their inner experiences. Such people do not stuck into the storm of their own emotions. It was determined that the higher the dispositional mindfulness is, the higher indicators on the scale of "self-confidence" the respondents have. Table 2 presents the results of the correlation analysis.

**Table 2. The correlation between the dispositional mindfulness and the scale "Confidence in yourself as an organism" (Pearson correlation coefficient)**

Conscious focus Mindfulness indicator	Correlating coefficient (r)	Level of significance (p)
Observation	0.220	0.05
Depiction	0.266	0.05
Non-judgmental attitude to own experience	0.421	0.01
Integrated index	0.291	0.01

The scale "confidence in yourself as an organism" represents the leading characteristic of a personality, which is faith in oneself as a biological being, a body with an ever-changing stream of feelings. A high indicator of self-confidence reflects the ability of respondents to allow their feelings being as they are, to be able to detect them. According to K.Rogers, this allows a person to have an opportunity to be natural, to accept himself as an imperfect being. On the one hand, this may seem like a paradox – to accept one's imperfection speaking of building integrity and achieving self-actualization. On the other hand, this paradox could be explained by the following centered reflexive position: "when I accept myself as I am, I change" [1].

The formation of the organismic confidence of a person in oneself is difficult. However, thanks to the desire of being open to own experience, over time person is increasingly aware of the unsatisfactory consequences of this or that choice, and increasingly corrects erroneous decisions. The ability to be finely tuned in to oneself implies a high degree of mindfulness of one's inner feelings, careful observation of one's feelings and thoughts, accepting them as they are, without evaluating whether they are good or bad, simply fixing them through naming and accepting aspects of inner life. A high mindfulness level is associated with such an indicator of a person's psychological health as "totally functioning". It was determined that almost all characteristics of the

dispositional mindfulness construct positively correlate with this indicator. The data are presented in Table 3.

**Table 3. The correlation between the dispositional mindfulness with the "Totally functioning personality" scale (Pearson correlation coefficient).**

Totally functioning personality Mindfulness indicator	Correlating coefficient (r)	Level of significance (p)
Depiction	0.394	0.01
Conscious activity	0.281	0.05
Non-judgmental attitude to own experience	0.543	0.01
Non-resposiveness	0.562	0.01

**Table 4. The correlation between the dispositional mindfulness with the scale "Feeling of discomfort with people" (Pearson correlation coefficient).**

Feeling of discomfort with people Mindfulness indicator	Correlating coefficient (r)	Level of significance (p)
Depiction	- 0.537	0.01
Conscious activity	- 0.381	0.01
Non-judgmental attitude to own experience	- 0.429	0.01
Non-responsiveness	- 0.358	0.01
Integrated index	- 0.553	0,01

**Table 5. The correlation between dispositional mindfulness with the scale "Fighting the inferiority feeling" (Pearson's correlation coefficient).**

Fighting the inferiority feeling Mindfulness indicator	Correlating coefficient (r)	Level of significance (p)
Depiction	- 0.428	0.01
Conscious activity	- 0.435	0.01
Non-judgmental attitude to own experience	- 0.543	0.01
Non-responsiveness	- 0.401	0.01
Integrated index	- 0.550	0,01

A totally functioning person has characteristics that, according to K.Rogers, help a person to cope with difficult situations and indicate own psychological health. A totally functioning person accepts all aspects of his own life, both strong and weak. Such a person knows how to enjoy every single minute of life. The correlations between the “totally functioning personality” scale and the indicators of dispositional mindfulness were obtained in the study. According to these correlations, the more a person is prosperous in his life functioning, the more he is able to be mindful of his reactions, accept the whole spectrum of his emotions and be restrained in emotional expressions.

Such a person is well aware of his actions, knows how to focus on them, act in the present tense, without “wandering” in own past and future. That is, a totally functioning person consciously refers to both his emotional expressions and to own actions. The potential for personality development lies not only in the plane of a person’s inner life, but also in his relation to other people. For K.Rogers, the attitude towards others begins with the acceptance and awareness of own inner “Ego”, understanding own emotions in relation to others. K. Rogers defines the “feeling of discomfort with people” as the feeling of insecurity in a situation of interaction with others.

Negative correlations between the “Feeling of discomfort with people” scale and dispositional mindfulness were determined (Table 4).

The resulting correlation indicates that respondents with a pronounced sense of discomfort with people are characterized by low mindfulness indicators. Such people are in their emotional lives, while they do not accept their emotions and can hardly verbalize them. Such people are characterized by hasty decisions that are made according to emotional and momentary impulses. Their conscious activity is hindered by the same excessive, spontaneous, poorly regulated cognitive activity, without paying attention to what is happening at the moment. In support of how important it is to realize and accept oneself in building relationships with others, K.Rogers points out: “... I find that I am more successful in relationships with other people when I can perceive myself and be myself, accepting myself as I am”[1].

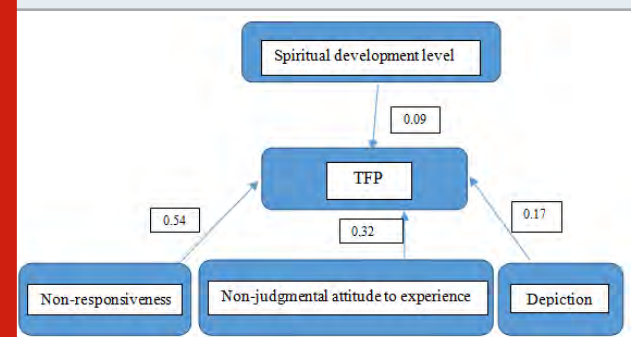
The potential of personality is also associated with another characteristic, which is the lack inferiority feeling. The inferiority feeling, according to K.Rogers, manifests itself in the confidence of some people that others show themselves as more competent, intelligent and productive compared to them. They struggle with a sense of inferiority by avoiding situations, in which they may lose, or try to please others in order to be accepted. They are accompanied by a struggle for a positive attitude of the social environment. The scale “Fighting the inferiority feeling” demonstrates a deep experience of this feeling. Correlation relationships demonstrate that a high level of inferiority feeling has a negative

correlation with such dispositional mindfulness factors as “Depiction”, “Conscious activity”, “Non-judgmental attitude to own experience”, “Non-responsiveness”, as well as with an integrated index of mindfulness.

The obtained data demonstrate that a person with a pronounced inferiority complex is not able to understand own actions, is within the framework of stereotypical reactions, condemns and does not accept own emotions and feelings. Such person lives in the strict framework of evaluating his emotions as “good” or “bad”. Without seeing half-tones, it is difficult for such person to verbally describe the inner world experiences, but this person easily plunges into their living, not leaving himself the opportunity to choose a constructive reaction model for the situation. In order to measure the contribution that dispositional mindfulness can make to the potential of the individual, the parameter “Totally functioning personality” was selected as the one best representing the psychologically healthy individual. Multiple regression analysis data are presented in Figure 1.

The data obtained (at  $p < 0.05$ ,  $R = 0.70$ ,  $R^2 = 0.52$ ,  $b = 11.63$ ) indicate that several variables make a positive contribution to the “totally functioning personality” indicator. These are the spiritual level of personality development, as well as several factors describing mindfulness, such as non-responsiveness, non-judgemental attitude to own experience, and depiction.

Figure 1: Contribution of dispositional mindfulness indicators and personality development levels to the parameter “Totally functioning personality”.



## DISCUSSIONS

According to K.Rogers, a person is endowed with a natural desire for self-improvement. From the organizational level to the spiritual, he seeks to develop, to manifest himself in the best possible way. In order to do this, he has a rich potential, which, with the required efforts, can be implemented and help to become a totally functioning personality. The conducted research showed that there are such characteristics of a person-developmental potential that are important, “cross-cutting” and appear at all three levels of the personality hierarchy. Such characteristic is “openness to feelings in relationships”. It should be noted that only at the spiritual and soul levels a person can be open, empathic with others, while the



bodily level of development implies orientation toward oneself, one's ego.

Another such characteristic is the "totally functioning personality". This characteristic is also essential and is manifested at all hierarchical levels of personality development. According to it, the full functioning is possible only when a person successfully functions at the spiritual and psychological levels, as well as at the bodily level. K.Rogers noted that it is a totally functioning personality that has qualities allowing advancing to maturity and self-actualization. In order for an individual to follow this path, one should be mindful of the mission, the vector of own movement. Dispositional mindfulness is a psychological quality that each individual is endowed with to some extent. It is manifested in the ability to observe internal and external stimuli, depict them, carry out conscious activity, to be non-responsive to own experience, be able to choose a reaction without focusing on momentary experience (R.Baer).

We suggested that dispositional mindfulness is closely related to personal potential and affects the way it is used by the individual. The conducted research exposed that dispositional mindfulness is positively associated with all the characteristics of a personality's developing potential. These characteristics are conscious focus, confidence in yourself as an organism, and total functioning. Negative correlations were identified with such characteristics as a feeling of discomfort with people, a feeling of inferiority. Mindfulness is a multifactorial construct and not all factors are equally significant for the developing potential of the individual. Since the personality potential is totally manifested in the full functioning of the personality, the factors of dispositional mindfulness making the greatest contribution to this parameter were studied. It was determined that there are three such factors: the ability to describe one's inner world, the non-judgmental attitude to own experience, and the individual's ability to choose reactions regardless of the emotional and cognitive response to their experience.

We assume that the development of these three mindfulness factors is useful in terms of achieving the totally functioning personality. It should be noted that this study requires further development, in particular, increasing the series, considering gender and age differences. Further studying will allow expanding the idea of the importance of mindfulness for the current and future personality development.

## CONCLUSION

Each person has a certain development potential, this potential is used for the purpose of self-disclosure, self-actualization and the implementation of own total life functioning. A totally functioning personality possesses such characteristics as the spiritual development level, as well as three factors of dispositional mindfulness. These factors are "non-responsiveness" i.e. conscious choice of reaction regardless of the emotional assessment of the

situation; "non-judgmental attitude to own experience" i.e. acceptance without condemnation of one's thoughts and feelings; "depiction" i.e. ability to describe own inner world. Thus, the listed factors of dispositional mindfulness have a close relationship with the person-developmental personality potential and in the future determine its total life functioning.

## REFERENCES

- A. Lorgus (2004) Soul and spirit: nature and being. Orthodox doctrine of man. Christian life. Moscow-Klin: Synodal Theological Commission.
- A.M.Golubev, EA (2018) Dorosheva, Features of the application of the Russian-language version of the five-factor questionnaire of mindfulness., Siberian Journal of Psychology, vol 69, pp. 46-68.
- Baer, R 13, 'Assessment of Mindfulness Self-Report: The Kentucky Inventory of Mindfulness Skills.', Assessment, p. 1.
- D.I. Zelikson (2016) The relationship of mindfulness presence and subjective well-being. ', Modern foreign psychology. vol 3, pp. 92-99.
- E.R. Tomlinson, OYADVLJ (2018) Dispositional Mindfulness and Psychological Health: a Systematic Reviw. Mindfulness, pp. 23-43.
- E.V. Shestun, EAMIA, Podorovskaya, E.N. (2010) Ustyuzhaninova Diagnostics of personality levels using the personality hierarchy technique. Psychological science and education, pp. 69-81.
- G.V. Ivanchenko, DALAVP (2011) The idea of potential in the human sciences: from "human potential" to personal in the collective monograph "Personal potential: structure and diagnostics", Moscow: The Meaning.
- J. Kabat-Zinn, WYG (2005) There You Are: Mindfulness Meditation in Everyday Life. Hachette Books.
- K. Brown, RR (2003) The Benefits of Being Present: Mindfulness and Its Role in Psychological Well-Being. Journal of Personality and Social Psychology vol 84 no. 4 pp. 822-848.
- K. Rogers, FOP (2016) A look at psychotherapy. Institute for Humanitarian Research.
- O.D. Pugovkina, ZNS (2014) The concept of mindfulness (awareness): a non-specific factor of psychological well-being. Modern foreign psychology, vol 2, pp. 18-28.
- R. Baer, GSJHJKLT (2006) Using Self-Report Assessment Methods to Explore Facet of Mindfulness. ', Assessment vol 13, no. 1, pp. 27-45.
- S.L. Bratchenko (1997) Diagnostics of personal development potential. Publishing house of the Pskov Regional Institute for Advanced Studies of educators.
- S.V. Velichko (2004) The role of personal potential in the processes of social readaptation., Advanced Information Technologies and Intelligent Systems vol 1, no. 17, pp. 126-130.

S-L. Keng et al. (2011) Effects of mindfulness on psychological health: A review of empirical studies.', Clinical Psychology Review.

T.I. Shulga, LEZ (2019) Mindfulness as a special quality of modern youth. Social psychology and society:.

U. Wirtz JT (2014) Thirst for meaning: Man in extreme

situations: The limits of psychotherapy', Moscow: Kogito-Center.

Zotova, LE (2018) The role of personal resources in the formation of teachers' perception of resource provision. Bulletin of Moscow State Regional University. Series: Psychological Sciences, vol 2, pp. 114-124.

# Aspects of Intercultural Communication in the Activities of A Small Educational Group at the University

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## ABSTRACT

This article presents and analyzes the experience of intercultural communication of students of a technical university in the educational process. Increased communication confidence and the acquirement of intercultural communication skills were observed among students after completing the study assignment. The analysis revealed a statistically significant correlation between the acquirement of intercultural communication skills and engagement rate in a small group, increased communication confidence, the development of a sense of belonging to a small group through collaboration, increased communication confidence, including confidence in communication in Russian for foreign students. Other positive correlations were found between confidence in communication in Russian and the development of a sense of belonging to a small group. Finally, the acquirement of intercultural communication skills was closely related to the acquirement of interpersonal communication skills through participation in a small group.

**KEY WORDS:** INTERCULTURAL COMMUNICATION, GROUP INVOLVEMENT, A SENSE OF BELONGING TO A GROUP, CONFIDENCE IN COMMUNICATION.

## INTRODUCTION

Intercultural communication is a necessity and a guarantee of success in modern society. The price of insufficient mastery of intercultural communication skills can be incredibly high. Intercultural communication abilities

increase the chances of success in education, business, provide productive interpersonal contacts and reduce mutual misunderstanding and disagreement. Unfortunately, there is often a demarcation and even an active opposition of separate social groups and communities. The processes of social, cultural differentiation are observed: inter-ethnic conflicts arise, competing subcultures appear within the same culture [14].

The interdependence of global communities requires more thoughtful interaction between nations and language groups. According to K. Fitch and R. Desai, awareness of cultural differences is necessary to overcome cultural divisions and to promote intercultural relations. These authors advised to acquire knowledge about intercultural interaction, remember cultural differences, and also

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learn how to properly interact with representatives of different cultures [7].

Students from countries of Asia, Africa, the Middle East, and representatives of states belonging to the former Soviet countries study at Russian universities. In some university groups, there are up to 10–20% of foreign students. In such groups, representatives of different cultures have the opportunity to conduct and conduct a dialogue of cultures, in the process of which knowledge and skills of intercultural communication are formed and developed, based on respect for another culture, mentality and traditions. In the scientific literature of a number of areas: linguistics, cultural studies, psychology, sociology, issues of intercultural communication have received quite wide coverage. The theory of intercultural communications was developed by G. Hofstede, E. Hall, E. Hirsch, R. Lewis, W. Gudykunst, M. Bennett, A.L. Berdichevsky, V.G. Kostomarov, S.G. Ter-Minasova et al. The indicated literature is at the same time not sufficiently focused on the communicative and practical training of students in the field of intercultural communications.

While some researchers noted that introduction with national cultures was a key component of many intercultural training programs, others suggested that the study of some aspects of culture should be included in education programs intercultural competency training programs [1]. J. Berry pointed out that in our time, in order to increase production performance, an individual should have the ability to work in other languages and with representatives of other cultures [9]. Cultural characteristics can also affect the interaction of students in the classroom, working together on group tasks and projects. An understanding of how cross-cultural interaction occurs while working in educational groups is necessary for improving the abilities of intercultural communication, and to study foreign experience, when interacting with foreign students in classes and conducting comparative studies [18].

By examining the value of online forums for collaboration in a group, researchers found that online events expand participants' knowledge of specific learning areas. Analyzing online cooperative learning, M. Loncar, N.E. Barrett and G.-Z. Liu came to the conclusion that online conferences contribute to the development of critical thinking [10, 18]. To develop the skills of intercultural communication, the learning experience in small groups is useful. Small groups have a rather high potential in other indicators of the educational process. In educational small group, students acquire real practice of developing communication skills, the ability to defend their position, to comprehend the system of argumentation. Work in small groups teaches productive partnerships, develops the ability to formulate thoughts in a professional language, listen, hear and understand others, and conduct a dialogue correctly. Joint group activity involves the organization of work on the basis of cooperation, mutual responsibility, exactingness and involvement of its participants [2, 8].

Engagement of students is important for productive work of small group. It can be expressed in the actions and behavior of students, in activity, participation in discussions, application of knowledge, ideas and skills from related disciplines, spending more time on assignments in comparison with other unengaged students.

Researchers note that the students' engagement in the educational process plays an important role in the implementation of the educational program [17]. The engagement in the work of the group reflects the students' tendency to collaborate with others and help them in understanding the materials of education courses [13, 16]. This study is based on the belief that if students participate in cross-cultural study groups, they have the opportunity to prepare and effectively implement intercultural communication. The purpose of this study was to consider the impact of joint activities in a small group on intercultural communication. The following hypothesis was put forward. Joint activity in an intercultural educational small group on the basis of cooperation leads to the development of intercultural communication skills, increased confidence in intercultural communication among students.

## MATERIAL AND METHODS

54 people took part in this study, 28 of them were foreign citizens from Africa, Arab countries and China. Among the 54 participants: 32 male, 22 female, the age of the majority was 21–25 years (94%). The participants studied at the magistracy of the technical university on the 1st year. The students were given the task to discuss the topic in a small group, to join discussions online and to establish cooperation in the performance of the group task, regularly gathering in the classroom. Throughout the course of the assignment (about 6 weeks), e-mail and chats were the main means of communication between students and teachers for discussing the progress of the assignment. The students held four discussions, in addition to the introductory discussion intended for familiarity.

The topics of discussions were: methods of communication in a small group, academic performance in academic disciplines, stereotypes and conflicts in the group work, types of business communication. Each student had to formulate and submit several questions online and then answer questions from their colleagues on the topic. Further, the students were evenly divided into six small groups, 6–8 people each, each small group was assigned one topic for discussion and writing the final report. Participants of the study interacted both during classroom lessons and online, this was determined by the logic of the assignment. Strict requirements were established for small groups. The requirements made it possible to ensure multicultural composition of small groups (at least two members of the group should be foreigners).

Each small group could fulfill its task only by the joint efforts of all its participants, based on information from lectures, practical exercises, several chat discussions and communication between all participants. After the students began to do their homework, they received weekly instructions and feedback from the teacher, by e-mail, in chat rooms, to regulate the general direction of the discussions. Reports on the dynamics of task performance allowed students to keep abreast of their achievements and served as a guide for them. To collect data, quantitative and qualitative methods, questionnaires and interviews were used.

To find out the participants' awareness of intercultural communication, even before starting work in small groups, respondents were asked a questionnaire, which included 5 open questions. In the future, interviews were used with some participants so that they could express their thoughts on intercultural communication in more detail, and discuss certain points. The second survey was conducted at the end of the work, it summed up the assignment. The questionnaire had 16 statements (5-point Likert scale) and 4 open-ended questions. High scores indicated a high degree of agreement. Four open questions were intended to identify expectations from the assignment and difficulties encountered in the process of its implementation.

## RESULTS AND DISCUSSION

According to the survey about awareness of intercultural communication, the majority of respondents (84%) agreed that it was necessary to study intercultural communication and its mechanisms. Among the remaining respondents, opinions were divided, 5% did not formulate a certain opinion, others thought that it was not so important for them to study intercultural communication (7%), and some respondents believed that everything would depend on their chosen career. Almost all participants acknowledged that they lacked, to one degree or another, competence in the field of intercultural communication. Some students (5%) attributed this to a lack of relevant intercultural communication experience. Regarding expectations/concerns about working in a small group, 7 (12,9%) respondents indicated that they would like to get to know the colleagues better, 10 (18,5%) respondents hoped to improve communication skills, especially verbal and intercultural communication. 17 (31,5%) students said they hoped to improve academic performance.

Six students noted that they would like to study without specifying the educational objectives. Two students hoped that the task would be informative and interesting. At the end of the work, according to the results of the survey, students provided written feedback about their experience in completing the assignment, reporting the results achieved. They gave answers to the following four open questions. The survey was anonymous, conducted in the classroom and provided data on how foreign students are engaged in the work of a small group. In

answers to the first question, most students described the possibility of communication with representatives of different cultures.

When asked about difficulties in completing the assignment, the students provided the following information. The first is a lack of patience and desire to work in a small group. In some small groups for a long time they could not allocate areas of responsibility. Another obstacle is lack of time. The third obstacle is the lack of knowledge in Russian by foreign participants. Some respondents stated that they were concerned about the lack of understanding messages and certain phrases in Russian, speech spoken, lack of vocabulary, problems with the quick writing of messages in Russian in chat rooms. The third and fourth questions were posed to determine students' attitudes toward the assignment after the start of electronic messaging. The initial reaction of learners to the experience of joint communication in the group was positive. Some small difficulties, associated with joining a small group and starting work, were successfully overcome. Responses to 16 other statements from the second questionnaire covered a number of indicators with the respective sets of questions. Mean values were calculated on a 5-point system (from 1 to 5 points). The results are presented in Table 1.

Table 1. Indicators of small groups' work.

Indicators	Mean	SD
engagement in the work of a small group	3,33	0,81
increased confidence in cross-cultural communication	3,3	0,8
development of a sense of belonging to a small group	3,18	0,87
acquisition of intercultural communication skills	3,53	0,79
confidence in communication in Russian (for foreign students)	3,63	0,76
(Here: SD – standard deviation).		

Approximately 51% of students read the instructions completely before starting the assignment, although more than half of the participants (58%) knew that these were guidelines. A high percentage of participants (79%) read online answers from other participants of small group, before sending their own, and only 26% said they liked reading from colleagues. Only 25% of participants reported that they were comfortable exchanging views while completing the assignment. Almost 70% of in students felt more comfortable exchanging opinions on the Internet than in a classroom. At the same time, many foreign students reported that they gained confidence in communication in Russian (68%), and there were more than those who could not give an answer (26%) or did not express their opinion on this issue (5%). Only 7% of foreign students answered that their confidence rate in

communication in Russian did not increase in the process of working in a small group.

The confidence in intercultural communication in a small group can be characterized through interest in the opinion of the interlocutor, the desire to enter into dialogue with him (her). Only 29% of foreign students recognize some interest from Russian colleagues, and 56% were not sure about it. However, more than half of the participants (59%) agreed that their partners from Russia were interested in learning a different culture, compared with a much smaller number of foreign participants (19%) who did not agree with this opinion. The development of the sense of belonging to a small group was manifested through a willingness to support students in their group, identification with the group, willingness to share time and make efforts to achieve the goals of the group. The number of students who were not sure that their teacher and colleagues would support them was 41% and 38%, respectively.

Almost 69% of students believed that they acquire intercultural communication skills by participating in the group task. 60% of students said they had a better understanding of other cultures, while 53% said they learned more about their cultures. The analysis revealed a statistically significant correlation between the acquirement of intercultural communication skills and: engagement in the small group work,  $r = 0,516$ ,  $p < 0,001$ ; formation of a sense of belonging to a small group,  $r = 0,627$ ,  $p < 0,001$ ;

confidence in communication in Russian (for foreign students),  $r = 0,428$ ,  $p < 0,005$ . In addition, the formation of a sense of belonging to a small group significantly correlated with: engagement in the work of a small group,  $r = 0,342$ ,  $p < 0,001$ ; confidence in communication in Russian (for foreign learners),  $r = 0,358$ ,  $p < 0,005$ . It was found a positive correlation between the self-perception of foreign students of their competence in Russian and their confidence in communication,  $r = 0,544$ ,  $p < 0,01$ . The average values of students' self-perception of Russian language skills:  $M = 2,89$ ,  $SD = 0,76$ .  $t$  means that the better students think about their ability to read, write, speak and understand Russian, the more confidently they communicate with colleagues in a small group. Students from China were the least involved in the educational process, compared with other students, were least involved in the discussion in the classroom, discussed working issues with the teacher online and took part in other events. In turn, Russian students showed the highest level of engagement compared to colleagues from other countries.

When foreign students were asked about the interpersonal experience of interaction in a small group, they mostly rated it positively. Many foreign students reported that they had become friends with Russian colleagues, sharing opinions and conclusions. Their statements were coded into two categories: their ideas about Russian colleagues and their interaction with Russian colleagues. Answers with a similar context were collected together. Many

participants indicated that working in a small group challenged their stereotypes about cultures and people. According to foreign students, Russian colleagues showed themselves to be interesting, positive, communicate well and ask questions, were inspirational, patient, non-formal in communication. Foreign students described Russian colleagues through their expressed forms of behavior: they actively shared their opinions, showed a positive attitude, answered questions, sought to learn more about the interlocutor, to find shared interests.

## DISCUSSION

The fact that only 51% of students actually read the instructions for online participation before their discussions indicates that most of them did not clearly understand what is required for successful online collaboration. It also showed that cooperation should be structured and organized [5]. The reason most foreign students did not like to read chat messages, via e-mail, may be due to a language barrier. The assumption that students understood the instructions well through classroom announcements or email messages was clearly unfounded. Only 45% of foreign students assessed the level of Russian language proficiency when asked about it ( $M = 3,62$ ). Through this intercultural collaboration, participants learned about communication skills in various cultural aspects. They also mastered the rules of etiquette in online communication and group work. Other researchers also consider the language barrier an inevitable obstacle to satisfactory intercultural collaboration [6]. It is encouraging that 65% foreign students reported that they felt more confident in communicating in Russian after completing the assignment.

One of the objectives of this study was to help students develop a sense of belonging to a small group. Indicators of formation of a sense of belonging have been determined in this study by how students felt support from teachers and their classmates. In particular, 56% were not sure that they were supported by classmates. J. Mittelmeier et al. faced similar problems that affected the motivation of participants in the multinational project. Enhanced student interaction can be achieved by adopting more structured participation criteria for two types of topics [15]. Most students responded positively to intercultural experience. Overall, they felt that they had increased intercultural awareness and acquired cross-cultural communication skills.

The positive correlation between the acquirement of intercultural communication skills and interpersonal skills is consistent with the fact that there is an obvious connection between interpersonal and intercultural communication. Similarly, J.N. Martin, T.K. Nakayama emphasized the importance of interpersonal communication skills for intercultural interactions [14]. Collaboration in small groups was successful, allowing students to practice interpersonal skills, as well as learn how to work with differences between group members.

## CONCLUSION

The results of this study allow paying attention to how it is possible to increase the level of students' involvement in the work of a small group, for developing a sense of belonging to a small group in order to accelerate the mastery of intercultural communication skills. In current study, engagement involved, first of all, viewing messages sent by classmates, following the teachers' instructions, and participation in discussions. This idea was supported by Y. Chang Y. and M.J. Hannafin, who proposed setting guidelines for engagement [3]. Creating an atmosphere of cooperation required to develop and structure online-interaction rules. Content, guidelines and schedules for events should be approved and agreed upon. Setting pedagogical and educational goals for online activities is crucial to ensure effective discussion and satisfactory learning outcomes [4].

Special events can be developed as a part of small group training to strengthen a sense of belonging to a small group. The students are more interested to participate in the educational process when they develop interpersonal relationships [12]. Virtual tours of universities, holding open days, intercultural events and student life events can be used to expand cultural exchange through wide accessibility and multimedia tools.

To reduce the anxiety of foreign students in communication in Russian, cooperation strategies should be developed. We believe that the development of the educational community can reduce the fears of foreign students in communication in Russian. Although the study is limited to a small-scale sample, its results may possible give reason for other studies that investigate intercultural interaction in higher education. Despite the problems that need to be resolved in the future, participants expressed satisfaction in mastering skills of intercultural communication. It would be advisable to conduct a comparative study in the future, which will focus on the behavioral and motivational aspects of intercultural interaction, how interpersonal and intercultural communication skills can influence each other, how the development of a sense of belonging to a small group and group cohesion can affect intercultural communication.

## REFERENCES

- Behrnd V., Porzelt S. (2012) Intercultural Competence And Training Outcomes Of Students With Experiences Abroad. *International Journal Of Intercultural Relations*, 36 (2), Pp. 213–223.
- Berry J. W., Poortinga Y. H., Seagal M. H., Dassin P. R. (2005) *Cross-Cultural Psychology: Research And Applications*. Cambridge University Press.
- Chang Y., Hannafin M.J. (2015) The Uses (And Misuses) Of Collaborative Distance Education Technologies. *Quarterly Review Of Distance Education*.. 2, Pp.77-92.
- Deardorff D. K., Deardorff. D. (2016) Assessing Intercultural Outcomes In Engineering Programs. In K. S. Amant, K. S., & M. Flammia, M. (Eds.). *Teaching And Training For Global Engineering: Perspectives On Culture And Professional Communication Practices*. Cincinnati, Ohio: John Wiley & Sons., Pp.239-258.
- Dimitrov N., Haque A. (2016) *Intercultural Teaching Competence In The Disciplines: Teaching Strategies For Intercultural Learning*. Centre For Teaching And Learning Publications, 16, 2016.
- Effectively., Burke A. (2011) Group Work: How To Use Groups. *The Journal Of Effective Teaching*. 11(2), Pp.87-95.
- Fitch K., Desai R. (2012) Developing Global Practitioners. *Journal Of International Communication*. 18(1), Pp.63-78.
- G.V, Davidson-Shivers. (2009) Frequency And Types Of Instructor Interactions In Online Instruction. *Journal Of Interactive Online Learning*. 8(1), Pp.23-40.
- Griffith R., Wolfeld L., Armon B., Rios J., Liu O.L. (2016). *Assessing Intercultural Competence In Higher Education: Existing Research And Future Directions*. Ets Research Report Series. 2, Pp.1-44.
- Kim J., Kwon Y., Cho D. (2011) Investigating Factors That Influence Social-Presence And Learning Outcomes In Distance Higher Education. *Computers And Education*, 57(2), 1512-1520.
- Loncar M., Barrett N. E., Liu G.-Z. (2014) Towards The Refinement Of Forum And Asynchronous Online Discussion In Educational Contexts Worldwide: Trends And Investigative Approaches Within A Dominant Research Paradigm. *Computers & Education*. 73, Pp. 93–110.
- Malik Z. A., Khan S. S., Maqsood M. (2018) Exploring The Relationship Between Student Engagement And New Pedagogical Approaches. *Journal Of Educational Technology Systems*. 47(2), Pp.170-192.
- Maloshonok N. G. (2014) Engagement Of Students In The Educational Process In Russian Universities. *Higher Education In Russia* 1 Pp. 37-44.
- Martin J. N., Nakayama T. K. (2017) *Intercultural Communication In Contexts*. Ny: Mcgraw-Hill Education.
- Mittelmeier J., Rienties B., Tempelaar D., Whitelock D. (2018) Overcoming Cross-Cultural Group Work Tensions: Mixed Student Perspectives On The Role Of Social Relationships. *Higher Education*. 75, Pp.149-146.
- Ni A. Y. (2013) Comparing The Effectiveness Of Classroom And Online Learning: Teaching Research Methods. *Journal Of Public Affairs Education*, 19 (2), 199-215.
- Strauss L. C., Terenzini P. T. (2007) The Effects Of Students' In-And Out-Of-Class Experiences On Their Analytical And Group Skills: A Study Of Engineering Education.. *Research In Higher Education*.. 48(8), Pp.967-992.
- Summers M., Volet S. (2008) Students Attitudes Towards Culturally Mixed Groups On International Campuses: Impact Of Participation In Diverse And Non-Diverse Groups. *Studies In Higher Education*, 33 (4) Pp. 357–370.

# Role of Physical Culture As a Basis in the University Pedagogical Process in the Development of Students' Worldview in the Third Millennium

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## ABSTRACT

The authors concern an actual problem - the importance of physical culture in the pedagogical process of the university as a positive image of the worldview of the students of the third millennium. The idea of interrelation between the sphere of values and meaning and the sphere of human existence and periodic physical activity during the higher education is carried out. It is stated that physical culture promotes initiative, responsibility, critical thinking and purposefulness of students. The worldview is considered from the point of view of human personality subjectivity that can influence the sphere of being and its perception. It is emphasized that the qualities acquired by a student in physical culture classes are one of the main in the course of socialization in the formation of a holistic worldview, the ability to adapt to changing conditions of life. It is pointed out that the formation of worldview within the framework of physical culture classes is possible only with a positive moral coloring of the perception of the need for exercise and maintenance of an appropriate level of their own health.

**KEY WORDS:** HIGHER EDUCATION, CULTURE, PERSONALITY, WORLDVIEW, STUDENT YOUTH, PHYSICAL ACTIVITY, PHYSICAL CULTURE.

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## INTRODUCTION

At the start of the third millennium, Russian universities are faced with a very important problem of the need to develop physical culture and sport. The urgency of this problem is raised at various levels of public discussion, including at the level of government. For instance, the President of the Russian Federation V. Putin noted that "in Russia the development of physical culture and sport



is among the national priorities” in his speech on October 10, 2016 [6].

In the context, it is no coincidence to address such a social group as youth. However, the sociological science has not formed a clear and unambiguous definition of this concept. In a broad sense, it is understood as a set of group communities of a certain age that manifest themselves through similar activities [3]. At the same time, in accordance with the regulations of the Russian Federation of different levels, the age according to which an individual belongs to the category under consideration is represented in the interval from 14 to 30 years [1; 2]. At the end of the 20th century and at the beginning of the 21st century in Russian universities of physical culture and sport there are global changes in an important and responsible direction as “World Vision”.

We believe that this is an essential system of human views of the world around us. In this responsible direction there are different types of worldviews: religious, scientific, everyday [5]. All of them have a lot of advantages in the modern society, but at the same time, their disadvantages. Many researchers consider the formation of a humanistic worldview, which would be based on the advantages of scientific knowledge of the surrounding world, but aimed primarily at the man himself, as the most important task of our time. It is the human being, his needs and interests, his peculiarities and harmony, that is, perfection, moral and physical, that should become the center of this worldview [1].

It is clear that physical education in higher education and additional classes can be an important means of forming such a world view. The purpose of physical training is comprehensive, harmonious development of personality. A strong and healthy body should not be the only dignity of a modern person. No less important is intellect combined with a high culture of behavior, moral values such as nobility and honor. All this implies a close relationship between physical education and the moral, ethical and work ethic. In our opinion, these physical education activities create exceptional conditions for the physical and moral education of students [7]. It is in games and exercises that the character of the student is revealed; here collectivity, unity and patriotism, persistence and perseverance, courage and honesty are acquired, and spiritual and physical qualities of the personality are formed [8].

Nevertheless, the formation of human personality goes through a global process of its formation within the framework of life in society through activity, communication, work and many other aspects of socialization. Sport and physical culture are also parts of the formation of man as a unique subject of existence. As a separate phenomenon, it is aimed at the comprehensive realization of internal potential in various aspects not only of physical activity, but also at harmonious building of style and way of life, revealing oneself in educational and labor activity from new positions [1]. The worldview

is a product of human interaction with society, public institutions and the heritage of mankind.

In fact, it begins to be formed with the beginning of self-consciousness as a part of the world and is initially built on education, in the subsequent on separate points of view, chains of events of the life path or life of the significant person, the culmination of which is not so much the formation of a system of beliefs and views, but the ability to build judgments and be guided by certain attitudes in different situations. In this regard, it is advisable to consider physical culture as a unique part of the life path, which can have a direct impact on the formation of the individual’s world view.

**Research objective:** reveal the peculiarities of worldview formation in physical education of students of different ages.

**Research methods and organisation:** A full review of pedagogical literature on the research problem was carried out; the legal framework regulating state work with student youth was studied.

## RESULTS AND DISCUSSION

According to philosophical dictionaries, the worldview is a system of the most general ideas about the world as a whole and the place of man in this world [2]. Due to the continuity of national philosophy with German, this term is literally a pebble from the German (*die Weltanschauung*), and in the literal sense was originally understood as contemplation of the world, observation of it, that is, assumed the presence of subjectivity - personality of a contemplative person.

One of the tasks of the educational system is to promote the formation of the learner’s worldview[1]. In this regard, the system of higher education is no exception, because within the framework of the educational organization, a student has the opportunity to learn and develop a certain list of competencies [8], which contribute not only to the formation of a professional, but also to the transformation of his personality. The pedagogical process is understood as a pedagogical system characterized by dynamism, purposefully built and manifested in the interaction between teachers and students to solve development and educational tasks [9]. The pedagogical process in higher education implies a required federal component, in which physical culture is an essential part [4]. The feature is not occasional, because within the framework of this discipline the student gets an opportunity to:

- Develop one’s own intellectual abilities, analyzing, synthesizing and interpreting information in conditions non-standard for the organism, which is a stimulating factor that can be useful in mastering educational and scientific material;
- Form and strengthen physical qualities through the performance of actions and operations related to the possible load;

- Reveal the aesthetic potential in relation to activity, labor activity, morality;
- Develop willful qualities through self-education, self-control and self-improvement.
- Physical culture is an essential part of culture, both in its broad and narrow sense. This fact can be traced in the fact that it is closely related to the education of morals and aesthetics, based on similar psychophysical processes.
- In this context, physical exercises become not simply a machine performance of certain operations, but an opportunity to develop creative abilities, initiative, and critical attitude towards oneself and one's actions, one's own actions [6].

These qualities are basic for the formation of a comprehensively developed and responsible personality of a student. In this context, physical culture acts as an element of formation of world outlook of students in the conditions of receiving higher education from the point of view of harmonious transformation of their lifestyle, revision of priorities and values, aimed at preservation of health and maintenance of it at the proper level.

## CONCLUSION

The formation and development issue of physical culture is an essential part of the pedagogical process of the university, acting as a positive image of the worldview of students. The position is confirmed by its role in the formation of a comprehensively developed personality from the standpoint of a humanist approach to education, which is revealed from the standpoint of health promotion, as well as education of value attitude

to their lives and social wellbeing. In this context, physical culture becomes not only a factor influencing the formation of an individual personality, but also an essential part of health protection, labor and educational activities of society.

## REFERENCES

- (A.Y., 2014) (V.V., 2012) (Anon., 2025) (Ponomareva, 2012) (Anon., n.d.) (V.V., n.d.) (V.V., n.d.) (V.N., 2008) (M.N., 2018)
- A.Y., G. ( 2014) Formation of the students motor competence in the process of physical education in university. pp. 29-38.
- Anon. (2025). Basics of the state youth policy for the period till.
- Anon., n.d. Resolution On the main directions of youth policy in the Russian Federation.
- M.N., S. (2018) Physical culture and sports in higher educational institutions. p. 153.
- Ponomareva, K. ( 2012) Physical culture of students: definitive characteristic, scientific-methodical system of formation in conditions of pedagogical higher education institution. pp. 178-180..
- V.N., S. (2008) The role of the university physical culture in socialization of the future specialist.
- V.V., K. (2012) Model of forming the positive attitude of the students of pedagogical university to physical culture. Volume 11, pp. 137-141.
- V.V., P., n.d. Development of physical culture and sport in Russian Federation is one of the national priorities. Russian Information Agency TASS..
- V.V., P., n.d. Sport is back in priorities of state policy.

# Concept and Episteme as Basic Concepts of Native Language Methodology

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## ABSTRACT

The relevance of the study refers to the contradiction between the social mandate, which defines a strategic goal of modern domestic education – moral development and education of students on the basis of national (all-Russian, civic, ethnic, Russian) values – and uncertainties (combination, identification) of the concept and episteme as the basic units of linguo-oriented techniques of the native (Russian) language. The purpose of the research is to identify the content nuances of the concept and episteme as basic nominative units that reflect the national (ethnic) specifics of the linguistic knowledge representation through language study of Russian as a native language. The key approaches to the study of this problem were systemic, cultural (cultural-historical) and axiological approaches, which helped us to comprehensively examine the specifics of the concept and episteme. – In this paper we confirmed that content nuances of the categories under study are within the different perception of reality: if the concept associates with the knowledge (consciousness, knowledge) – meaning, logics, mind (conscious perception), cognitive experience of the individual, the episteme – knowledge on the basis of the “soul” (spirit) – feelings, sensations, experiences, spiritual activities, emotional and semantic practice of the person. The article materials present theoretical and practical value in order to determine the structure of value orientations, content, main directions, principles, planned results, methodological foundations, and the organizational features of spiritual and moral development, education and socialization in relation to the student’s personality by means of Russian language as a native language.

**KEY WORDS:** CONCEPT, EPISTEME, RUSSIAN (NATIVE) LANGUAGE, SPIRITUAL AND MORAL EDUCATION, SOCIALIZATION.

## INTRODUCTION

One of the fundamental terms among the modern educational method of Russian (native) language which focuses on spiritually-moral development and education of students in accordance with the basic national values

by means of the native language, is a concept without which it is very difficult to ensure complete education of students (all-Russian, civic, ethnic, Russian) values of national culture. We find this category leading both in the theory and practice of native language study, as well as in cultural studies, linguoculturology, cognitive grammar, linguo-cultural studies, semantics, logical semantics, mathematical logic, philosophy, psychology, and other related disciplines. Whereby, we should note that “the term of concept as a unit of cultural content, has no full definition” [Azimov, p. 113], and along with the concept (N. D. Arutyunova, D. S. Likhachev, S. Kh. Lyapin, V. P. Neroznak, Y. S. Stepanov, etc.) one can use and other equivalent concepts:

## ARTICLE INFORMATION

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- logoepistema – (E. M. Vereshchagin, V. G. Kostomarov, N. D. Burvikova);
- linguocultureme – (V. V. Vorobyov);
- conceptual framework (D. S. Likhachev);
- mythologema (V. N. Bazylev, M. Lahteen–maki);
- sapien–tema (E. M. Vereshchagin, V. G. Kostomarov);
- ekforema (N. I. Rubakin);
- noema (philo–sophical hermen–eutics).

You can also add to these categories the concepts of "constant", "language constant", "existential meaning", "limitative item", "cultural concept", "linguo-cultural concept", etc. Of course, from the perspective of synergetics, as B. N. Poizner notes, it is appropriate when in a situation of "order from chaos", the replicator, who accidentally surpassed his "rivals", serves as the instigator, the agent of self-organization, which can lead to the domination of the "successful" replicator within the system [Poizner, p.238]. At the same time, we have to state that the concept, which is "significantly ahead of all other pro-nomenclative innovations in terms of word-usage frequency" [Vorkachev, p.41], and the concept of epistem (logo–epistem) which one identifies with it have their own content nuances.

Thus, the relevance of the study refers to the contradiction between the social mandate, which defines a strategic goal of modern domestic education – moral development and education of students on the basis of national (all-Russian, civic, ethnic, Russian) values – and uncertainties (combination, identification) of the concept and episteme as the basic units of linguo-oriented techniques of the native (Russian) language. The purpose of the research is to identify the content nuances of the concept and epistemes as basic nominative items that reflect the national (ethnic) specifics of the language knowledge representation in education of Russian language as a native language.

## MATERIAL AND METHODS

In the course of the study, we applied to systematic, cultural (cultural–historical) and axiological approaches that allowed us to comprehensively consider the specifics of the concept and epistem.

## RESULTS AND DISCUSSION

In philosophy one determines the concept as "formulation, mental image, general idea, concept" [Filosofsky, 1986, p. 217]. In logics and logical semantics, one interpretes this category as "the meaning of the name" [ibid.], "the content of the concept, its semantic content in withdrawal from the specific language form of its expression" [Vsemirnaya, p. 506]. We note that various interpretations of the concept relate to the reference

theories (the concept of truth, satisfiability, designation, name, extensionality, synthetic reality, etc.) and meaning (value and sense, synonymy, analytical reality, etc.) [Filosofsky, 1986, p. 242]. In linguistics, the term "concept" – is a "mental formation that replaces us in the process of thought an indefinite set of objects of the same kind" – belong to S. A. Askoldov–Aleksyev. Later R.I. Pavilionis (clarification of the relationship between meaning and concept), M.A. Kholodnaya (revealing the role of concepts in the organization of thinking), D.S. Likhachev, (filling the concept of linguoculturological access) and many others participated in the interpretation of the concept.

If in the 90s of the last century, there was a formation of the traditional identification in regard to the "concept" as "grammatical or semantic category, usually of no higher-level generalization", and the term "concept" [Akhmanova, p. 334], that one interpreted as "a phenomenon of the same order as the meaning of the word" but "in a slightly different system of relations; the value in the language system, the concept – in the system of logical relations and forms under the study as in linguistics and in logics" [Linguistic, p. 384], then in a variety of scientific concepts within the content of the concept we can identify systematic, conceptual, figurative, associative, cognitive, communicative, activity, historical, etymological, cultural, ethnic, ethno-cultural, semantic, value and other dimensions, whereby we use the concept as:

- "mental education" (S. A. Askoldov–Aleksyev);
- "algebraic expression of meaning" (D. S. Likhachev);–
- "basic perceptual-cognitive-affective education" (A. A. Zalevskaya);
- "the original meaning, which has not acquired a form; the matter which refer to the design of the word in its content forms: in the constructive
- within the image and symbol, and in the structural within the concept" (V. V. Kolesov);
- "quantum" of the knowledge" (E. S. Kubryakova);
- "quantum of structured knowledge" (Z. D. Popova, I. A. Sternin);
- "quantum of knowledge", "semantic embryo", or "semantic gene" of the meaning in relation to a language sign" (N. F. Alefirenko);
- "extension of knowledge" (V. N. Telia);
- "knowledge which one identifies within all its connections and relations" (V. N. Telia);
- "discrete content item of collective consciousness (ideal world)" (A. P. Babushkin);
- "a cluster of culture in the human mind", "the content of concept", "the meaning of the word, "a mixture" of ideas, concepts, knowledge, associations, experiences that accompany the word", "the main cell of culture in the mental world of man" (Yu. S.

- Stepanov);
- "primary cultural formations that express the objective content of words and have (value) meaning" (V. I. Karasik);--
  - "the key word of culture" (A. Vezhbitskaya);-
  - "micro-model of culture" (V. G. Zusman);
  - "cultural layer as a mediator between man and the world" (N. D. Arutyunova);-
  - "conditionally-mental item" (V. I. Karasik, G. G. Slyshkin);
  - "expression of ideation ethnic specificity" (T. A. Fesenko);-
  - "an item of collective knowledge / consciousness (with reference to the highest spiritual values)" (S. G. Vorkachev), etc.

Nevertheless, the above-mentioned facts allow us to state that in modern linguistics and related disciplines, there is the emergence of main approaches to the concept's comprehension:

1. Semantic (traditional, linguistic, grammatical-semantic, logical, logical-semantic, logical-philosophical), comprehending the concept as the meaning (concept) of a word together with its connotative (additional) element (meaning) (N. D. Arutyunova, S. A. Askoldov, R. I. Pavilionis, V. N. Telia, etc.).
2. Cognitive (educational, epistemological, psycholinguistic), which refers the concept to mental phenomena which expresses the activity of consciousness (V. Z. Demyankov, A. A. Zalevskaya, E. S. Kubryakova, L. G. Luzina, Yu. G. Pankrats, Z. D. Popova, I. A. Sternin and others)
3. Cultural (linguo-culturological, linguo-crosscultural) (Yu.D. Apresyan, V.G. Zusman, V.I. Karasik, V.V. Kolesov, D.S.Likhachev, V.A.Maslova, Yu.S. Stepanov, T.A. Fesenko and others .), where the concept is "a national-marked image of culture that has a language expression in the form of words, phrases, sentences and with representation of some linguistic and cultural content that is essential for comprehension of the national characteristics in relation to the native speakers" [Azimov, p. 113].
4. Axiological, the representatives of which (N.F. Alefirenko, A.P. Babushkin, S.G. Vorkachev, V.I.Karasik, G.G.Slyshkin, etc.) under distinction of concepts by their attraction to the sphere of "scientific" or "artistic" conceptual field, nevertheless, have conviction that the "known mental items used in various fields of science (for example, cognitive concept, frame, scenario, script, concept, image, archetype, Gestalt, mnemonic, stereotype) "linguistic and cultural concept differs in that its "center is always value".

With respect to the various approaches to comprehension of the term "concept", let us clarify that they do not exclude

each other and have more or less interconnection.→ So, for example, V. V. Kolesov distinguishes between a narrow (concept as the volume of notion) and a broad comprehension of the concept in culture. In addition, the concept for the author is "the initial position of semantic content for the word and the final limit of development".→ Thus, we can conclude that, despite the "uncertainty" (differences in comprehension) of the concept, the "pro-nomenclative innovations" such as noem, ephorem, linguoculturem, sapientem, logoepistem and others within the scope of the categories under analysis are not identical.

So noema, along with noesis, are terms of Platonic and Aristotelian philosophy that relate to the theory of knowledge. Noesis, by Plato, is the mental perception of the essence, the idea, in accordance with the contemplative nature of reason; noema (thought) is the comprehension of the diversity in relation to the things as a certain unity. Later, noema, which denotes the experience as an "intentional object" constituted by consciousness, becomes one of the central concepts within the transcendental phenomenology of E. Husserl and G.G. Shpet.

The concept of ekforema which belongs to N. A. Rubakin – a category associated primarily with the psychology of reading, as well as with the socio-cultural adaptation of foreign languages and with precedent texts (the term of Yu. N. Karaulov), that are "significant for a particular person in cognitive or emotional relations with a superpersonal character, that is, well-known to the environment of this person, as well as his predecessors and contemporaries, the appeal to which repeatedly occurs in the discourse of such language personality". As precedent texts, the author interprets quotations from works of art, entire written texts that are not fixed in one canonic form, legends, myths, oral and poetic works, parables, legends, fairy tales, and anecdotes.

The term linguocultureme by V. V. Vorobyova, – is "a complex inter-level item which represents the dialectical unity of the linguistic (sign, meaning) and extralinguistic (concept, subject). As an item of a deeper level than the word, linguocultureme" [Azimov, p. 127] "accumulates both the actual language representation ("form of thought") and the closely related non-linguistic cultural environment. The linguocultureme exists as an item of meaning and one can express it by a word, phrase, or the whole text. The logo-epistem – is a "knowledge stored in the item of language: a sign that requires comprehension at the level of language (which identifies) and at the level of culture (which is under identification).

One can call logoepistems (quotes, proverbs, aphorisms, charactonym, catchwords) as symbols, signals that

make you remember a certain background knowledge, a certain text, some information": "Everything is mixed in the house of the Oblonskys", "Here, grandma, and Yuriev day!", "Battle of Kulikovo", "Ilya Muromets", "et tu autem, Brute!" [Azimov, p. 131]. The authors determine sapientema, a concept by E. M. Vereshchagin and V. G. Kostomarov instead of the previously proposed term "logoepistema" (E. M. Vereshchagin, V. G. Kostomarov, N. D. Burvikova), as an a priori innate value-marked idea (in accordance with Plato), which one comprehends speculatively, intuitively, sometimes by insight, which is a combination of knowledge and ethical attitude, able to unfold in specific linguistic cultures and become a linguosapientem [Vereshchagin, p.952-953].

One traditionally considers the concept of episteme within the structure of the philosophical term of epistemology -the theory of knowledge that studies "the nature, prerequisites, conditions, opportunities and boundaries of human knowledge" [Dictionary, p.705]. One attributes the introduction of the term "epistemology" to J. F. Ferrier [Philosophical, 1986, p. 568], who divided the philosophy into epistemology and ontology. M. P. Foucault introduced the term of episteme into the historiography of linguistics. Foucault believes that the emergence and existence of various sciences, theories and hypotheses in different historical epochs determine the "epistemes" - historically changing structures of world perception, or "prisms of vision" of natural and social processes. For M. P. Foucault, the main factor which forms and orders the episteme is the ratio of "words" and "things".

In linguistics, the concept of "episteme" refers to the epistemic function of language, which associates "with the form of knowledge store about the reality".→ If the cognitive function of language (which is a mean to obtain the new knowledge about reality), in accordance with A. E. Kibrik, associates with "the mental activities of man (within the items of language and their properties the structure and dynamics of the mind materialize), i.e. the language items adapted for the category of elements in reality (and, further, store of knowledge) and in order to meet the needs of the thinking process," the epistemic function" connects the language with reality (in the items of language within the framework of epistemological images in it fixes the elements of reality that the human mind selects, displays and processes)" [Linguistic, p. 604].

And, nevertheless, in the logics of concept's and episteme's content nuances identification, it is extremely important to turn to the original comprehension of the episteme, a concept, which belongs to the ancient Greek language. The "cognition" (episteme), in accordance with Plato's thesis, "identifies that the soul, whose significance in this matter is great, follows (hepomene) the things in

motion without arrears and leads.→→ Therefore, by insert of ei, one should say epeisteme ("not to cognite", but "to position") (412a) [Plato, p.453]. The "knowledge" (episteme), continues the philosopher, "is dual and seems to mean that the soul stands (histesin) besides (epi) the things, rather than it moves along with them, and it is probably more correct to pronounce the beginning of this word as we now pronounce it with the extension not in e [ei] - epeisteme, but in i [ii]" (437a) [Plato, p.486].

The epistemological comprehension of language as "study of one's native land" (G. Schuchardt), "monuments of the spirit" (I. Grimm), expressions of "self-consciousness, world-view and logics of the national spirit" have wide representation in foreign linguistics (Sh. Bally, F. Boas, J. Bonfante, L. Weisgerber, J. Vandries, W. Woodt, W. von Humboldt, A. Martinet, G. Paul, E. Sapir, B. Wharf, K. Vossler, G. Steinthal, G. Schuchardt and others). Thus, in accordance with W. von Humboldt, language "is as an external manifestation of the national spirit; the language of the people is its spirit, and the spirit of the people is its language-it is difficult to imagine anything more identical" [Zvegintsev, p. 88-89].→ The scientist explained the development of language and the difference of languages, first of all, by "national world-view", "national spirit", by which he understood the mental structure of the people, their way of thinking, philosophy, art and literature.

We agree with the idea of W. von Humboldt that: "Language is not a product of activity (egdop), but an activity (epedgia)", J. L. Weisgerber argued for an "energeticist" approach to the study of language, the language image of the world, which correlated with the concept of "words of the world" ("Worthen der Welt"), by which he understood not just the division of the world into certain segments by means of words, but the process of spiritual creation or transformation of the objective world into a language picture of the world [Weisgerber, p.277-278]. The follower of W. von Humboldt, G. Steinthal developed the doctrine of language, which, from the scientist's frame of reference, "is essentially the product of a community, a people.→ When we call language instinctive self-consciousness, instinctive worldview and logic, it means that language is self-consciousness, world-view and logic of the national spirit" [Zvegintsev, p. 134-135], which "manifests itself a priori in language, then in disposition and customs, institutions and actions, traditions and chants" [Zvegintsev, p.135].

An anthropological approach to language as a "gift of the word" (N. I. Gretschi) "the spirit of the native language" (N. P. Nekrasov), "the national spirit" (A.M. Peshkovsky), as to "unconscious tradition" (F. E. Korsh), chronicles of the "experienced cultural and social history of this people" (V. A. Bogoroditsky), as a "mirror of the national spiritual personality" (M. A. Tulov), the product of the "spiritual

creativity for this cultural and historical collective” (people) (G. O. Vinokur), the study of the native language in close connection with the consciousness and ideation of a person, his national culture and spiritual life found the reflection within the domestic:

- linguistics (K. S. Aksakov, O. S. Akhmanova, Yu. A. Belchikov, I. A. Baudouin de Courtenay, G. O. Vinokur, N. I. Gretschi, I. I. Davydov, A. A. Zaliznyak, V. A. Zvegintsev, K. P. Zelenetsky, V. V. Kolesov, I. Ornatovsky, A. M. Peshkovsky, M. M. Pokrovsky, E. D. Polivanov, A. A. Potebnya, I. S. Rizhsky, L.V. Savelyeva, Z. K. Tarlanov, I. F. Timkovsky, M. A. Tulov, F. F. Fortunatov, P. Ya. Chernykh, A. D. Shmelev, L. V. Shcherba, E. S. Yakovleva and others);
- linguo-cultural studies (Yu.D. Apresyan, N.D. Arutyunova, V.I. Belikov, L.P. Krysin, E.L. Berezovich, S. B. Borisov, T. V. Bulygina, A. D. Shmelev, M. I. Vendina, E. M. Vereshchagin, V. G. Kostomarov, S. G. Vorkachev, V. V. Vorobiev, V. G. Gak, G. Gachev, V. D. Gubin, T. V. Evsyukova, V. V. Ivanov, V. I. Karasik, Yu. N. Karaulov, V. V. Kolesov, G. V. Kolshansky, V. V. Krasnykh, D. S. Likhachev, A. F. Losev, M. Yu. Lotman, V. V. Makarov, V. A. Maslova, V. I. Postovalova, O. G. Pocheptsov, N. V. Pyataeva, G. G. Slyshkin, Yu. S. Stepanov, E. F. Tarasov, V. N. Telia, S. G. Ter-Minasova, N. I. Tolstoy, N. S. Trubetskoy, B. A. Uspensky and others);
- ethnopsycholinguistics (L. S. Vygotsky, A. S. Gerd, V. V. Krasnykh, M. M. Kopylenko, A. A. Leontiev, A. N. Leontiev, D. A. Leontiev, S. E. Nikitina, N. I. Tolstoy, N. V. Ufimtseva and others);
- linguodidactics (I. A. Abramova, A. D. Alferov, T. M. Andrianova, E. V. Arkhipova, P. O. Afanasyev, V. V. Babaitseva, T. A. Baikova, M. T. Baranov, E. A. Barinova, Y. A. Belchikov, M. V. Boykina, N. F. Bunakov, R. N. Buneev, E. V. Buneeva, F. I. Buslaev, E. A. Bystrova, A. P. Valitskaya, V.I. Vodovozov, T.N. Volkova, M.P. Voyushina, S.G. Gladneva, V.G. Goretsky, J.K. Grot, V.V. Danilov, A.D. Deikina, M. N. Demytyeva, N.S. Derzhavin, V. V. Demicheva, A. S. Dyomyshcheva, O. V. Dzhhezheley, T. K. Donskaya, O. I. Eremenko, E. R. Erisheva, L. A. Efrosinina, L. Ya. Zheltovskaya, L. M. Zelenina, V. A. Ilyukhina, M. A. Kalenchuk, V. P. Kanakina, T.B. Kiryakova, L. F. Klimanova, O.S. Kozhaeva, I. V. Kornut, A. N. Kokhichko, T. S. Kudryavtseva, G. M. Kulaeva, A. Yu. Kupalova, M. L. Kusova, V. A. Kustareva, N. M. Lavrova, E. N. Leonovich, A. A. Leontiev, O. I. Lipina, M. R. Lvov, S. I. Lvova, S. G. Makeeva, O. V. Malakhovskaya, L. A. Mesenyashina, T.F. Novikova, R.S. Panova, O. V. Pronina, T. G. Ramzaeva, E. I. Rogaleva, N. M. O. L. Soboleva, Sokolov, V. Ya. Stoyunin, I. I. Sreznevsky, N.A. Stef Anenko, V. Ya. Stoyunin, A.V. Tekuchev, V.Yu. Troitsky, G.G. Tumim, D.N. Ushakov, K. D. Ushinsky, L.P. Fedorenko

L.A. Khodyakova, T.E. Khokhlova, N.A. Churakova, N.M. Shansky, A.A. Shtets, N.Yu. Shtreker, L.V. Yuldasheva, N.S. Yunova, T.V. Yakovleva, etc.).

Thus, we find the idea to use the “gift of the word” in language study of Russian (native) language in papers of the founder of Russian linguodidactics, F. I. Buslaeva. “The gradual discovery towards the gift of the word and its laws,” in accordance with the author [Buslaev, p. 4], “ must also be the discovery of all the student’s moral forces, because the native language is an inexhaustible Treasury of all the mankind’s objective reality.” “Language,” in accordance with I. I. Sreznevsky, - is not only an instrument of human cognitive and thinking power, but it is the power itself, the body in which it lives and without which it freezes <...> That is why to think about spiritual and moral education of the person and not to think at the same time about his native language or to think about his native language only as one of the objects within the scope of education, which occupies one of the roles among the other study subjects, and not as the main, general, which focuses and supports within itself all the other - is impossible” Sreznevsky, 1982].

The above-mentioned arguments allow to suggest, that the epistemological approach to language education under consideration within the cultural (cultural-historical) and axiological approaches to content of education which focuses on spiritual and moral development and education of students on the basis of national (all-Russian, civic, ethnic, Russian) values that have support of the domestic and foreign traditions. Nevertheless, although between the concept noema, ekforema, linguocultureme, logo-epistem, sapientema and other converging multidimensional and complex cognitive linguistic and social concepts there are no contradictions, traditionally as the base of the nominative items, that reflect the national (ethnic) specificity of language knowledge, were the concept of the episteme, the content nuances of which lie within the different perception of reality: if the concept is normally associated with the knowledge (consciousness, cognition) – meaning, logics, mind (conscious perception), cognitive experience of the individual, the episteme – knowledge in accordance with the “soul” (spirit) - feelings, sensations, experiences, spiritual activities, emotional-semantic practice of the person.

We find confirmation of this idea in the papers of V. G. Belinsky and many other Russian thinkers. – So, in accordance with V. G. Belinsky: “the Idea relates to the word as the soul to the body, and the word relates to thought as the body to the soul, i.e. the word is a cover, garment, form, expression, and the idea is the sense, the mind, the meaning of the words” [Chrestomathy, p. 83]. A strong argument for this position, in our opinion, is an appeal to the etymology of the concepts under

analysis, where:

- Latin *conceptus* - thought, concept, representation < *concepi*, *conceptum*, *concepere* - to collect; to clothe the words into a certain formula; to perceive; to imagine; to comprehend [Latin, p. 257-259]; →
- ancient Greek (*episteme*) - cognition < ("not to cognite", but "to position") < "the soul, whose significance in this matter is great, follows (*hepomene*) after the things in motion without arrears and leads", "the soul stands (*histesin*) besides (*epi*) the things" [Plato, p.453, 486].

## CONCLUSION

In conclusion, one considers the concept and epistemes as basic nominative items that reflect the national (ethnic) specifics of the language knowledge representation, we emphasize that the native (Russian) language has always been and remains the main subject in primary school. → The movement in the process of learning in relation of emphasis in the education of the native language towards the activities of students, on the speech development and self-development of the person, on education of schoolchildren with the language, history and culture of their people, contributes to the effective development, education and socialization of students [Kokhichko]. Such comprehension of the priority values and normative (moral) core for the content of the modern national education can contribute to determine the structure of values, content, main directions, principles, intended outcomes, methodological principles, peculiarities of the organization within the spiritually-moral development, education and socialization of student's personality by means of the Russian language as native language.

## REFERENCES

- Akhmanova, O. S. (1969) Dictionary of Linguistic Terms. M.: Soviet Encyclopedia, P.608.
- Azimov E. G., Shchukin A. N. (2009) New Dictionary Of Methodological Terms And Concepts (Theory And Practice Of Language Teaching). M.: Icarus Publishing House, 448 P.
- Buslaev, F. I. (1844) About The Russian Language Study. Essay By Fyodor Buslaev, Senior Teacher Of The 3rd Moscow Real Gymnasium. Part 1-2. M.: Univ. Tip. Part 1. 335.
- V. V. Shcheulin, V. I. Medvedeva. M. (1965) Chrestomathy On The History Of Grammatical Teachings In Russian Federation/ Comp.: Higher School P.355.
- Dictionary Of Philosophical Terms / Scientific Ed. Prof. V. G. Kuznetsov. M.: Infra-M (2007) P.731.

- Kohichko A.N. Epistemes Of The Modern Russian Language As The Basis Of Self-Identity Among Younger Pupils: Monograph. Murmansk: Moipkroyk (2010) 222.
- Kokhichko, A.N. (2013) Self-Determination Of A Junior Schoolchild In Russian National Culture: Monograph / Germany, Saarbrucken: Lap: Lambert Academic Publishing, GmbH, P.371.
- Latin-Russian Dictionary / Author-Ed. K. A. Tanushenko. Mn.: Harvest (2005) P.1344.
- Linguistic Encyclopedic Dictionary / Chief Editor V. N. Yartseva. M.: Soviet Encyclopedia. (1990), P.685.
- Philosophical Dictionary / Under The Editorship Of I. T. Frolov. 5th Ed. M.: Politizdat, (1986) 590.
- Philosophical Encyclopedic Vocabulary / Editor: S. S. Averintsev, E. A. Arab-Ogli, L. F. Ilyichev Et Al. 2nd Ed., M.: Soviet Encyclopedia. (1989), P.815.
- Plato, Plato. Cratil / Dialogues. Book One /, [Trans. From Ancient Greek. M. S. Solovyova Et Al., Article To The Dialogues Of A. F. Losev Introductory Article, And 2008. (Anthology Of Note. To The Dialogs And Instructions. Comp. A. A. Tahoe-Godil). M.: Eksmo.
- Poizner, B. N. (2007) Replication-A Latent Transdisciplinary Concept? // New Ideas In Axiology And Analysis Of Value Consciousness: A Collective Monograph. Ed. 4. Yekaterinburg: Ural Department Of Russian Academy Of Sciences, Pp.220-258..
- Sreznevsky, I. I. (1982) About Learning Your Native Language In General And Especially In Childhood // Chrestomathy On The Methodology Of The Russian Language, P. 49-5 Russian Language As The Subject Of Education / Comp. A. V. Tekuchev. M.: Prosveshchenie.
- The Latest Dictionary Of Foreign Words And Expressions / Rel. For The Issue Of V. V. Adamchik. Mn.: Modern Literator 2006, 976.
- Vereshchagin, E. M., Kostomarov, V. G. (2005) Language And Culture: Three Linguistic And Cultural Concepts: Lexical Background, Linguo-Behavioral Tactics And Sapientema: Monograph / Edited By Yu. S. Stepanov. M.: Indrik, 1040.
- Vorkachev, S. G. (2006) Happiness As A Linguistic And Cultural Concept. M.: Itdgc Gnosis. 236.
- Weisgerber, J. L. (1993) Native Language And Formation Of The Spirit. M.: Publishing House Of M-Sk Un-Ty., 224.
- World Encyclopedia: Philosophy / / Main Scientific Ed. And Comp. A. A. Gritsanov. M.: Ast, Mn.: Harvest, Modern Literator. (2001), 1312.
- Zvegintsev V. A. (1964) History Of Linguistics In The Xix-Xx Centuries In Essays And Extracts. Part 1. Moscow: Prosveshchenie, 466.



# Transcendental-Phenomenological and Existential-Phenomenological Practices of Self-Knowledge and Self-Transformation

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## ABSTRACT

The article is devoted to the self-knowledge research methods used in philosophy and psychotherapy. The author proceeds from the idea that a rich arsenal of self-knowledge methods can be combined into two groups of practices: transcendental-phenomenological and existential-phenomenological. The first ones contribute to the consciousness purification from worked out mental and behavioral schemes, the second ones are aimed at constructing “self” in accordance with the selected cultural concepts.

**KEY WORDS:** SELF-KNOWLEDGE AND SELF-TRANSFORMATION PRACTICES, SELF, “EGO-IDENTITY”, PHENOMENOLOGICAL REDUCTION, EXISTENCE.

## INTRODUCTION

In connection with the continuous changes in the informational, sociocultural space, the problem of finding one’s “self” is being actualized, which acts as a person’s defensive reaction to life in uncertain conditions. Modern person is forced to exist in a multi-layered and antinomical context of being, where constantly renewing cultural patterns come into conflict with the content of human life experience (Gladyshev, Miliaeva, Meniaeva, and others, 2019). High social dynamics requires a person to select new values, other ways to “fit” himself into the changed socio-cultural environment.

If a person does not know how to quickly respond to the challenges of being by changing the “self” structure, it

leads to an acute ideological conflict, which turns into an existential crisis. The integrity and completeness of the personality is replaced by its fragmentation and value disorientation. A person submerses into a state of anxiety, despair and fear, a feeling of deep psychological discomfort does not leave him. Overcoming this existential crisis is one of the urgent problems of modern man, the solution of which is possible through the implementation of the value and cultural self-determination of the individual through philosophical self-reflection. In our research, we proceed from Erickson’s thought that a person should stay on the border of constancy and change of himself (Erikson, 2013).

New “self” elements must be integrated into the existing structure, old non-adaptive elements must be discarded. Therefore, it is necessary to select such tools that, on the one hand, will allow a person to preserve the core of “self” or ego-identity, on the other hand, will give the necessary flexibility to comprehend and transform himself and his own being. Transcendental-phenomenological and existential-phenomenological practices of self-knowledge and self-transformation used in philosophy and psychotherapy can act as tools. The purpose of the research is to reveal and substantiate the potential of these practices.

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In the history of cultural development, one can find various self-knowledge practices, which are spiritual exercises aimed at immersing a person into the depths of his “self” in order to clarify its content and determine its subsequent development. The self-knowledge practices are based on two traditions: Eastern and Western. According to the Eastern tradition, a person seeks to merge with the world, to subordinate himself to the supra-personal, while rejecting the “ego”. A person of the Western tradition, in the process of self-knowledge, strengthens his “self” through self-determination and self-realization. Western and Eastern traditions give rise to different spiritual techniques of self-knowledge and self-transformation. Within the framework of the Eastern tradition, as a rule, meditative techniques are used, aimed at inner concentration, allowing one to enter the spiritual realm and merge with it. In the Western tradition, the techniques of self-knowledge and transformation are based on reflection.

In the modern movement of philosophical practice, one can find the principles and techniques of self-knowledge that are characteristic of both the Eastern and Western traditions. In his study of philosophical practice, Borisov S.V. distinguishes two conceptual approaches: therapeutic and developmental (Borisov, 2019). Philosophical practices within the framework of a therapeutic approach help a person to deal with existential problems, to choose suitable ideological, value supports for building a holistic picture of the world. Within the framework of this approach, self-knowledge techniques can be used that contribute to the detection of rigid patterns of feelings, thoughts, actions that separate the individual from himself and the full-blooded experience of his life. These can be spiritual exercises of Eastern philosophy, and their adapted versions for a person with a Western style of thinking. The therapeutic approach includes the philosophical counseling of G. Achenbach (Achenbach, 1984), L. Marinoff (Marinoff, 2002), the R. Lahav’s deep philosophy of (Borisov, 2019, 94–102).

The “developing approach” is aimed at the formation and improvement of the critical thinking skill, which is necessary to determine the consistency of ideas about oneself and build a consistent, holistic worldview. The developing approach is based on the principle of person’s reconciliation with his own speech through a reflexive statements analysis to reveal hidden thoughts (Borisov, 2019, 232). The developing approach fits into the mainstream of the Western tradition since it is based on reflection. The developing approach includes the O. Brenife’s philosophical consulting (Brenife, 2018), the method of Socratic dialogue by A.I. Makarova (Makarov, 2012), the methodology for the rational thinking development by N.S. Yulina (Yulina, 1996).

Even though the problem of self-knowledge was the subject of close attention of antique philosophers and continues to be relevant for modern philosophers-practitioners and psychotherapists, it remains poorly developed in theoretical and practical aspects. The

presented classifications of self-knowledge practices are considered in isolation, independently of each other. In our research, we will conduct a comparative historical analysis of philosophical and psychotherapeutic methods of self-knowledge, we will combine them into two groups of practices: transcendental-phenomenological and existential-phenomenological. The predominant feature of this classification will be not only the possibility of generalizing the accumulated theoretical material, but the disclosure of the relationship between the self-knowledge practices in the process of living by the subject of his experience.

## MATERIAL AND METHODS

The article is devoted to the generalization and systematization of the self-knowledge methods used in philosophical and psychotherapeutic practices. The conducted research will provide an opportunity to determine the basic principles of self-knowledge practices, will reveal their potential in the study and construction of “self”. Phenomenological, narrative, and existential approaches will be used as a methodological basis, revealing the functional relationship of the subject with the outside world.

## RESULTS AND DISCUSSION

Basic principles and potential of transcendental-phenomenological self-knowledge practices  
Transcendental phenomenological self-knowledge practices are aimed at expanding consciousness. They are performed due to a radical transcendental reduction, which takes all the empirical components outside the brackets, revealing pure consciousness (Husserl, 1998, 85). Transcendental-phenomenological self-knowledge is realized in Eastern and Western practices, the purpose of which is to move towards a pure stream of consciousness experiences that make the “self” core. The worldview basis of these practices is the realization of the conceptual “self” expression impossibility, which is experienced intuitively in a state of “liberated” consciousness, when the unconscious “talks” with consciousness (Bogdanova, 2019). Primary in these practices is the detection and removal of psychological barriers that do not allow to feel oneself in the stream of consciousness. Spiritual-meditative, breathing, and bodily techniques can be considered as examples of self-knowledge practices.

Spiritual meditation practices (anapanasati, vipassana, zazen, transcendental meditation) are based on the principle of “suspension of judgments”, through the implementation of which a person is freed from the individual and socio-cultural experience stereotypes and expands consciousness. Spiritual meditative practices lead a person into a state of “mental pause”, because of which he overcomes the limitations and inflexibility of formal logic, and listens to his subconscious (Sadomirsky, 2001, 231). Being in the socio-cultural framework, a person does not always hear signals from his subconscious, which tells him about his true “self”. Meditation allows

to “establish communication” between consciousness and subconsciousness, helps to realize and accept your inner experience (Mindell, 2019).

Breathing practices are an important part of the Eastern tradition. They are techniques for consciously controlling breathing through changes in the frequency and depth of inhalation and exhalation. During breathing practices, nervous structures are activated that are responsible for the unconscious part of the psyche, emotional processes, and long-term memory. A person enters a state of altered consciousness, which makes it possible to re-experience what is repressed in the subconscious. Modern breathing psychotechnics (vivation, free breathing, rebirthing and holotropic breathing) use the eastern tradition experience.

Bodily practices are based on the principle of the unity of the person's body and spiritual and mental sphere. All unconscious emotions, traumatic memories, repressed feelings are imprinted in the body since the physiological mechanisms of psychological defense are activated. It is possible to overcome these mechanisms using the feedback principle: changing the psychological state through work with the body. Body practices include oriental techniques (yoga, bikram yoga, qigong, etc.), which served as a solid basis for body-oriented psychology and psychotherapy (bioenergetic psychoanalysis by A. Lowen (Lowen, 2015), biodynamics by L. Marcher, the method of sensory awareness by S. Selver, primary therapy by A. Yanov and others).

Transcendental-phenomenological practices of self-knowledge are very effective, since they affect the human psyche, escaping the “censorship” of consciousness. Practitioners work on an unconscious level using bodily experience, which helps a person regain contact with himself. They allow you to work through suppressed emotions, get rid of negative psychological and bodily habits, remove psychological blocks that interfere with normal life. The transcendental-phenomenological approach expands the consciousness boundaries, makes it possible for a person to “become empty”, i.e. become open to the perception of the world.

With the help of these practices, a person comprehends revelation, which can be expressed by the phrase “I am” - this is the state that must be accepted otherwise further progress in self-knowledge is impossible. It should be noted that these practices are not an end in themselves, they serve as a preparatory stage for self-knowledge. They only work in tandem with existential-phenomenological practices. Having cleared the consciousness of “worked out” mental, emotional, and behavioral schemes, it is necessary to move on to existential-phenomenological practices, with the help of which the “self” construction occurs. Basic principles and potential of existential-phenomenological practices self-knowledge Existential-phenomenological practices are aimed at cognizing the phenomenal “self” being, which reveals its essence through its existence. “Self” is

nothing more than a series of interconnected existence manifestations (Sartre, 2015, 33).

Existential-phenomenological practices make it possible to understand personal experience through its design and articulation within the chosen cultural meanings. Since a person's existence has a procedural mode, it can be imagined as a continuous stream of becoming. In this stream, the subject strives for certainty. He approaches it, clarifying his identity, by selecting fixed forms to describe his own existence manifestations, which set the “self” boundaries (Trunov, 2008, 99-100). By this act, a person significantly improves the “self” content, however, not finding confirmation of his being through conceptualization, experiences existential anxiety, feels the absurdity of existence. Existential-phenomenological self-knowledge practices allow to achieve the necessary balance, they turn to the experiences of an individual's experience as material for interpretation. The interpretation itself is determined based on the person's worldview ideas and spiritual, intellectual, emotional needs.

The purpose of existential-phenomenological practices is to focus consciousness on direct experience that opens when interacting with the world. These practices work with human subjectivity in the context of reality. They rely on psychological and eidetic reductions, thanks to which a person is more fully aware of his own thoughts, feelings, corporeality, independently discovers the existence limitations and finds new resources. With the help of psychological reduction, the border between the individual's mental life and the external world is established, the epoch is implemented, excluding all “automatic” judgments about reality. In the interpretation of experience, consciousness is freed from the objectifying position.

Concentrating on the experiences, the subject moves on to eidetic reduction - to the essential discretion of phenomena. Here, the method of ideation is used, with the help of which the individual is distracted from particular forms in order to investigate a priori forms of phenomena. In the stream of internal experience perceptions by the subject, unchanging structures are revealed, without the discretion of which no perception can be understood. Thus, if psychological reduction exposes the phenomena of actual internal experience, then eidetic reduction captures the essential forms of mental being (Husserl, 1998). Existential-phenomenological practices help the subject to know himself on two levels. First, he turns to his own experience through the rejection of the objectifying “position” about individual phenomena, reaching an integral structure of mental life. Then he performs the fixation, comprehension and description of diverse phenomena, which no longer act as objects, but as units of meaning.

First, the act of experiencing is described (poetic description), followed by a description of “what has been experienced” (noematic description). The

experience is interpreted already based on the discovered universal meanings that are embedded in the subject's consciousness. Existential-phenomenological self-knowledge practices are aimed at overcoming the confrontation of a person with the ultimate given of being: death, freedom, responsibility, isolation, meaninglessness. Overcoming confrontation with being is an act of comprehending one's own existence and awareness of one's responsibility, which is directly related to the realization of the person's creative potential in the present. Escape from freedom and responsibility gives a person a sense of imaginary security and leads to personal stagnation. As a way out of personal stagnation I. Yalom offers a technique that has great therapeutic potential. It is aimed at reconciliation with the finitude of one's own being, self-knowledge and increasing the mode of existence. The technique serves as a kind of "motivator" for personal changes, it helps a person through the awareness of his finitude to overcome anxiety, social fears that interfere with self-disclosure and the "self" manifestation.

The essence of the technique is that a person is asked to write their own obituary or fill out a questionnaire with questions relating to anxiety associated with death. You can invite a person to fantasize about his death, imagining "where", "when" and "how" it will happen, how his funeral will take place (Yalom, 2009). This technique allows to understand what a person lacks in life, to clarify his personal meanings. A person determines reliable guidelines for personal growth, self-improvement, self-actualization, which is a necessary condition for achieving happiness and fullness of life. The next self-knowledge practice used in the existential-phenomenological approach, which was initially used in the theory of psychosynthesis by R. Assagioli and was somewhat modified by I. Yalom, creates opportunities for deep individual's self-knowledge. The essence of the psychosynthesis technique is to free oneself from illusory ideas about one's "self" (Assagioli, 2017).

I. Yalom offers the following variation of the psychosynthesis practice, calling it an exercise in "disidentification". "Disidentification" is a person's going beyond the bounds of objectified representations of himself through immersion into the experience. The participants of the practice are given the task to write eight answers to the question: "Who am I?" On separate cards. Then they are asked to arrange their answers in order of importance and centrality: the answers closest to the center of their being should be placed down, the more peripheral for them - placed higher from the center. Participants are then encouraged to focus on the topmost card and reflect on how they would feel if they gave up this attribute. After two or three minutes, a soft signal is given, the participants move on to the next card and do exactly the same work. Until they mentally free themselves from all eight attributes.

After the work on disidentification, the reverse procedure is performed to integrate personality traits into the "self" center (Yalom, 2009). The exercise helps the individual to

reach their "center of pure self-awareness" by imagining the detachment from themselves in turn their attributes (for example, descriptions of the body, emotions, desires, intellect). It weakens attachment to individual characteristics, makes a person more flexible, receptive to being and ready for self-transformation.

The study of phenomenological experience for the transformation of being is an integral feature of existential-phenomenological practices. In this regard, one cannot fail to mention the narrative techniques that help a person to give a new understanding of his existence and choose strategies for the «self» development. They are aimed at helping a person become the author of a life story, realizing their ability to influence the course of events. A person structures his «self» by linking together the significant facts of the biography. In this way, a story about oneself (narrative) is created (Botella, 1995). Narrative is the result of understanding subjective reality and personal identity.

The facts of biography create only the texture of the life path, but it is the subjective perception of these facts, the experience and comprehension of individual experience that serve as the basis for the worldview and personal identity. Although a person cannot change his past, he can use different ways of interpreting life stories, which leads to a change in his ideas about himself (Trufanova, 2017). This main principle of narrative psychology has great therapeutic potential, it allows to determine the dominant story, to assess its impact on self-development. If it is an obstacle to the development of personality, then the search begins for an alternative experience that is not included in a person's life history.

The counselor helps the person discover alternative experiences through questions designed to develop a "good" story. Thus, the main form of work in the narrative approach is the re-writing of history, for this a positive experience is revealed that determines the significant sides of the "self". A person begins to realize himself as the creator of life and begins to develop more adaptive ways of interacting with the world. The concept of "personal constructors" by J. Kelly is consonant with the narrative approach. A personality construct is a judging system that an individual uses to classify various objects and events in his or her life space (Kelly, 2005). Working with personal constructs involves determining to what extent the formed evaluation system meets the principle of adaptability. As soon as a person's sense of adaptation to the world disappears, he needs to replace this construction with another that will meet a certain practical goal.

## CONCLUSION

The path to understanding one's own "self", being, opens through mastering the self-knowledge practices which differ from each other in the performance technique. As a result of a comparative analysis, two groups of self-knowledge practices were identified: transcendental-phenomenological and existential-

phenomenological. Transcendental phenomenological practices open the subject's pure consciousness through the use of radical transcendental reduction. Existential-phenomenological practices are limited to psychological and eidetic reductions, which make it possible to turn from the perception of the natural attitude's world to the consideration of consciousness' subjective experiences, and then from experiences in their individuality to the discretion of their essence.

Existential-phenomenological self-knowledge practices lead to an understanding of individual being-in-the-world, transcendental-phenomenological ones deal with consciousness as much as possible cleared of any signs of individuality and subjectivity, open a universally existing consciousness (Trunov, 2008, 99-100). The presented practices' classification conveys the dynamics of the self-knowledge process, reveals the "self" formation more fully. There are several self-knowledge stages through which the subject passes in self-determination and self-development. The first stage is primary self-knowledge, which consists in acquainting a person with himself through the interpretation of the Other. The completeness of the ideas' content about the "self" will depend on the readiness of a person to be fully present in the dialogue.

However, communication with others does not always reach an existential level, sometimes it leads to alienation. This happens when the subject creates false images of "self", convenient for building relationships with other people. The creation of false images leads to a self-knowledge crisis. At this stage, a person is faced with conflicting interpretations of different people regarding his personality. However, a person is not material for interpretations for compliance with one or another ready-made explanatory models of other people. The mental life of each person is unique, its interpretation must be performed based on its own structures. At this stage, it is best to use the transcendental-phenomenological practices of self-knowledge, which help a person to look at himself "from a scratch", abandoning the usual attitudes that classify his state of mind.

After the consciousness freeing from objectified ideas, it is necessary to move on to existential-phenomenological practices, with the help of which the "self" construction occurs. At this stage, secondary self-knowledge occurs. A person chooses ways of self-determination in the field of cultural concepts, based on their own life guidelines and ideas about which images of the "self" will make his life fuller and richer (Trunov, 2008, 17). At this stage, one can use the existential and phenomenological practices of self-knowledge and self-transformation, constructing «self», based on the understanding of existence and awareness of responsibility for it. Thus, the two groups of self-knowledge and self-transformation practices complement each other. The inner life of the subject takes place in an endless struggle, which is expressed as a manifestation of multidirectional aspirations.

On the one hand, the subject wants to define his essence, to come to self-identification, and for this he can use existential-phenomenological practices. On the other hand, having defined himself, he can come to the realization of the limitations of any definitions, and will wish to go beyond these characteristics, which are not able to fully convey his being-in-the-world. Going beyond the bounds of objectified representations is performed with the help of transcendental phenomenological practices.

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## REFERENCES

- Achenbach. G.B (2002) *Philosophical Practice*. San Diego: Academic Press.
- Assagioli. R (2017) *Psychosynthesis. Principles And Techniques [Psihosintez. Principy I Tekhniki]*. Moscow: Institute Of General Humanitarian Research.
- Binswanger. L (2016) *Existential Analysis*. Institute Of General Humanitarian Research. Yalom.
- Bogdanova, VO, 'Cartesian Reflections', Yuventa.
- Borisov. S (2019) *What Is Recollection? The Deep Philosophy Group: History, Theory, Techniques*. Ed. By R. Lahav. Hardwick Vermont: Loyev Books, Pp. 94-102.
- Borisov, SV (Philosophical Practice In The Modern World: Challenges And Answers', Monograph.
- Botella, L, 'Personal Construct Psychology, Constructivism, And Post-Modern Thought', Advances In Personal Construct Psychology, Vol 3, Pp. 3-36.
- Brenifier. O (2018) *The Art Of Philosophical Practice: Philosophical Attitudes Socium I Vlast*, Vol 69, No. 1 Pp. 80-87.
- Erikson. E (2013) *The Problem Of Ego Identity, Adolescent Identities: A Collection Of Readings* Pp. 223-240.
- Existenzielle Psychotherapie. (2010) Erlag Andreas Kohlhage.
- Gladyshev V. ME, MM. NV (2019) *Yes-Tradition And No-Tradition In The Reproduction Of Cultural Forms And Cultural Identity In Conditions Of Globalization SHS Web Of Conferences: International Scientific Conference: Achievements And Perspectives Of*

Philosophical Studies, P. 72.

Kelly GA (2005) A Brief Introduction To Personal Construct Theory International Handbook Of Personal Construct Psychology Pp. 3-20.

Lowen. A (2015) Bioenergetic Analysis: Theory And Practice.

Makarov, AI 121-125., 'Socializing Function Of Philosophical Practices ', Bulletin Of Volgograd State University, Vol 3, P. 2018.

Mindell, E 2019, 'Coma: A Healing Journey'.

Phenomenology Of Reduction Of Consciousness: Comparativist Approach (2019) SHS Web Of Conferences: International Scientific Conference: Achievements And

Perspectives Of Philosophical Studies, P. 72.

Sandomirsky ME (2001) Protection From Stress. Physiologically Oriented Approach To Solving Psychological Problems Publishing House Of The Institute Of Psychotherapy.

Sartre. J-P (2015) Being And Nothing. Experience Of Phenomenological Ontology AST Moscow.

Trufanova EO (2017) I Am As Reality And As A Construction', Voprosy Filosofii Vol 8, Pp. 100 – 112.

Trunov DG (2008) Introduction To The Phenomenology Of Self-Knowledge A Monograph.

Yulina NS (1996) Teaching Intelligence And Democracy: A Pedagogical Strategy ', Philosophy For Children.

# Transformation of Social Attitudes at the Stage of Professional Adaptation of Village School Teachers

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## ABSTRACT

In modern realities, when every year people move to cities, and villages begin to die out, the problem of education in remote areas is acute. The responsibility of the village school teacher increases, and there are problems in adapting the teacher to work conditions in rural sparsely populated areas. The peculiarities of the adaptation process determine the success of a person in professional activity very often. The purpose of this work is to study the transformation of social attitudes and their content components in the process of professional adaptation of teachers in village schools. The hypothesis is that in the process of professional adaptation of young teachers in rural schools, there is a decrease in the value of social conditions and an increase in the importance of interaction with students. Psychodiagnostic methods were used as research tools to identify the social attitudes of young teachers and identify the features of the adaptation process in the first three years of work. To identify patterns of changes in attitudes, we compared young teachers (under 25 years of age) who are at different stages of primary adaptation. As a result of the research, it was proved that the process of professional adaptation of young teachers in village schools is interconnected with changes in social attitudes at various stages. The less work experience a teacher has, the more focused they are on teaching subjects and less interested in working conditions. At the same time, the more experience they gain, the level of entry into the profession increases, the more they focus on relationships with students and take into account their working conditions.

**Introduction.** The level of uncertainty in the adaptation of young teachers in village schools may be high. It is important to study the peculiarities of the adaptation process which determines the success of a person in professional activity.

**Aim.** The aim purpose of the work is to study the transformation of social attitudes and their content components in the process of professional adaptation of teachers in village schools. This study was conducted to reduce the level of uncertainty in the adaptation of young teachers in village schools. **Result and Discussion.** The process of professional adaptation of young teachers in village schools is interconnected with changes in social attitudes at various stages. In this paper, we have also established the relationship between indicators of the development of social attitudes of teachers with different professional experience and indicators of their professional adaptation. A similar time dynamic of the processes of formation of social attitudes and professional adaptation of the teacher's personality was found.

**KEY WORDS:** YOUNG TEACHER, VILLAGE SCHOOL, ATTITUDE, PROFESSIONAL ADAPTATION, JOB SATISFACTION.

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## INTRODUCTION

The difference between village and urban schools is so great that the knowledge and skills that young professionals acquire in higher education are often ineffective, since the training of teachers is not unique and does not take into account the location of schools, i.e., "unaddressed". The specifics of the special working conditions of a young teacher in rural schools are

often not taken into account, which can significantly complicate the adaptation process. The nature of the period of adaptation in the process of mastering a specialty largely determines the professional fate of an individual. Practice shows that a novice specialist has to overcome a large number of difficulties, which in the end many young teachers can not cope with and go to other areas of activity. Activities in small localities have their own specifics, which can have both a negative and positive impact on the adaptation of young teachers:

\* teachers have a fairly clear understanding of students, their living conditions, family relationships, peer relationships, and so on • ;

- greater influence of public opinion than in the city, the authority of the teacher, especially those who have worked in one village for a long time and raised several generations of villagers;
- most parents belong to the same labor collective, live in a small, rather closed territory of the colony, rural area, village;

\* optimal conditions have been created for preparing students for life in rural areas, in most cases for future work in agricultural production, children begin to show independence in solving economic and life problems earlier [5; 8].

The organization of educational work in village schools is often explained by the smallness and smallness of the majority of village schools. The service area of village schools is much larger than that of urban schools. Because of these factors, teaching teams incur additional and often very significant costs of effort and time to ensure timely attendance of educational and extracurricular activities by students. In particular, to organize regular transportation of children to school, and in the case of boarding schools – to establish and maintain living conditions that minimize the negative impact of separation from families, to take measures to influence students during their stay outside the school [4, P.154].

The negative dynamics of demographic indicators is the reason for the constant increase in the number of small classes in village schools. This specificity of education in village schools makes it possible to apply an individual approach to the student more efficiently than in urban schools. On the other hand, in small classes, there is more often an increased anxiety, psychological, emotional, and sometimes intellectual overload of students, which is associated with increased control by teachers. The negative features of small village schools can also be attributed to the lack of a special emotional and psychological atmosphere. Because of this, there is a restriction of business information and emotional communication of students, there is almost no competition among students in the process of mastering knowledge [4].

A small number of students is not the only special condition for the work of village schools, the specifics of

the pedagogical activity of village teachers also require consideration. It is worth noting that there are significant differences in the content and nature of educational assignments of village and city teachers. In an urban school with several parallel classes, the entire teaching load of a teacher is mostly one subject; teachers who teach multiple subjects are extremely few. At the same time, more than 50% of teachers in small village schools, along with their specialty, teach several other disciplines, usually without special training. The workload of a village school teacher, for the most part, far exceeds the established norms [10]. Village teachers are required to spend a lot of time preparing for classes in evening (shift) general education institutions, usually operating on the basis of day schools in rural areas.

The above-described features and factors that influence the work of a teacher in a village school can strongly influence the transformation of attitudes about professional activity in a young teacher. Waiting for some conditions, and facing others, the process of adaptation for teachers can lead to unexpected and unpredictable results. This study was conducted to reduce the level of uncertainty in the adaptation of young teachers in village schools. The aim is to study the transformation of social attitudes and their content components in the process of professional adaptation of teachers in village schools. The hypothesis is that in the process of professional adaptation of young teachers in village schools, there is a decrease in the value of social conditions and an increase in the importance of interaction with students.

## MATERIAL AND METHODS

To confirm this hypothesis, a study was conducted using psychodiagnostic tools, which allowed us to track changes in adaptation and social attitudes among young teachers in rural schools. Measurements were made in three groups: with experience up to 1 year, from 1 year to 3 years, from 3 to 5 years. In the first years, the adaptation process only begins, up to three years there is a period of stabilization within the professional activity of adaptation, after three years, a period of reduced adaptive capabilities begins [6].

The following criteria were adopted for professional adaptation of teachers:

1. Professional satisfaction with their work,
2. General socio-psychological adaptability [12].

The following methods were used to solve the set tasks:

Questionnaire professional attitudes of teachers (the author D. M. Bagjunen, modification of G. O. Matina) [7]. This method allows us to identify the degree of formation of the following types of attitudes: setting for teaching a subject; setting for interpersonal relationships with children; setting for socio-psychological conditions of activity; setting for non-professional orientation.

Method "Study of teachers' satisfaction with their profession and work". Authors N. V. and E. P. Ilyin



developed this methodology to identify the degree of satisfaction of teachers with their profession and various aspects of professional activity. The method consists of just one question: "Are you Satisfied?" Then we offer various aspects of the teacher's professional activity, indicators of their socio-psychological status and relationships that develop in the course of work.

Methods of diagnostics of social and psychological adaptation of K. Rogers and R. Diamond (SPA Questionnaire) [11]. This tool allows you to evaluate the overall socio-psychological adaptation of teachers, as well as to obtain data on the relationship with others and the teacher's self-attitude, his emotional state, the direction of the processes of causal attribution of personality (all these psychological phenomena are determinants of the adaptation process). The SPA questionnaire has the following scales: adaptability, self-acceptance, acceptance of others, emotional comfort, internality, and desire for dominance. Two of them were selected as indicative, as the most reflective of the degree of socio-psychological adaptation: the main - adaptability, as well as emotional comfort of the individual.

The study involved young teachers of secondary schools located in localities with a population of up to 1000 people. A total of 87 teachers, including 29 men and 58 women under the age of 25. The sample was divided into three groups: experience up to 1 year – 23 people; experience from 1 year to 3 years – 31 people; experience from 3 to 5 years – 33 people. The obtained data were processed using methods of mathematical statistics: descriptive statistics; Craskell-Waliss criterion; correlation analysis. Calculations were performed using the SPSS 21 for Windows program.

**Literature Review:** The problem of structural construction along with the functional load of social attitudes of the individual attracted the attention of many researchers and formed the central issue in the research of many authors. The interpretation of connections and internal properties of the social attitude is still carried out today largely due to the structural components of the social attitude, put forward in the middle of the XX century by M. Smith. However, it is worth noting that their rationale has changed over time and has become somewhat broader. In particular, the cognitive component includes beliefs, representations, opinions, and ideas, i.e., those cognitions that appeared during the cognitive process directed at a social object. The affective component is emotional in nature and includes feelings, emotions, and experiences related to the object of the installation.

The conative aspect of a social attitude, in addition to direct behavior, represents intentions (expectations, plans and aspirations), motives and goals of behavior or propensities to certain actions [16]. A similar three-component model of attitude in modern psychology was presented by S. Chaiken and A. Igli [14]. According to this model, the installation status was defined as a hypothetical construction located between certain

categories of stimuli and certain categories of observed reactions [8, p.230].

The three fundamental elements of analysis in the study of the structure of social attitudes are the behavior, knowledge, and feelings of the individual. It is worth noting, however, that this construction is rather theoretical in nature and is implemented in real life situations in its own way. The attention of psychologists has been drawn to the fact that the social attitude should be considered exclusively in relation to the concrete individual and the surrounding reality, and it cannot be isolated from the individual's mental organization.

As proof of this statement, we can cite multiple cases of revealed contradictions between the social attitudes of an individual and his real behavior [1]. This phenomenon is widely used in psychology under the name of Lapierre, who describes a situation in which the measured attitudes did not reflect the real behavior of people [13]. Being an ambiguous concept, the structure of social attitudes is presented from other points of view. Thus, the authors of the monograph "Social influence" F. Zimbardo and M. Leippe presented a view of the social attitude as a phenomenon that reveals itself in value and dispositional categories. The authors introduced the concept of an installation system that has a five-component structure: installation, cognitions (beliefs and knowledge), affective reactions (feelings), behavioral intentions (intentions), and behavior itself [17].

In psychology, the directions that refute the concept of multicomponent model of attitudes are presented. In particular, some researchers have considered the affective component as the only relevant indicator of the evaluating nature of attitudes. An example of a single-component view of a problem is the concept of persuasion, whose proponents consider information, knowledge, and thoughts inherent in a certain subject about the object of the installation. It is worth mentioning behavioral intention, which is a certain type of propensity for a specific type of installation-relevant action, that is, the willingness to act in relation to this object of psychological installation in a certain way [8, p.231].

Having briefly reviewed the results of research related to the analysis of components of social attitudes, S. Chaiken and E. Igli [14] concluded that it is currently too hasty to categorically assert the superiority of a three-dimensional model over a one-dimensional one. In addition, the structure of the installation can be dynamic: if the basic beliefs about the installation object are clear, few in number, and do not contradict each other, such an installation can be represented by simple affective reactions. A significant attempt to integrate previously existing concepts into a complete theory can be called the functional-motivational theory of social attitudes of D. Katz. The author has identified four functions of social attitudes: adaptive, egoprotective, value-expressive, cognitive [15].

The installation has the character of a dynamic phenomenon that has its own time continuum. Every time an individual first enters a new social environment, such as a labor collective, he demonstrates a diffuse attitude to the environment as a whole, as well as to its individual components. This process contributes to the formation of an unlimited number of social attitudes. The social experience acquired by an individual is formed into complex personal formations. Through the formation of social attitudes, people strive to organize their relationships with the new realities of the environment. Such a desire to consolidate experience, establish balance and balance between the individual and the social is a fundamental mechanism for personal adaptation, ensuring the comfortable presence of the individual in the environment and personal development [3].

In this dynamic nature of the social attitude lies its similarity to adaptive processes. The fixation of experience is not an end goal, but one that is driven by experience and drives experience. We can talk about the performance of an adaptive function by a social installation only if we understand it as a process of formation, which involves characteristic dynamics, plasticity, and the transition from form to form. At the same time, the installation performs the adaptive function both during the actual adaptation period and in the future.

The term "adaptation", or scientific value "fixture", in relation to the teacher is considered as to adapt it to the objective requirements of the teaching profession, when it reaches the line between the personal and professional development of teachers and the requirements of teaching. Research literature traditionally considers adaptation in the professional activity of a teacher as a period when the professional development of a person occurs, it follows the receipt of professional education and corresponds to the first years of the teacher's work. It is also worth noting that psychologists consider this period to be sensitive, since it is associated with the need for self - affirmation-this is the leading need of the individual at the stage of its professional adaptation [2, p.3-4]. Thus, studying the transformation of attitudes of a young teacher during the first three years of work, it is possible to trace how the process of adaptation occurs, how the approach to activities and attitude to others changes.

## RESULTS

Based on the tasks set, at the first stage of this study, an empirical study was conducted to identify the social attitudes of young teachers in rural schools. The results of the study of social attitudes in relation to the professional pedagogical activity of teachers are presented in table 1. The values correspond to the percentage of subjects in each group who have social attitudes of a particular type of pedagogical activity.

The data obtained in the study show that the change in the content components of social attitudes of young teachers

proceeds in the direction of their professionalization, that is, from non-professional orientation to professional attitudes themselves. A comparative analysis of the first and third measurements helps to illustrate this phenomenon most clearly. Non-professional orientation, characteristic of about 28 % of teachers with up to 1 year of experience, remained only 7% of teachers after 3 years of work. Applying the Kraskel-Wallis method to determine the reliability of differences in the level of the studied trait, it was found that the selected groups of subjects have differences in the formation of attitudes, with the exception of the setting for training in the subject, where no differences were detected (table 2).

Table 1. Professional attitudes of pedagogical activity. (Formedness in %.)

	Experience up to 1 year	Experience from 1 year to 3	Experience from 3 to 5 years
Attitude of a course of study	86 %	78 %	85 %
Adjustment for relationships with children	35 %	21 %	28 %
Adjustment for socio-psychological business conditions	68 %	59 %	50 %
Non-professional orientation	28 %	21 %	7 %

Table 2. Results of comparison of three groups of subjects on the formation of adjustments.

	On training	On the attitude	On conditions	Non-professional orientation
Chi-square	,319	11.841	18.684	9.551
Asymptotic value	,852	,017	,010	,029

Thus, it is impractical to compare groups of subjects on the formation of attitudes to learning the subject. Changes in social attitudes in the process of professional adaptation according to the three stages are shown in figure 1.

At the second stage of the study, the process of professional adaptation of young teachers with different experience in teaching was studied. The analysis of data on the criteria of adaptation of the sample was carried out for the groups selected at the first stage of the study. The values of the average indicators of the three groups of subjects were checked for the reliability of differences in the level of the studied trait using the Kraskel-Wallace method (table 3). This criterion

showed that all three measured indicators (satisfaction, adaptability, and emotional comfort) differ in all three samples of subjects.

Figure 1: Changes in social attitudes among young village school teachers

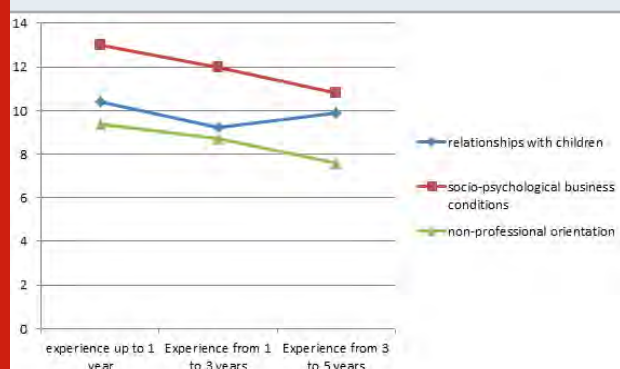
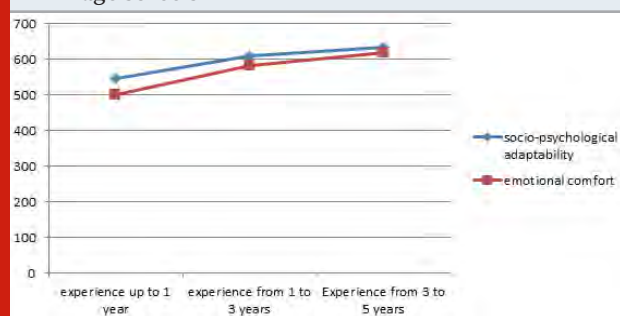


Table 3. Results of comparison of three groups of subjects on the level of adaptation.

	Statistics parameters of criterion a, b		
	Satisfaction	Adaptivity	Emotional comfort
Chi-square	12.983	10.379	7.904
Asymptotic value	,009	,011	,019

Figure 2: Changes in indicators of emotional comfort and socio-psychological adaptability of young teachers in village schools



Based on the results of descriptive statistics, a graph was drawn (Fig. 2) of changes in indicators of socio-psychological adaptation and emotional comfort of young teachers.

Such a criterion of professional adaptability as emotional comfort, in general, has a pronounced growth during the first five years of the young teacher's activity. The minimum score (500), reflecting emotional comfort, belongs to a group of teachers with up to 1 year of experience, and the maximum indicator is shown by teachers from the third group of subjects - from 3 to 5 years. Indicators of socio-psychological adaptability

also have a pronounced tendency to increase in different groups of subjects. To analyze the teacher's satisfaction with their profession, a graph was also created (Fig. 3) of changes in the satisfaction indicators of young teachers based on descriptive statistics.

Professional satisfaction, in general, decreases as the length of teaching experience increases: from 6.1 points, which corresponds to the average professional satisfaction of teachers with up to 1 year of work experience, to 3.3 points, which corresponds to low professional satisfaction of teachers with 3 to 5 years of teaching experience. Correlation analysis was used to establish the relationship between adaptive indicators and personal attitudes. This method revealed significant dependencies between the studied indicators (table 4).

Figure 3: Changes in the professional satisfaction level of young teachers in village schools.

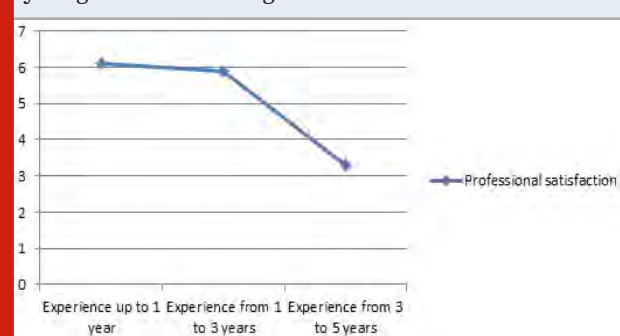


Table 4. Correlation matrix

	Satis-faction with the profession	socio - psychological adaptability	Emotional com-fort
Experience			0.411
Attitude of a course of study	0.689	0.762	
Setting up a relationship		0.498	0.662
Setting up conditions	-0.585		
Non-professional orientation			-0.565

It can be stated that there are several relationships between the variables under study. At the same time, the largest number of relationships (3 PCs) can be identified in socio-psychological adaptability and emotional comfort. Adaptability is related to the orientation of relations with students (direct weak connection,  $r=0.498$  at  $p=0.034$ ) and orientation to learning the subject (direct strong,  $r=0.762$  at  $p=0.005$ ). The higher the adaptability of young village school teachers, the more they worry about teaching their subjects, their relationships with students, and their working conditions.

The second variable, which also has three interrelated variables, is emotional comfort. It is related to experience (direct strong relationship,  $r=0.411$  at  $p=0.06$ ), non-professional orientation (reverse weak relationship,  $r=-0.565$  at  $p=0.021$ ) and relationship orientation (weak, direct,  $r=0.662$  at  $p=0.039$ ). Village school teachers feel more emotionally comfortable if they have at least 2 years of work experience and are more focused on relationships with students. At the same time, non-professional orientation decreases if the emotional comfort of the profession increases. Also, the variable job satisfaction has two interrelated elements, this is the orientation on working conditions (strong, reverse,  $r=-0.585$  at  $p=0.001$ ) and on learning the subject (direct, weak,  $r=0.689$  at  $p=0.036$ ). Job satisfaction among young village school teachers is higher if they have a professional orientation towards teaching their own discipline, and at the same time they do not care about working conditions.

## DISCUSSION

The study revealed the direction of meaningful changes that occur in the teacher's attitude system in the process of professional adaptation, which consists in mixing from non-professional orientation to the actual professional attitudes of activity. The stage of primary adaptation, which falls on the first year of professional activity of the teacher, social attitudes of professional content are represented little, but the non-professional orientation is quite pronounced. The stabilization stage, which falls on the period from 1 to 3 years of professional experience of teachers, is characterized by the beginning of the formation of professional pedagogical attitudes, among which the leading place is taken by the attitude to the socio-psychological conditions of professional activity. For a young specialist, the relationships that develop in the professional team, the psychological climate in which the adaptation period takes place, as well as mastering the psychological features of professional pedagogical activity are of great importance. Non-professional orientation at the stage of primary adaptation is already represented to a much lesser extent.

The stage of reducing adaptive capabilities is characterized by a stagnation relative to the previous ones in relation to attitudes to relationships with children and socio-psychological conditions of activity and a further increase in the role of attitudes to teaching one's subject. At this stage, the installation system plays a stabilizing role in the adaptation process. This explains the lack of reduction in the number of formed attitudes among teachers with more than 3 years of professional experience. In addition, it should be noted the features of the installation phenomenon itself, which consist in the phenomena of fixity at the final stages of its formation.

At the same time, at the initial stages of entering the professional community, the time dynamics of growth in indicators of emotional comfort and socio-psychological adaptability differ slightly. Thus, teachers from the

first group with a higher level of socio-psychological adaptability show a lower level of emotional comfort. And teachers with 3 to 5 years of experience demonstrate approximately equal levels of emotional comfort and socio-psychological adaptation. This can be explained by the fact that teachers with minimal experience have not formed elements of professional competence, which includes emotional comfort. At the end of the adaptation process, there is a low dissatisfaction with the profession. Thus, all groups of subjects show low results in terms of satisfaction with their profession.

Accordingly, the majority of respondents showed dissatisfaction with their profession, which has a well-defined time dynamics. Thus, we can state changes in the level of adaptation and satisfaction with work, which occur depending on the length of teaching experience. For example, indicators such as socio-psychological adaptability. There is a pronounced dynamics of its growth with an increase in the length of teaching experience of the subjects. On the contrary, in the case of such an indicator as teacher satisfaction with their profession, there is no definite dynamics in relation to the length of service.

## CONCLUSION

In this paper, we have established the relationship between indicators of the development of social attitudes of teachers with different professional experience and indicators of their professional adaptation. A similar time dynamics of the processes of formation of social attitudes and professional adaptation of the teacher's personality was found. High indicators of the significance of the relationship between the adaptation process and personal attitudes were obtained. Most of them are directly related to each other. Only indicators of teacher satisfaction with their profession and non-professional orientation, which are associated with an inverse relationship, differ from the general dynamics. Thus, the hypothesis was confirmed. The process of professional adaptation of teachers is interconnected with changes in social attitudes at various stages. The less work experience a teacher has, the more focused they are on teaching subjects and less interested in working conditions.

But at the same time, the more experience they gain, the level of entry into the profession increases, the more they focus on relationships with students and take into account their working conditions. The criteria of satisfaction in the process of entering the profession differ greatly. For example, job satisfaction at the stage of primary adaptation is generally negative. During the stabilization period, this indicator continues to decline, turning into professional dissatisfaction, which peaks at the stage of possible maladaptation. But the criteria for emotional comfort increase throughout the teacher's adaptation process. The analysis of the data made it possible to draw a conclusion about the system-forming role of social attitudes of the teacher's personality in the process of professional adaptation.

## REFERENCES

- (M., 1977) (Bogomolva., 2001) (Bodrova, 1991) (M., 2012) (A., 2008) (A., 1993) (G., 1999) (M. Houston, 2014) (Rodina, 2014.) (Serikov, 2011) (V.A Slastenin, 1991) (M., 1988.) (T.Dockery, 1989,1934 ) (Eagly A., 1995) (D., 1960.) (Smith M., 1982) (Zimbardo, 1991)
- A., M. (1993) Psychology of the teacher's work: a book for the teacher. Prosveshchenie p. 192.
- A., Z. M. A. S. S. (2008) Virtual classroom in the supplementary education of village school children. p. 19.
- Bodrova, B. V. A. (1991) Psychological research of the problem of professionalization of personality. Psychological research of the problem of professional personality formation, pp. 3-26.
- Bogomolva., N. (2001) Formation of the teacher's readiness to work in the system of developing training in the conditions of a General educational institution. p. 8.
- D., K. (1960). The Functional Approach to the Study of Attitudes.
- Eagly A. S. (1995) attitude structure and resistance to change. Volume 4, p. 54.
- G., M. (1999) Professional attitudes in the activity of teachers. p. 29.
- M, A. A. K. N. N. B. (1977) On the relationship of the concept of attitude in general and social psychology. Moscow:Publishing house of Moscow University, pp. 143-163..
- M. Houston V. S. S. (2014) Perspectives of social psychology. publishing house EKSMO, p. 35.
- M., G. (2012) Discursive skills of rural teachers: content and structure. Psychological and pedagogical Sciences, Volume 3, pp. 28-32.
- M., S. G. (1988). The functions of social attitudes in the process of personality adaptation. dissertation of the candidate of psychological sciences. , p. 173.
- Rodina, P. P. (2014). Study of motivation for choosing a profession "teacher": methodological aspect. Bulletin of the Moscow University. Series 14: Psycholog, pp. 70-77.
- Serikov, V. (2011) Rural teacher for the school of the future: personality and activity.. School of the future, Issue 5, pp. 3-7.
- Smith M., B. J. C. C. O. D. T. R. (1982) Communication and Attitude Change. In: Introducing Organizational Behaviour.. Palgrave, London..
- T.Dockery, A. (1989,1934) Attitudes versus actions: Lapiere's classic study revisited.. An international journal Social Behavior and Personality, pp. 9-13.
- V.A Slastenin, V. A. S. N. E. M. (1991) Diagnostics of professional fitness of youth for pedagogical activity. p. 141.
- Zimbardo, P. G. & L. M. R. (1991) The psychology of attitude change and social influence. Mcgraw-Hill Book Company., p. 20.

# Current Trends in the Development of Music Education in the Global Innovation Context

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## ABSTRACT

The content of the article is dictated by the need to comprehend innovative processes in the field of music education. The purpose of the article is an analysis of modern trends in the music education development in the context of world educational innovations and practical testing of methods of interactive design and music therapy at a university. The study of domestic and world experience in the innovation's application in musical pedagogy at the levels of school and university education is performed. The musical education experience in Japan, Scandinavia, the use of advanced computer technology in the musical pedagogy of the USA, Russia and Ukraine, the use of music therapy methods in Russia are considered. The results of a practical study performed using the methods of interrogation, design, testing, testify to the effectiveness of the synergistic implementation of these methods in practice, which contributed to the formation of a student-oriented attitude to music. The authors believe that, based on the study, there are objective prerequisites for further successful borrowing of the most effective experience of world schools in the field of musical education and training, the introduction of digital and art technologies in the musical pedagogy system.

Introduction: Digital and art technologies in the musical pedagogy system is an important way to develop the music education. Implementation of such technologies in practice may contribute to the formation of a student-oriented attitude to music. Aim: The aim of the article is to explore the innovative processes in the field of music education for its better comprehension, and to analyze the modern trends in the music education development. Result and Discussion: The music therapy methods application allow student musicians to change the content and nature of the music interpretation and contribute to the comprehension of the personally meaningful meaning in it.

**KEY WORDS:** INNOVATION, MUSIC EDUCATION, MUSIC THERAPY, INTERACTIVE DESIGN, ART TECHNOLOGY.

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## INTRODUCTION

An outstanding domestic researcher in the history of musical education, O. A. Apraksina, came to the conclusion that the development of music education can be used to judge the state of the entire educational system [2]. This conclusion deserves close attention, since it has now been implemented in most national schools and has actually manifested itself at the global level. To prove this, we will consider some innovations in music education, based on the best practices of two distant literally and figuratively meaning educational systems that have developed in Japan and the Scandinavian countries [5]. The educational system of Japan is developing in accordance with several fundamental ideas: the construction of a continuing education system throughout a person's life; changing the content and teaching methods to take into account the individual characteristics of each; ubiquitous computerization as a reflection of the high level of modern life informatization and internationalization [17, p. 537].

Respecting the individual, Japanese pedagogy, however, follows the path of purposefully forming group consciousness among young people, international education, while preserving national traditions, features of a national character and self-awareness, developing the ability of young people to resist "destructive" foreign influences [ibid, p. 541-543]. Hence, the teacher must teach children to recognize the interests and problems of other members of society, as their own. Therefore, children are taught to live according to the norms of their class, school, and, finally, according to the norms of the entire Japanese society. In accordance with this, the personal qualities of future citizens are formed, aimed at the "great common" business of the whole nation.

These attitudes largely determine the moral education of Japanese schoolchildren, which differs significantly from the orientation of the Western school towards individualism. Moreover, the school is responsible for the formation of the younger generation's loyalty to social reality and the minimization of the critical attitude towards it, so that with the maximum dedication to put all our strengths, professional knowledge and skills into the hierarchy of social communities - family, school, state. The meaning of the national educational system of Japan is self-education and self-improvement. Moreover, likeness, equality and interdependence are valued higher than uniqueness and individualism.

In this context, art is also evaluated, the artistic and figurative nature of which allows us to consider it as an effective method of educating moral feelings. Therefore, the perception and understanding of music is valued higher than its performance and composition. Nevertheless, practical musical activity is considered as a socially acceptable way of self-expression. At the same time - special exercises for the development of finger mobility, which, as scientifically proven, contributes to the intensive development of intelligence. The

foregoing does not deny the importance of the personal development of children in line with national traditions, the development of folk music and musical instruments as a national value.

As for the Scandinavian countries, the school is regarded as an important public institution that preserves and reproduces culture, transfers knowledge, values and symbols to younger generations. The educational process in the Scandinavian countries is result-oriented, i.e. achievement of a certain level of knowledge and skills [10]. This is done by individualizing instruction, taking into account the educational needs of students and their parents. In schools in Scandinavia, music education occupies a worthy place, due to the population amateur activity development, strengthening of school and society unity and joint activity. The objectives of the school are due to musical pluralism and the growing importance of musical leisure.

As a result, the school teaches the perception, reproduction and understanding of music, as well as its composition, arrangement and improvisation. At the same time, the comprehension, research and evaluation of music from the point of view of its style, genre and other features is of key importance [ibid, p. 124]. The ability for musical activity is also highly valued, which is why dance and composition have been introduced in Norwegian schools, during which great attention is paid to "rhythmic music", i.e. rock and pop music. Important is "authentic", i.e. "natural" and understandable music in extracurricular musical activity, where young people prefer rock. A new way of learning music is connected with rock classes: in an informal setting, learning from each other, without a teacher. Such mutual learning is considered "natural", coming "from the heart", in contrast to studying at a school of classical music under the guidance of a teacher. Interestingly, pop music is not considered authentic, since it belongs to the sphere of the music industry with performers - "puppets" [ibid, 3. 125].

The ideas of contextual and collective learning are popular in Sweden, due to the desire for authentic, contextual and non-formal learning. It is opposed to school and is considered more effective. Much attention is paid to the theories of "interaction" and "guided participation," focused on the practical activities of students. It is believed that interaction is the path to meaningful joint activity and solving problems that are not regulated by the rules that are assimilated in the process of practical activity. Thus, individualized learning is being replaced by the ideas of collective and group learning, mutual learning, as well as a generalized idea of personality as part of the world and environment. There is a unification of world educational systems, including music education, with or without national specificity (given the trend of globalization), as well as a principled orientation towards the formation of "group" musical consciousness.

One of the most demanded and universal resources for the development of music education is its ubiquitous

computerization - an actual direction for improving not only music education, but the entire world educational system.

The structure of modern students thinking, due to the ubiquity of digital and information technologies, creates demand for a new format of educational methods covering interactive processes and related to the development and implementation of new digital systems. New computer technologies are able to push the boundaries of familiar patterns of interaction between student and teacher and provide additional, and in some cases, alternative opportunities for the creative development of students. These innovations make it possible to supplement the traditional learning scenario and strengthen the practical orientation in education, in part to attract students to self-mastering courses of disciplines and increase their responsibility for the quality of education.

According to A. A. Miroshnichenko, "computer technology becomes an extremely effective means of optimizing music education, if the teacher is clearly aware of the goal that determines the result of both his activity and the activities of the students" [14, p. 109]. The process of introducing computer technology in the field of music education has been going on for more than half a century. The first automated teaching systems appeared in the USA in the 1950s. The most famous of them - AOS PLATO, created by the University of Illinois in conjunction with the company UCL, it is still used in a number of American universities. In 1960, in the United States, among a significant number of programs aimed at informatization of many university academic disciplines, programs appeared at the faculties of art.

In the second half of the 80s, when scientists noted a significant increase in the process of computerization of education, the rapid growth of various curricula was noticeable. For example, in the first quarter of 1988 alone, more than 120 programs were created in the United States that were used in teaching music. Since the late 1990s, teaching computer technologies have become widely demanded in domestic music education. One of the first experiments in the systematization of such technologies in music education belongs to S.P. Polozov, who gave a classification of programs in his Ph.D. thesis and examined both the possibilities of computer support of the main stages of training and the general trends in computer education that developed by 2000 [13]. In more detail, the pedagogical aspect of the use of computer technology in music education was considered in his dissertation by A. I. Markov [11]. In the further application of information and digital technologies in music education, their fundamental pedagogical research was devoted to N. N. Telysheva [19], N. V. Belousova [4].

At the present stage, the issues of using information technologies in the education system are widely discussed in the global pedagogical community [9, 12, 15]. In domestic education, digital technologies that play an equally important role are extremely diverse.

Opportunities introduced into the educational process by modern means of communication processing information, such as the Internet, cable and satellite television, mobile communications, Skype, etc., are explored by O. Lagutenko [13, p. 48-53.]. It is necessary to mention the latest electronic systems Learning Management System (LMS Moodle), AdobeConnect and Echo360, which successfully operate in many universities and expand the possibilities of remote interaction, as well as computer programs that optimize the process of music education and creativity, in which diverse directions related to the development of the 20th century have been developing with electronic music [18].

Working with electronic sound editors (Adobe Audition, Sound Forge) allows you to record sound quality by editing and processing it, helps to select and compose the necessary pieces of musical text to create audio and video albums in educational activities. The introduction of the musical and electronic program Finale 2003 as a music editor in the learning process makes it possible to create scores of vocal and instrumental works, create repertoire collections, and also perform other functions in the creative process, including music education. Highlighting certain issues of computerization in the educational process of training musicians in the highest echelon of education, I. Gaidenko believes that the latest computer capabilities in teaching today significantly affect the composer process [6]. In some domestic universities, special educational laboratories are opened, aimed at the synergistic development of music and information technology education [7].

In the context of the wide development of information technologies in music education at the Moscow City Pedagogical University, an interactive design technique has been introduced into the educational process of training a teacher-musician, used on such subjects as the history of music, music journalism, and implying a synergy of research and project activities in the process of creation students of a joint Internet product - a website of a given thematic direction. Thus, the sites "Classical Music for All", "Musical Capital" were created. This technique is described in more detail in an article by E. G. Artemova [2] and in the collective work of teachers of the Moscow City Pedagogical University [1]. Measuring the final indicators of students' knowledge of music and music journalism history, performed using questionnaires, as well as using a survey in the final exam, revealed a noticeable increase in the knowledge assimilation of application against the background of interactive design techniques.

As a result of its application, it is possible to note a significant increase in students' motivation to study the subject, research opportunities development in the process of working with sources, collective attention activation in the learning process not only on their own experience, but also on the experience of fellow students. Interactive design contributes to a more active enrichment of students' knowledge and skills in working with multimedia, computer and Internet technologies,



takes students out of the audience, increasing the social responsibility of future music educators.

In the context of the above, a number of new open questions arise before modern music education, which cannot remain outside the field of attention of specialists, one of which is the tendency to minimize the emotive component as an integral part of musical education and development. Total computerization and the transition to a digital platform highlight the operational-technical and informational-cognitive components in training, involuntarily displacing the emotive side of this process. The cognitive and affective side of music education lose their equivalence in favor of the former. At the same time, the emotional component does not lose its relevance in the work of a teacher-musician - on the contrary, it is based on it, since the subject of study is music, the emotionally subtlest of arts. However, the upbringing of feelings, despite its relevance, ceases to be included in the goals and objectives of modern music education, in particular, university.

So, in the training of student musicians, the operational-technical component includes, among other things, mastery of performing techniques and analysis of musical expressiveness. Repeated repetition of certain exercises inevitably emasculates the emotional attitude to the content of music, thus forming a certain "programmatic" perception of it. The same thing happens with the analysis of musical expressiveness, where cognitive processes dominate. As a result of such a clear differentiation of the two components of a single process - cognitive and affective - the access of music to the deep boards of the psyche is blocked. As a result, the exclusion of the sensory side in the interpretation of music leads to a distortion of the personal meaning, depriving the musician of the possibility of knowing himself through music and becoming his professional problem as a result. In this regard, one of the directions in the music education development leading to an effective solution to this problem is the enrichment of curricula with additional professional competencies that characterize the ability to understand the processes associated with the psychology of art and the psychology of creativity, and the introduction of disciplines that implement these competencies into the educational process.

We are talking about disciplines of art-therapeutic orientation, which can not only significantly enrich the competency model of a university graduate, but also contribute to the solution of one of the leading tasks facing the modern healthcare system: caring for the health of practically healthy people. Health is considered as a complex biosocial category, including not only the absence of diseases, but also the harmonious existence of a person in his physical, social, economic and cultural environment. Such an approach requires the search and development of new non-drug methods of supporting and healing the body, which contribute to the acquisition of internal balance by a person, the ability to psychological adaptation to external conditions, as well as leading to his personal growth.

Thus, in recent years, the research focus has been on the use of music therapy methods in restorative correction programs for healthy individuals, in particular, the work of G. O. Samsonova [18] is devoted to this problem, revealing the psychophysiological, chronobiological and cognitive mechanisms of acoustic reception. The main theme of these studies is the influence of musical-acoustic signals on the vital functional systems of the body. The problem of personality changes as a result of music therapy techniques' application in psychological research is considered to a much lesser extent, since personality change in its educational aspect is today the prerogative of educational sciences.

In connection with the interest in this urgent problem, an experimental research study was conducted on the basis of the State Autonomous Educational Institution of Higher Education "Moscow City Pedagogical University", the purpose of which was to test the effectiveness of the use of music therapy methods in interpreting music by musician students, performing a key function in comprehension of the personal meaningful meaning embedded in it. In the experimental work was attended by undergraduates and senior students of the undergraduate department of musical art at the Institute of Culture and Arts, studying in the specialties: instrumental performance, choral conducting, vocals.

The work was performed in the following directions:

- a) the identification of psychological factors that influence the interpretation of music by student musicians;
- b) the identification of the etiology of a weak ability to differentiate emotions in the interpretation of music among music students; whether the observed phenomenon is a psychological characteristic of a personal order related to alexithymia, or a characteristic relating to special professional characteristics;
- c) study of the interpretation of music by students in accordance with the developed criteria for its evaluation.

To obtain data on the psychological conditions that influence the music interpretation by student musicians, the following components were taken into account: gender characteristics, lateral organization, personality orientation, level of subjective control.

The study of the music interpretation by students showed that this process is due to both pedagogical and psychological factors, in particular, the personality orientation and the subjective control level. However, a common problem for all subjects was their reduced ability to simultaneously cover the temporary deployment of musical tissue, which greatly complicated the holistic perception of the musical image. This negatively affected the ability to recognize one's own emotional state in the process of listening to music, categorizing emotions and the ability to verbalize them. The developed set of music therapeutic methods was aimed at students studying their own emotional experience, developing the ability to observe internal experiences in the process of communicating with music, to realize the expressive

meaning and interconnection of the elements of the musical language with respect to the interpreted work.

A comparative analysis of the ascertaining and control stages' results showed the dynamics of music interpretation by student musicians according to the parameters we developed. These included: the integrity of the musical image perception, the differentiation of emotions and the adequacy of the interpretation of music to its content. A control study showed that, while perceiving music, along with the great importance that students attach to textured elements, the emotional component, represented in music by the leading expressive means, melody, became no less important for them. The emotional significance of nuances, carcasses, and breathing in the performance of music has also increased. Students learned to determine their emotional state without resorting to the help of a ranked table of emotions, which indicates the acquisition by them of a previously absent skill of differentiating their own emotions. They also acquired the ability to establish the relationship of musical expressiveness, the nature of their interaction and development, to rethink it in relation to the interpreted work.

The hypothesis put forward on the effectiveness of music therapy methods application, allowing student musicians to qualitatively change the content and nature of the music interpretation and contribute to the comprehension of the personally meaningful meaning in it, has been confirmed. This is evidenced by the control stage data of the experiment, which reflects the dynamics of music interpretation by student musicians against the background of music therapy methods application and demonstrates the tendency of students to interpret their music to their own emotional response and personal sensory experience. The content of the study outlines ways to solve the problem of personal self-knowledge through music among music students in the process of their professional training in the context of university education.

The results of the work performed, initiated the introduction of a block of art therapy disciplines into the educational process of training teacher-musicians, which made it possible to activate the reserve capabilities of the body, bringing the activity of its functional systems to balance. Thus, the described experience shows that trends towards the unification of world educational systems and a generalized idea of individuality as a part of the surrounding world and the environment activate the search and introduction into the process of modern music education of such directions that are able, without conflict with world trends, to maintain approaches to the development of personality, taking into account the ontological structure of its needs (self-expression - self-knowledge - self-actualization). This determines the meaning of music education, determining the formation of an individual's personality-oriented attitude to art (as opposed to practice-oriented), and therefore - the ability to effectively realize oneself in all spheres of life.

## REFERENCES

- (O.A., 1971) (Artemova, 2017) (Artemova, 2019) (Belousova, 2012) (E.A., 2017) (I.A., 2005) (B., n.d.) (V., 2018) (N. Popov, 2012) (A., 2009) (I., 2004) (Anon., 2016) (Lagutenko, 2008) (A., 2014) (Osinska V., 2015) (S.P., 2000) (Salimova K., 2001) (G.O., n.d.)
- A, M. A., 2014. Komp'yuternye tekhnologii v sovremennoj sisteme podgotovki muzykal'nyh kadrov.. political and legal sciences, cultural studies and art history, Volume 10 , pp. 107-110..
- A., H. J. (2009) Kak uchat muzyke za rubezhom [How to teach music abroad.
- Anon. (2016). Media education Today and Tomorrow. <https://www.researchgate.net/publication/306078522> Volume 80, p. 1-27.
- Artemova, E. B. E. P. S. a. T. N., (2019). The introduction of digital technologies in the learning process in the subjects of the aesthetic cycle. International Journal of Advanced Biotechnology and Research (IJABR), Issue 1, pp. 219-223.
- Artemova, E.(2017). Nauchno-issledovatel'skaya i proektnaya deyatel'nost' studentov v processe izucheniya istorii muzyki. Conference of the Institute of Culture and Arts of Moscow State Pedagogical University, pp. 70-74.
- B., G. I. n.d. Muzykal'no-komp'yuternye tekhnologii. URL:[http://mediamusic-journal.com/Issues/1\\_5.html](http://mediamusic-journal.com/Issues/1_5.html).
- Belousova, N.(2012) Information technology in the process of special training of a teacher-musician.
- E.A. B. (2017) Muzykal'naya pedagogika i pedagogika iskusstva.
- G.O. S. n.d. Effektivnost' metodov muzykal'noj terapii v programmah vosstanovitel'noj korekcii prakticheski zdorovyh studentov s vyyavlenymi psihofiziologicheskimi otkloneniyami The effectiveness of music therapy methods in rehabilitation correction programs for heal.
- I., M. A. (2004). Pedagogical conditions for the use of computer technology in music education. p. 167.
- I.A., G. (2005) The role of musical computer technologies in advanced composer practices. p. 19.
- Lagutenko, O. B. (2008). Suchasni vprovadzheniya programno-metodichnogo zabezpechennya u navchal'nij proces ta upravlinnya vishchim navchal'nim zakladom osviti. Pedagogical sciences: realities and prospects, Volume 11, pp. 48-53.
- N. Popov, C. W. B. L. G. H. J. O. P. A. A. (2012). International Perspectives on education Bulgarian Comparative Education Society (BCES), p. 446.
- O.A., A. (1971). Stanovlenie i razvitie muzykal'nogo vospitaniya v sovetskoj obshcheobrazovatel'noj shkole.

Osinska V. B. P. (2015). Study of dynamics of structured knowledge: Qualitative analysis of different mapping approaches. *Journal of Information Science.*, Volume 41, p. 197–208..

S.P., P. (2000). Educational computer technology in music education. p. 238.

Salimova K., D. N. (2001). Pedagogy of the peoples of the world: History and modernity. p. 576.

V. G. O. (2018). Muzyka v epohu cifrovych tekhnologij. URL: <https://srjournal.ru/2018/id81/>, Volume 1.

# Individualized Teaching English Writing in China

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## ABSTRACT

This study investigates the effectiveness of a teaching model in the context of the System-Activity Approach within “English Writing” as an academic course for English major students at the university in China. The main goal is to design an effective tool for a university teacher suitable for teaching each individual student in the condition of a large-in-number group of students that is typical for China. In purpose to achieve high educational results by organizing and managing independent in-class activity of each learner, a method of system analysis in teaching English Writing at the stage of interiorization of academic knowledge is implemented. The results of practical use of the model are presented to prove the efficiency of the teaching model.

Introduction: Academic education is considered to be a factor for economic growth and development of China. The priority of education and its development force the academic reality to be significantly upgraded and education to be high-quality oriented. Aim: The main aim of the research is to design an effective teaching model of the academic course “English Writing” on the basis of the SAA concept. Result and Discussion: This study may serve as an effective experience to upgrade the educational reality in the direction to high quality and breakthrough of Chinese education up to the world-class level. Elaborated working model of an academic activity of a teacher aimed to teach each individual student up to high academic result in the condition of large-in-number classes may serve as one of the key factors for ensuring the effective development of professional competencies in students and their final academic results

**KEY WORDS:** SYSTEM-ACTIVITY APPROACH, METHOD OF SYSTEM ANALYSIS, INTERIORIZATION, EXTERIORIZATION, ACTION ORIENTATION MATRIX, SYSTEMIC-TYPE ORIENTATION SCHEMES, ENGLISH WRITING, ENGLISH IN CHINA, CHINESE LEARNERS OF ENGLISH.

## INTRODUCTION

Significant improvement of the competitive position of the country in the global world is one of the basic goals of Chinese People Republic nowadays. According to the

updated paradigm, academic education is considered to be a factor for economic growth and development of China. Key-strategies like “Human potential will establish the power of the nation” and “Education and science lead the country to the prosperity and success of the whole nation” stimulate the positive changes in education of all types and levels (Wan-hua, 2007). Without any doubt, the declared priority of education and its development as an integral part of the Belt and Road Initiative force the academic reality to be significantly upgraded and education to be high-quality oriented. International strategy of China is aimed to breakthrough of national education and research up to the world-class level (Guruleva, 2017).

## ARTICLE INFORMATION

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At this point an academic society faces certain contradictions between the social demand in high-class specialists and university graduates with no more than just acceptable medium academic results. It is an effect of teaching technologies that do not consider psychological processes due to the lack of an educational strategy that clarifies teaching models based on psychological and pedagogical common factors and laws. On the one hand, there is a strong requirement to organize and manage individualized in-class activity of each student; on the other hand, lack of learning/teaching materials in academic theory does not support academic practice. Generally speaking, the demand in “psychologizing” in teaching any academic course is in a serious conflict with the lack of using the psychological knowledge in everyday educational practice.

A top-level academic teacher or lecturer understands in full psychological in their nature processes of acquisition, interiorization, and exteriorization in each learner; psychological images and psychological actions in learner’s consciousness, their function, characteristics, structure and content; methods, forms, means, and conditions to be used in educational process; the way the psychological image in learner’s consciousness will support his practical activity. The picture of educational reality shows that university teachers represent academic knowledge to passive listeners during a lecture, practical lesson, seminar, tutorial, but effectiveness of such a presentation is below expectations. Experimentally proved that in purpose to achieve productive cognition, learner’s speaking activity cannot be less than 85% of all lesson time, while teacher’s speaking time tends to 15% (Verbitskiy, 1999, p. 75). Thus, the academic goal of a teacher for any effective lesson is to organize and manage individualized in-class activity of each student.

In addition, there are some challenges for international teachers working in China in the field of education that should be taken into consideration. First, Chinese students are used to teacher-fronted styles of learning. It means that they are no more than just passive receivers and their academic activity is listening and, probably, writing some notes. Second, types of exercises are close-ended calling for specific answers (gap-fills with keys) which does not provoke any thought developing activity and systemic type of thinking. Third, fluency-accuracy balance in foreign language training is in favor of accuracy, though the professional linguistic competencies require both at equal level. Finally, the most challenging part is large-in-number groups of students that really leave no chance for a teacher to contact each student often.

What kind of academic quality are we talking about? (Wyss & Thrush, 2007). The extraordinary epidemiological situation that happened in China in the beginning of 2020 demanded development of distant training models initiated by pedagogical communities of all educational levels. The offered teaching strategy aimed to individualization of education seems to be supportive in the respect of remote variant of training Chinese students.

**Literature Review:** Theoretical and methodological background of this research is based on famous Psychological Activity Theory (PAT); Action Theory of Acquisition of Social Experience in the section concerning function of psychology to orient a subject and subject’s activity in materialized reality; conception of social and historical nature of human’s mentality; understanding of interiorization and exteriorization as psychological processes (Vygotsky, Leontiev, Galperin, Reshetova). The stages of the offered model of training in the frames of our research are designed in accordance with Theory of Step-by-Step Formation of Mental Activity (Galperin, 1998). The central role belongs to the statements of System-Activity Approach (SAA) about structure and content of activity as a structural substance, as well as investigation of an object exploring procedures of Method of System-Analysis (MSA) and formation of an action orientation matrix of a systemic type (Reshetova, 2002).

The term “activity” stands for motivated actions of a person as a social subject; activity is always socially based and ethically limited. It is aimed at the objects of the external and internal world of a human, changing these objects and the person (subject) himself. Activity is inextricably linked to the substantive and socio-cultural components without which they are just empty abstractions. Its performance is mediated by a mental image that serves in its orientational function. The structural stages of the activity are motivation, orientation, planning, performing, self-control, self-assessment, self-correction and reflection. The content of each stage is revealed in the following set of components: purpose, object, method, way, technology, means, forms, other conditions, actions and operations, product and result (Kolomiets, 2019, p. 149-150).

These structural stages and components are combined into a systemic unity with clear mutual systemic links. As a result, none of them can be omitted in the performance of the activity. Each one plays a certain function, has its own content, and occupies a definite position in the integral structure of the activity. The quality of the activity, the level of comprehension and effectiveness always depend on how well a person understands the structure and content of the activity and correspondently constructs it (Kolomiets, 2019, p. 16). The student’s academic and professional activity is organized in accordance with the psychological nature of the learning process and acquisition of social experience. PAT discloses the mechanism of the subject’s activity to master the object of learning as the general ability of the subject to acquire objects of culture. These activities involve two interrelated processes: interiorization and exteriorization.

According to Reshetova, to acquire an object means, first of all, to “decompose” it: to detect an object of social need in it, an objectified activity, and abilities that have mediated it. The subject” must perform the relevant activity of their interiorization – that means to transform them from generic to his individual abilities,

which now mediate his activity” (Reshetova, 2002). The starting and the key point of PAT is the approach to investigating, understanding, and formation of psychics in its orientational function. The image of the object of acquisition, formed by mental reflection in the subject’s mind, turns into orientation matrix for further transformation of the object.

The subject “returns” to the activity its transformed psychological content, which is now captured in its product as his individual-generic abilities; i.e. he exteriorizes them. So, the process of acquisition is the process of mutual transitions of external activity into internal activity and vice versa. (Reshetova, 2002, p. 23). Thus, students acquire academic knowledge in accordance with the psychological nature of the learning process at two stages. At the first stage, so-called the stage of interiorization, a mental image of the learning material is formed in the student’s mind, which involves construction of a materialized image of the academic knowledge in the form of a “didactic orientation scheme” and further transition of it into the internal plan. At the second stage, the stage of exteriorization, this image acts in the orientation function for the practical activity. The learner uses this mental image in his practical activity, that is, he exteriorizes it now as a tool of this activity.

The effectiveness of training is determined by the system of psychological and pedagogical conditions implemented in the process of learning on the basis of interiorization and exteriorization. The first condition is construction of a materialized image of the structure and the content of knowledge in orientation schemes using sign-symbolic means. The second condition is related to the construction of orientation schemes, where a special role belongs to the theoretical activity of the student in the form of academic investigation and analysis of an object. Any academic investigation is organized by a special program based on the procedures of the general scientific cognitive method - the method of system analysis (MSA).

Procedures of MSA include the following steps:

1. Select an object from the environment.
2. Examine object structure and identify blocks or levels (vertical and horizontal).
3. Detect cross-level systemically important links between blocks/levels (vertical and horizontal).
4. In each block/level:
  - 4.1. Detect elements.
  - 4.2. Identify systemically important links between them.
  - 4.3. Reveal the content of each element.
5. Establish common and different elements and relationships between elements of all blocks/levels.
6. Construct an integrative hierarchical system.

The academic investigation of the object ends with the schematization of the knowledge in systemic-type didactic orientation schemes using sign-symbolic means. Thus, theoretical knowledge of the object of learning in the process of academic investigation becomes the

subject knowledge of its investigator (Kolomiets, 2019, p. 71-72).

The third important psychological and pedagogical condition is organizing the purposeful and manageable process of interiorization of materialized image of the knowledge performed by the investigators in orientation schemes. The activity of any learner should be organized in stages in different forms: from cooperative with the teacher and with other students to the individual activity of the student performed by himself. The activity is carried out in different speech variants: in “external loud socialized speech,” “external in-mind speech,” “internal speech” (Galperin, 1998). One more significant psychological and pedagogical condition for the implementation of the process of effective learning is the organization of independent practical activity on the use of educational material in solving professional tasks. Thus, our teaching model is based on the academic activity with identified structural stages and components combined into a systemic unity with clear mutual systemic links.

**Research Questions:** The topic of our research is an individualized educational strategy based on SAA. The research is performed in Jiujiang University, China, within the academic course of English Writing. Thus, we investigate the educational process from the position of SAA. The main goal of our research is to design an effective teaching model of the academic course “English Writing” on the basis of the SAA concept.

Objectives of the research are the following:

1. to elaborate a working model of an academic activity of a teacher aimed to teach students in the way that each one achieves high academic result in the condition of a large-in-number class;
2. to prove experimentally the effectiveness of the educational activity in accordance with the offered model.

Hypothetically, within the frames of educational process a teacher/lecturer can make each individual student achieve high academic results according to educational standards, if teaching is organized on the SAA basis. To be more exact:

- a) if characteristics, structure and content of teacher’s activity are determined by the required academic results of students;
- b) if a teacher organizes theoretical academic investigation to be performed by a student with an investigated object, aimed to “produce” new (for a student) knowledge, so-called “subjective knowledge”;
- c) if a student interacts with the new knowledge reproducing it in materialized didactic orientation schemes, characterized as full, generalized, systemic;
- d) if a student in his activity follows steps and changes types of pseudo-professional activity from cooperative with a teacher and other students to individualized, as well as from out loud socialized activity to mental

activity;

e) if educational aids of teaching materials – for a lecturer/teacher and for a student – are specially elaborated in purpose to organize manageable individualized in-class activity of each student.

## MATERIAL AND METHODS

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To prove the success of our research we choose pedagogical experiment as the basic method, which is supported by theoretical and empirical methods as well. Theoretical methods include analysis of philosophical, psychological, pedagogical, andragogical and methodological literature; analysis of academic standards and normative documentation; analysis of academic results of students; modelling of educational activity. Some empirical methods, such as lesson observation, expert revision, and interview of students, additionally support the research from the scientific point of view. Experimental research of the academic activity of a teacher within the academic course of English Writing from the position of SAA is structured in 3 stages: preparatory, main and final. To organize an academic investigation based on the MSA, at the preparatory stage the teacher develops two major sets of teaching aids: for a student of the experimental group and for a teacher. The selected material normally coincides with the academic knowledge presented in the regular textbook for students that match the content and didactic objectives of the academic discipline and equal to the students' level of knowledge.

The teacher designs courses according to the actual professional qualifications that students must achieve. The content includes MSA's student knowledge and academic research program models and student activity books. Template activity book is a systematic plan for students to learn in the form of reference tables and reference maps. Each unit contains some necessary instructions to help students with academic knowledge, which will serve as a guide to the structure and content of the educational material in a specific subject. Such schemes provide students with insight into academic material and research, as well as material qualifications and fundamental structural components of relationships. A teacher can add some important academic information from the foundation of professional thinking - academic literature, practical professional work, creative work and some logical problems for developing problems, logical and systematic thinking. Also self-examination is an important component of self-assessment quality for self-examination, testing and practical work.

A set of materials for a teacher is presented in a teacher's book and presented to students for organizing and conducting the program, which is basically an academic investigation conducted by MSA. It contains several guidelines for teacher guidelines through teacher-specific academic knowledge structures and content, and the academic activities of the student and the academic activities of the teacher and the academic activities of the teacher related to a specific subject. The essential part of

the teacher's book is a copy of the student activity book which students must take out of academic literature while working independently. The template of the systematic plan in the form of reference table and reference map is filled with subject-specific academic knowledge for a student pre-reference.

Practical professional problems, as well as creative work and logical work, are presented with different variables of solutions. The test and evaluation material for self-examination contains key and correct variables and how to do and solve. At the main stage of the experiment, participants of the experiment are selected and divided into two groups: experimental and control. An experimental group is trained from the position of SAA with use of didactic materials elaborated by a teacher at the preparatory stage, while a control group is going through the traditional teacher-front way of learning. The training lasts for one academic semester, 16 academic weeks, 32 academic hours. At the final stage of the experiment all the participants are tested by the standard written test covering all the competencies, including theoretical knowledge and practical skills, acquired during the semester. At the end final academic results of the experimental and control groups are compared to analyze the training process and to make a conclusion about the effectiveness of the working model of the academic course "English Writing" on the basis of the SAA concept.

## RESULTS

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Academic courses in English writing from SAA are conducted in three stages. At the preparatory level, the teacher fully organized academic discipline and hopes to develop a plan for education and educational discipline elements, which will be developed as a mandatory requirement for students to describe knowledge and establish a fundamental relationship between knowledge, power and skills.

An activity book for students is able to conduct a knowledgeable and academic investigation for the purpose of independent work of a student, as well as academic literature, lecture course materials and other courses related to discipline. Each student will be able to generalize the specific discipline knowledge generated by his academic examination and hold it through an materially based data storage for future use. For this reason, a teacher specifies and includes a special orientation scheme activity book template and table and reference map. Students will use this reference table to represent discipline knowledge, and reference maps will be used to show the learning methods of activity and activity displayed to solve behavioral problems as part of future professional work under the study.

Teachers can include practical professional problems to develop rational and systematic thinking as the basis for discipline, creative work and professional thinking. Relevant testing and evaluation materials force students to self-examine; There is a standard standard for self-

assessment of test, logical and practical problems that they are taking with them. A set of guidelines to guide students through learning the final content of discipline, which serves as a vector for independent in-class work.

The teacher also develops a teacher's book for organizing his own pedagogical activity. Afterwards, activity books with the theoretical materials are provided to each

student, who will then work with them independently in the condition of a large-in-number group. At the main stage of the experiment the teacher arranges the in-class lessons for students to work with academic specific-discipline knowledge that will be generalized and materialized in the activity book. A detailed discussion of the content of the material under study – didactic units – and their theoretical generalization and systematization in the reference tables and reference maps takes place based on doing theoretical assignments.

Table 1. Results from the final academic assessment of students at the Department of Foreign Languages at Jiujiang University in the discipline “English Writing”

	Class	Number of students in class	Total number of students	Average score of the final test
Experimental Group	A1711	40	81	90,5%
	A1712	41		
Control Group	A1811	42	129	80,5%
	A1812	43		
	A1813	44		

The teacher works as a manager who organizes the activities of the students of the new DDTic unit in the class through the implementation of their “verbal” and systematic orientation schemes. The teacher conducts a general discussion on solving professional problems and analyzing various ways to solve them. Students offer different ways of solving problems, demonstrate the ability to find a solution independently, create a practical argument for a proposed solution, present relevant arguments. To help develop rational thinking, students can propose logical problems based on systems, classifications, causes and effects relationships. To solve professional behavioural problems, students rely on the systematic orientation plan already created – reference tables and reference maps, which are allocated for practical use, and can help students make all the errors.

**At this stage, a teacher uses different types of work with students:** individuals, couples, or groups. 210 students of Jiujiang University, China, majoring in English are chosen as participants of the experiment and divided into 2 groups: experimental (81 students) and control (129 students). All the participants are native Chinese speakers learning the English language for the second year in the university. According to the teaching plan and educational Standard of China the academic discipline “English Writing” is taught in the 1st semester of 2019-2020 academic year. The experiment takes place from September 2019 till January 2020. The results of the experiment are summarized at the final stage. The participants are tested by the standard written test covering all the theoretical knowledge and practical skills acquired during the semester. The final academic results in January 2020 are the following: 90,5% for the experimental group and 80,5% for the control group (Table 1).

It is evident, that students of the experimental group whose educational process was organized according to the elaborated educational model based on SAA concept and MSA have shown significantly greater final assessment scores after 32 academic hours of training: 90,5% VS 80,5%. It means that the offered teaching model aimed to individualize the process of training is proved to be highly effective in the condition of large-in-number group.

## DISCUSSION

The effectiveness of the teaching model based on SAA is proved experimentally during the 1st semester in 2019-2020 academic year. The educational process organized by a teacher from the position of SAA with the use of the above-described methodology yields the following inferences:

1. The quality of the knowledge and skills acquired by learners trained in the individualized manner from the position of SAA is significantly higher due to the complete, generalized, systemic knowledge acting in orientation function in respect of the tasks and assignments.
2. The academic investigation performed by students is adaptive and accessible for each student notwithstanding his individual abilities and starting level.
3. Attitude of the students to the lessons organized in experimental way essentially changes: they prefer arranged and managed in-class investigation activity performed with MSA that allows to work independently in large-in-number group. The cognitive motive for the students becomes leading, and students get interested in the technology of learning.
4. Specific discipline knowledge is easily acquired by



the learners and applied in practice, because this type of knowledge is the product of their own academic investigation.

5. In addition to specific academic knowledge and skills the learners obtain the “ability to learn”, that means designing their own pseudo-investigation using MSA to discover new knowledge, to generalize and schematize knowledge with signs and symbols.
6. The method of academic investigation arranged by MSA and managed by the teacher boosts systemic way of thinking in learners.
7. MSA itself acts as a generalized method for investigation, and it may be used for learning any other subject.
8. During the educational process, a teacher and each student feel psychological comfort and moral satisfaction which are very important from the point of view of physical and mental health.
9. The teacher feels a sense of satisfaction with success of each student, that is the key outcome of his pedagogical activity.

## CONCLUSION

Elaborated working model of an academic activity of a teacher aimed to teach each individual student up to high academic result in the condition of large-in-number classes may serve as one of the key factors for ensuring the effective development of professional competencies in students and their final academic results. Within the frames of educational process characteristics, structure and content of teacher’s activity are determined by the required academic results of students. A teacher organizes theoretical academic investigation to be performed by a student with an investigated object, aimed to “produce” so-called “subjective knowledge”. A learner interacts with the new knowledge reproducing it in materialized didactic orientation schemes, characterized as complete, generalized, and systemic.

Under the supervision of a teacher, each student follows steps in changing types of pseudo-professional activity from cooperative with a teacher and other students to individualized, as well as from out loud socialized activity to mental activity. The designed educational aids of teaching materials – for a lecturer/teacher and for a student – are highly efficient to organize manageable individualized in-class activity of each student. Thus, this study may serve as an effective experience to upgrade the educational reality in the direction to high quality and breakthrough of Chinese education up to the world-class level. It may also be used in some extraordinary conditions when there are certain restrictions in attending in-class lessons, and the whole training is performed in a remote variant.

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## REFERENCES

- (Galperin, 1998) (Guruleva, 2017) (Kolomiets, 2009) (Kolomiets, 2019) (Leontiev, 1965) (Leontiev, 1975) (Leontiev, 1988) (Litvinova, 2017) (P.Y Halperina, et al., 1979) (Reshetova, 2002) (Reshetova, 2013) (Reshetova, 1985) (Reshetova, 2002) (Verbitskiy, 1999) (Wan-hua, 2007)
- Galperin P. (1998) *Psihologija myshlenija i uchenie o pojetapnom formirovanii umstvennyh dejstvii*. Publishing House of the Institute of Applied Psychology, Voronezh, MODEK.
- Guruleva, T. L. (2017). Education system in the Chinese Republic: structure and main direction of development. pp. 152-164.
- Kolomiets O. M. (2019) Pedagogical conception of teaching on the base of competency-activity approach. Sechenov First Moscow State Medical University. .
- Kolomiets. O. & P. O. (2009) College students research activity. pp. 147-151..
- Leontiev A. (1965) Issues of mind development.
- Leontiev A. (1975) Activity Consciousness. Personality.
- Leontiev A. (1988) Students concepts acquirement as an issue of educational psychology. Volume 1,2.
- Litvinova, T. M. G. I. Y. K. O. M. S. O. A. & D. M. N (2017) Professional Activity as Part of the Educational Process.. Revista ESPACIOS..
- P.Y Halperina N. T. Z. R. P., Talyzina, N. & Reshetova, Z. (1979) Psychological and educational problems of vocational training. Moscow State University Press, .
- Reshetova, Z. (1985) Psychological bases of vocational training. Moscow State University Press.
- Reshetova, Z. (2002) The organization of students’ learning and development. pp. 70-78.
- Reshetova, Z. A. (2002) Formation of System Thinking in Teaching.
- Reshetova, Z. A. (2013) On the mechanism of learning and development. National Psychological Journal.
- Verbitskiy, A. A. (1999) New educational paradigm and context teaching. ITSPKP.
- Wan-hua, M. M. M. H. P. H. J. (2007) Globalization and paradigm change in higher education. Tsinghua University Press., Volume 20.

# Problems of Reconstruction of Local Specificity of Culture

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## ABSTRACT

The study of specific features of the culture of a local group of evens in the spheres of national and cultural identity, natural resources management natural resources management and economic practices has been proposed. It is assumed that the tourism industry will contribute to the preservation of the specificity of culture in the local society. Following issues have been solved: to characterize traditional natural resources management, socio-cultural practices of the evens of Lamynkhinskiy national nasleg, transformation and continuity of the economic-cultural type, defining the processes of ethnic identification; to prove the potential of tourism; to define the role of mix tour in the process of reconstruction of lamynkhinskiy component of the evens culture. Within the framework of the socio-cultural approach, the potential of the method of culture reconstruction has been considered. The semiotic analysis of some natural and cultural attractions of the village Sebyan-Kyuel has been carried out. During the study, the methods of expert interviews and participatory practices were also used. Field studies have confirmed the fact that, historically, an independent lamynkhinskiy component of the evens culture, representing the highlanders' culture (they're herders, hunters and fishermen) was formed; different from Anabar and Magadan; with the established forms of management and communication. Lamynkhinskiy evens speak a dialect of the even language; have their own name; are conscious of their unity; cultivate and mythologize their common past (different from the past of the evens of other regions). It is proved that the project mix tour should promote the employment of the population; create conditions, contributing to the reconstruction of ethnic culture and the formation of a positive ethnic and cultural identity of Lamynkhinskiy evens. Introduction: The problems of preserving of the cultural specificity of local ethnic groups is an important field to study. We may assume that the tourism industry will contribute to the preservation of the specificity of culture in the local society. Aim: The aim of the study is to consider the tourism industry as a possible way to contribute to the preservation and reconstruction of the specific culture of the local society. Result and Discussion: Within the framework of the socio-cultural approach, the potential of the method of culture reconstruction has been considered. It is also proved that the project mix tour should promote the employment of the population; create conditions, contributing to the reconstruction of ethnic culture and the formation of a positive ethnic and cultural identity of Lamynkhinskiy evens.

**KEY WORDS:** INDIGENOUS PEOPLES, LOCAL SPECIFICITY, LAMYNKHINSKIY COMPONENT, RECONSTRUCTION, PARTICIPATORY PRACTICES, IDENTITY, TOURISM INDUSTRY, MIX TOUR.

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## INTRODUCTION

At present, the indigenous peoples of the North, Siberia and the Far East (hereinafter, the indigenous peoples) strive to preserve and develop the original culture kept through hundreds of years in permanent close intercultural contact. Such evens as the Evenki, the Chukchi, the Koryaki, the Dolgani, the Yukagiri, the Sakha and the Russians have lived for centuries on a vast territory, in close dependence on each other. They have not lost their local originality and interethnic ties in conditions of a sharply continental climate, in the same contrasting enclosing landscape: the mountains of the Verkhoyansk range, the Central Yakut lowland, the tundra and the coast of the Arctic ocean. Moreover, representatives of one ethnic group created local variants of culture in the conditions of dispersed residence of small ethnic groups in the South, East and North of the modern territory of the Republic.

The local specificity defined here as lamynkhinskiy component of the evens culture of Kobiyabskiy district (ulus) of Yakutia (in contrast to the Anabar, Olekminsk, Magadan, etc.), gives the ethnic culture of the evens "extra accent, complicates its structure. Multicomponent structure, complexity of the system contributes to greater stability, viability of culture" [1, p. 145]. Indigenous peoples of the North studied without separating the evens and Evenki until recently, for example: I. S. Gurvich (1966) [2], V. A. Tugolukov (1985) [3]. The scientists who had the greatest influence on tungus learning period should be pointed out in the pre-Soviet: S. K. Patkanov (1912) [4] and S. M. Shirokogorov (1929) [5], whose works testify to the Russian ethnography, geography, statistics, linguistics, the study of folklore, history, and arts and crafts. In the Soviet period there were ideas about different groups of evens in the studies in the field of North, but local features of ethnic groups were studied inhomogeneously. The evens of hard-to-reach regions of north-eastern Eurasia remained little explored.

The circle of scientists in the field of North study is constantly expanding, today it is presented by the names of A. A. Alekseev [6], S. A. Alekseeva [7] S. A. Grigoriev [8], V. V. Filippova [9] etc. At the end of XX - beginning of XXI centuries generalized works about evens appeared. (V. A. Turaev and others, 1997) [10]. The researches on tourist resources are being conducted in the Republic (S. N. Fedorova [11], etc.), development programs are being adopted, but the problems of preserving of the cultural specificity of local ethnic groups are not sufficiently developed. The study used a sociocultural approach. The semiotic analysis of separate natural and cultural sights of the village Sebyan-Kyuel was offered. Along with general scientific methods of expert interviews, participator practices, as well as the design method were used.

The method of reconstruction as a method of studying culture through its modeling system is considered as the main one. Unlike historic and other renovations, there is

no any task of recreating a specific individualizing trait of the studied cultural phenomenon in the cultural one; its typological and systemic signs are being modeled. The principles, on which such reconstructions can be carried out, have been developed by evolutionists (C. Spencer, E. Tylor, etc.), which, despite being archaic, remain effective. They come down to finding the natural "based on the specific historical traits of a culture from a combination of natural and historical conditions of existence of the respective community, allowing a more complete knowledge about these conditions increase the accuracy of the reconstruction of the forms of the target culture" [12, 373]. A number of expert interviews were conducted as part of the field.

**Research:** Based on the data of the expedition in Lamynkhinskiy national nasleg of Kobiyabskiy district (ulus) of the Republic of Sakha (Yakutia) in March-April 2019 [ACA, 2019], we assume that the tourism industry should contribute to the preservation and reconstruction of the specific culture of the local society. The introduction of the proposed mix tour will create new opportunities for the consolidation of the ethnic community (participatory practices) and the creation of new jobs. Together, the proposed measures should contribute to the formation of a positive ethnic identity, as well as conservation and restoration of lamynkhinskiy component of the culture of the evens. Traditional culture of lamynkhinskiy evens as a development resource in the region. The chronological framework covers the period of the mid-XX-early XXI centuries. The source date selection is determined by the state of the source database. The choice of the upper boundary is due to the fact that the study concerns the process of assimilation and transformation, as well as issues of continuity and reconstruction in this period.

**Territorial limits:** Sebyan-Kyuel village, Lamynkhinskiy national nasleg of Kobiyabskiy district (ulus), the administrative entity of the Republic of Sakha (Yakutia). The choice of the region is determined by the administrative-territorial status and the importance of this factor in the formation of the identity of this small ethnic group. According to the 2000 and 2010 censuses, the total number of evens in the Russian Federation is "19242 people. Live by local groups in the Republic of Sakha (Yakutia) in Allaikhovskiy, Momskiy, Tomponskiy, Srednekolymsk, Verkhoyansk, Oymyakonskiy, Abiyskiy, Bulunskiy, Eveno-Bytantayskiy areas; Magadan region (Olskiy, Northern-Evenskiy, Omsukchanskiy, Tenkinskiy, Khasynskiy, Yagodninskiy areas); Khabarovsk territory (Okhotsk district); Kamchatka region (Bystrinskoye, Penzhina, Olyutorskiy, Tigilskiy districts); Chukotka Autonomous district (Anadyr and Bilibino districts)" [13, 1113; 15].

It can be argued that in each area of residence evens retain its ethnic and cultural specificity. At the same time, they show an ambivalent attitude to the host culture: on the one hand, it is quite easy to adopt methods of management, language, enter into interethnic marriages;

on the other hand, accentuate, preserve, cultivate (hyperbolize) – specific ethnic mental characteristics.

Sebyan-Kyuel is located on the right bank of the Lena river, is considered the most remote settlement in Yakutia. The village lies on the banks of mountain rivers the Sulanachiyen and Nadatav. The tops of the mountains reach 2000 meters or more above sea level, above the village rises the highest mountain Dudara. The climate is continental. The maximum temperature reaches +31 C° minimum to -56° -58°. Reindeer husbandry is the leading form of life activity of the population of the national nasleg. The territory of the municipal formation of Lamynkhinskiy national nasleg is of 49.1 thousand hectares [14]. In total, the village is home to 750 people of different nationalities, according to 2002-2017 [15; 8, p. 125]. You can find a museum in Sebyan-Kyuel where you can see a stuffed mountain sheep, the Mongolian marmot, wolf and other animals and birds. The exhibits of the Museum acquaint with the history, customs and traditions of the evens of Lamynkhinskiy nasleg. The folk ensemble "Marlenka" has played an important role in the cultural life of the villagers since 1975.

Evens of Lamynkhinskiy nasleg represent "a distinct ethnic group of the evens of the North-West Verkhoyanie" [6, p. 189], endoethnonim "namadali". In 2012-2015, the number of evens in the nasleg were 649 people, more than 80 % of those living [8, p. 125; 9, p. 210]. The language belongs to the lamynkhinskiy dialect of Western dialect of the even language [16, p.12]. The essence of lamynkhinskiy people consisted of: the Keimeti, the Niaku, the Kara, the Kirginbis. In the population of nasleg – the representatives of the Dotke, Kolteeki, Memel, Tuges, Dondetkil, Bules [16, p.19]. The representatives of these groups of people are the Keymetinovi, the Stepanovi, the Zakharovi, the Krivoshapkini, the Alexeyevi, the Kolesovi, the Sleptsovai [9, p. 206]. 694 189 thousand rubles was provided from the state budget on the development of domestic reindeer breeding in the framework of the powers transferred to municipal administrations (2017).

The actual number of reindeer counted 149 560 [17] according to the government statistics (2017) in the agricultural enterprises and individual entrepreneurs of the nasleg. Reindeer breeding is the main form of life, the most prestigious type of activity for men and the main source of income for the population of Sebyan-Kyuel. Thus, following A. A. Alexeyev and other researchers we notice that the independent lamynkhinskiy component of the culture of the evens was formed at the beginning of the XXI century. Its local type, representing the culture of the mountaineers, reindeer herders, hunters and fishermen; different from Anabarskiy and from Magadanskiy; with the current and become "routine patterns of interaction and communication" [18, p. 8]. Lamynkhinsk evens speak a dialect of the even language; have its own name; conscious of its unity; cultivate and mythologizing their common past (different from the past of the evens from other regions).

Mix tour to Sebyan-Kyuel as a tool of reconstruction: Ethnic tourism in the modern world is gaining popularity, is considered an exotic and often extreme form of recreation. This type of tourism is becoming a way of personal development, expanding the boundaries of knowledge, promotes ethno-cultural self-identification of a person. The interest of people interested in the study of ethnic groups of people to the culture of their ancestors, folk traditions, beliefs, rituals and crafts has increased greatly in recent years.

The products of cultural synthesis developed in the process of interethnic integration and acculturation are related to the prerequisites for the development of ethno-cultural tourism minimization of the destructive impact of urbanization on the traditional cultures of indigenous peoples of the North-East of the Russian Federation and the promotion of the Republic to the tourist market. The semiotic analyses of the individual attractions in the area was conducted, creating a complex folded text of space of the lamynkhinskiy culture of evens. The lake Sebyan-Kyuel is located on the territory of the nasleg. In its vicinity, evergreen grass churukta, favorite food of deer, is growing. The lake keeps many secrets: fishermen claim that there are fish in the length of 1.5-2 meters; according to the local myths, no one has managed to go down to the bottom of the lake [PMA-2019]. It is possible that there are fragments of the plane of S. Levanevsky, a Soviet polar pilot of the 30-ies of the XX century.

The Day of reindeer breeder is annually celebrated in Sebyan-Kyuel in March-April. Guests come from the Bulunskiy, the Zhiganskiy, the Oymyakonskiy, the Eveno-Bytantayskiy ulus, from abroad. Attention is drawn to national competitions: throwing of mavuta, jumping over the sled, kamas skiing, and wrestling sashes. But the most spectacular competition is the race on reindeer and reindeer sledding [PMA-2019]. In the summer "Evinek", a holiday of meeting of the sun and the evens New year, is celebrated. Children's holiday "the first fawn" is celebrated too in April. His main characters are children in national costumes; they dance, sing and read poetry in the evens language, or rather on his lamynkhinskiy dialect. Tourists are immersed in ethnic culture of lamynkhinskiy nasleg and hunting and fishing in extreme conditions are offered to them. Familiarity with the culture of lamynkhinskiy evens, participation in a national holiday "Bakaldyn". Any holiday is a boundary of time and an icon of the people, which presents all the codes of culture. The active involvement of tourists in the preparation of national dishes (cooking) code, rites (action code), a visit of the museum, riding on the reindeer in the tundra are expected.

## RESULTS AND DISCUSSION

The potential of participatory practices is indicated. It is proved that the project will create new opportunities for new job positions, as well as the conditions for the formation of a positive ethnic identity of the indigenous peoples of the North. Mix tour involves the basic forms of culture: housing, costume, ritual practices and methods

of management. It is shown that the effectiveness of ethno-cultural tourism as a form of leisure is not only in recreation, but also in maintaining the social status and self-realization of the individual, human adaptation to changing realities. The mixed tour, which includes ethno-cultural, extreme, festive types of tourism, is an instrument of cooperation at the intercultural level, a channel for the dissemination of cultural models focused on openness and mobility.

The arguments were offered in favor of the fact that the participation of representatives of indigenous peoples in the discussion of opportunities and limitations for the use of natural and landscape, material and spiritual resources of local culture (participatory practices) in tourism contributes to the balance of interests of tourists and the local community; tourism industries are a factor in the development of the region. The results obtained in the study can be used in the study of the problems of tourism development in remote regions; in the development of Federal and regional policies in support of tourism and socio-cultural development of territories, programs preservation of cultural heritage, natural landscape etc. the Introduction of tourism industries in ethnosocial and remote regions, analysis of the probable gains and risks should contribute to the preservation of local specifics of culture.

## CONCLUSION

Thus, it is determined that the evens of Lamynkhinskiy nasleg present textbook, classically formed local ethnic group, preserving its traditional way of life, and having high chances of possibility of reconstruction of the authentic forms of traditional culture. According to the strategy of tourism development there are necessary conditions for the development of tourism in Sebyan-Kyuel as another (except reindeer husbandry) priority sector of the economy in the long term. The authors consider the increase in the contribution of the tourism industry to the development of the region, the preservation and rational use of natural, recreational and cultural and historical potential.

Ethnic culture, lamynkhinskiy component which looked almost lost, got a real possibility of preservation and reconstruction. The essence of the tour is that it introduces tourists, travelers with wildlife, original culture, ancient forms of religious beliefs, unique art, traditions, customs and folklore of the local ethnic group of even Yakutia. The area of Lamynkhinskiy nasleg can become a popular tourist attraction due to the unique landscape. In total, ethnic, extreme, ecological, hunting and fishing types of tourism, combined in a mix tour, should contribute to an increase in the flow of tourists.

The proposed project of mix tour involves the reconstruction of described samples in science of verbal, plastic, and folk dance. The experience of the expedition showed how cultural codes are actualized in fishing

ceremonies, holidays and calendar: cooking, chromatic, zoomorphic, vegetative, acoustic and so on. The authors note the danger of the so-called constructed authenticity, which is observed in the world practice, when in favor of overseas guests, for the sake of greater exoticism, the people with their own hands ruin their culture. We believe that the reconstruction of the local specifics of culture (lamynkhinskiy component) of a small ethnic group (the evens of Lamynkhinskiy nasleg), does not involve sophisticated recovery exotic forms on trumped-up fragments. The real product of reconstruction is possible only if a systematic approach is observed, when the working processes contribute to the construction of a positive ethnic identity of each culture carrier in this and any other local ethnic group.

## REFERENCES

- A. A. Alekseev (2006) Evens of Verkhoyania: history and culture SPb p. 243.
- A. Y. Flier (1997) Reconstruction of culture. SPb.: University , p. 640.
- Anon. (2002) General plan of the village Sebyan-Kyuel of Kobyaiskiy ulus of the Republic of Sakha..
- Anon. (2004) Northern encyclopedia. p. 1197.
- district. T. n.d. Official information portal of the Republic of Sakha.
- E. A. Orlova (2016) Components of modern sociology of culture. Volume 3.
- R. P. Kuzmina (2010) The language of lamynkhinskiy evens. p. 112.
- S. A. Alekseeva (2008) Traditional family of the evens of Yakutia. p. 110.
- S. A. Grigoryev (2016) modern ethnosocial situation of the evens of Lamynkhinskiy national nasleg. Volume 4, pp. 124-133.
- S. I. (1966) Gurvich Ethnic history of the North-East of Siberia. p. 269.
- S. K. Patkanov I. r. T. A. Y. (1897). based on the data of the special development of the material of the census of. Volume 3, pp. 434-999.
- S. M. Shirokogorov (2017) Social organization of the Northern Tungus.. science; Oriental literature p. 710.
- S. N. Fedorova (2018) Ethno-Cultural tourism in the Republic of Sakha. pp. 191-195.
- S. V. Nikiforova E. N. G. (2019) To the problems of reconstruction of local specific culture of small ethnic groups. International scientific-practical conference pp. 144-147.
- V. A. Tugolukov (1985) Tungusy of Middle and Western Siberia. M.. science, p. 286.
- V. A. Tugolukov V. A. T. B. A. S. (1997) History and culture of the evens. SPb, p. 182.
- V. V. Filippov (2017) Lamynkhinsk evens: the number of resettlement in the centuries. Scientific dialogue Volume 9, pp. 202-213.

# Predicted Effectiveness of the Use of Surface-Active Substances (SAS) for Effective Development of a Cenomanian low-Pressure Gas Deposit

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## ABSTRACT

This paper focuses on the problem of development of a Cenomanian low-pressure gas deposit. A bed diagnostic technology has been developed, which comprises a group of methods – particularly X-ray computed tomography and surface geochemical prospection. The technology should raise the effectiveness of Cenomanian low-pressure gas deposit development. X-ray computed microtomography should help objectively evaluate the use of SAS. Surface geochemical prospection is used to discover prospective low-pressure gas sites, as well as zones where surface-active substances effectively influence the reservoir bed. Together, these methods should provide a bit of information, which can help develop the Cenomanian low pressure gas deposit more effectively. Introduction: An important part of extracting Cenomanian gas from undersaturated transitional areas is the technology of effective creation of a water-proof screen at a certain layer of the pay bed. For more objective lab evaluation of SAS use, it is necessary to apply X-ray computed microtomography – a non-invasive analysis of samples' structure, void geometry, and liquid radiographic contrast media. Aim: This paper focuses on the problem of development of a Cenomanian low-pressure gas deposit. Result and Discussion: X-ray computed microtomography as a micro-level reservoir study method, as well as surface geochemical surveys, which help detect localized decompactification areas over a large sedimentary mantle provide a volume of information that can help successfully develop Cenomanian low-pressure gas deposits.

**KEY WORDS:** CENOMANIAN DEPOSIT, HYDROPHOBIZATION, SURFACE-ACTIVE SUBSTANCES, SURFACE GEOCHEMICAL PROSPECTION, X-RAY COMPUTED MICROTOMOGRAPHY, LOW-PRESSURE GAS.

## INTRODUCTION

An important part of extracting Cenomanian gas from undersaturated transitional areas is the technology of

effective creation of a water-proof screen at a certain layer of the pay bed [1]. However, in order to increase the effectiveness and reduce waterproofing-related risks, it is necessary to conduct a laboratory quality test of the technology. Given the poor consolidation of most Cenomanian deposits [2,3], traditional lab tests, which disregard the anthropogenic changes in the rock matrix and a sample's void structure that occur in the process of experiments, cannot be objective. Therefore, for more objective lab evaluation of SAS use, it is necessary to apply X-ray computed microtomography – a non-invasive analysis of samples' structure, void geometry, and liquid radiographic contrast media.

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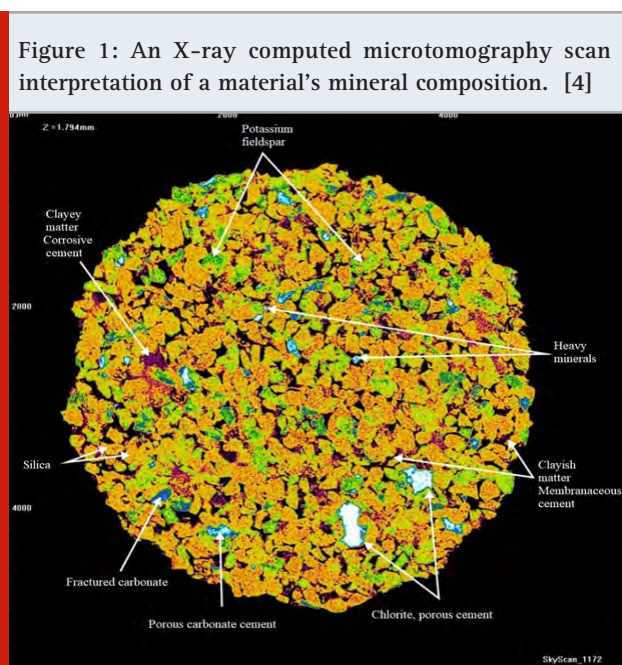
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It is still important to locate prospective low-pressure gas sites to ensure adequate development. Areal modeling of prospective low-pressure gas sites in a Ceomanian deposit necessitates the use of a method that allows for macroscale quartering of a parameter. Surface geochemical prospecting can be this method, as it relies on subvertical migration of fluid from fluid pockets to the surface.

## MATERIAL AND METHODS

Geochemical analysis requires the presence of a snow cover: a 200 ml sample of surface snow is made at a survey point. There should be at least six survey points per square kilometer. Samples are subject to lab thermal vacuum degassing, and the extracted gas is put to chromatographic analysis with carbohydrate detection threshold not exceeding 1-10-7%. Carbohydrates are detected within the methane-through-hexane range. Samples to be degassed and analyzed are stored at below-zero temperatures. Survey points are located by way of topographic GPS satellite mapping, the plottable error not exceeding 5 m.



The current experience of using X-ray computed microtomography in studying rock samples [4] and analyzing research works carried out by other scientific teams [5] suggests that there are no adequate X-ray microtomography sample wettability evaluation methods, which would work without using additional liquid radiographic contrast saturation experiments. Therefore, an important part of research of poorly consolidated samples' properties is development of wettability evaluation criteria, which rely on original digital sample data. A broad spectrum of characteristics can be categorized as original digital sample data, but in this case, the following criteria appear to be paramount: mineral composition, void mineral surface, and pore size. Today, specific scanning modes are used, which are

featured in the SkyScan 1172 X-ray microtomograph and provide relevant qualitative and quantitative data on these characteristics. An interpretation of a tomographic scan is shown in Figure 1.

## RESULTS

As follows from the available data, to solve the problem, it is advisable to start with research of a maximally consolidated sample. At this point, it is necessary to evaluate changes in wettability prior to and after applying surface active silicone polyorganosiloxanes. This requires the following research activities:

1. Choosing the most consolidated sample of sedimentary rock for the use of SAS;
2. Saturation of the sample with distilled or stratum water;
3. Modeling of natural residual water saturation through centrifugation;
4. Saturation with a NaCl radiographic contrast fluid medium;
5. Building a digital model of Sample 1;
6. Centrifugation.
7. Saturation with a liquid SAS medium;
8. Centrifugation to ensure natural residual water saturation after exposure to SAS;
9. Saturation with a NaCl radiographic contrast fluid medium;
10. Building a digital model of Sample 2;
11. Intercomparison of Sample 1 and Sample 2 in DataViewer [6] and marking areas with different radiographic density to evaluate saturation discrepancy;
12. Development of factors influencing saturation dynamics prior to and after applying SAS.

When saturation dynamics factors (substitution of hydrophilic behavior with hydrophobic behavior), following the use of a particular SAS in a particular sample, are determined, it will be possible to predict the surfactant's effect on other samples within a test area. A complex of obtained tomographic data should help to carry out non-invasive analysis of samples and make relevant prognosis of the use of SAS in a field facility. The next and, probably, the final stage of evaluation of SAS effectiveness in deposit hydrophobization is defining a relationship between criteria, which are determined through X-ray computed microtomography, and geophysical core research data. This stage is vitally important, because sampling can describe but a tiny fragment of a deposit and require further rescaling of predicted effectiveness of SAS across transitional areas, which often lack the core material.

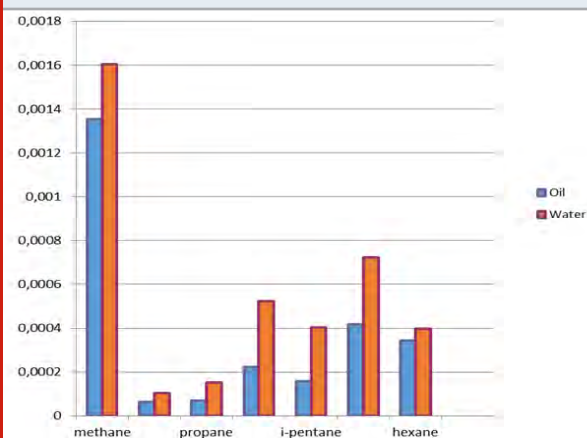
In order to make a generalized assessment of prospective sites and design a development system for a Ceomanian low-pressure gas deposit, a surface geochemical survey should be carried out. Practical geochemical work has shown that the intensity of a geochemical field depends not only on the concentration of oil and gas in the reservoir, but also on the sedimentary mantle's

vertical conductivity. Usually, abnormal gas releases occur in decompactification zones, which form due to a variety of factors – tectonic, stratigraphic, lithological. The tectonic factor is expressed in disjunctive breaks, which cause intensive reservoir fluid migration. The stratigraphic factor is appears in surface fields in the form of concentric gas show anomalies occurring at the edges of anticlinal structures. Lithological anomalies are hard to trace, because their effects are only visible after matching data with a seismic map and time sections.

Despite these factors, the formation of vertical fluid conductivity and superconductivity is explained by decompactification of the sedimentary mantle, which can stretch along the whole length of the section and continue into the substructure. Years of practice have demonstrated that the superconductivity of the upper productive strata in West Siberia is a kind of surface defect, which prevents the accumulation of gas in these areas. Wells drilled in areas with maximal concentration of methane and its homologues have been either “dry” or water-saturated.

These common factors have been proved statistically–through comparison of surface geochemical components with the results of tests of fully drilled wells (Figure 2). The statistical analysis encompasses a number of sites within the Nadym-Pur oil and gas field, where the geochemical work has been carried out. The diagram relies on a saturation analysis of 18 wells relative to the absolute values of a number of geochemical parameters that are methane, ethane, propane, butane, i-pentane, n-pentane, and hexane. A snow geochemical prospecting was carried out. Results have shown that wells drilled in areas with the highest concentration of methane homologues are water-saturated. According to the diagram, the intensity of the geochemical signal near cores that provide commercial hydrocarbons influx, is several times lower than above the non-productive part.

Figure 2: Concentration of methane and its homologues relative to a cores' productivity.

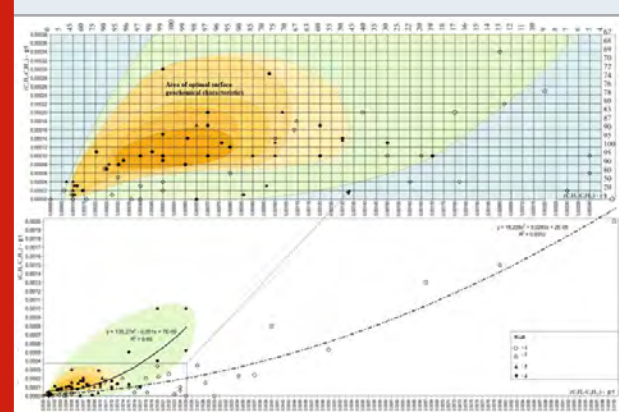


This common factor can be confirmed by Zavatsky M.D., whose work features a diagram characterizing saturation

of 88 cores relative to two absolute geochemical parameters – a sum of methane homologues  $C_2C_6 - C_6C_{12}$  on the X line, and a sum of gas methane homologues  $C_2C_6 - C_4C_{10}$  on the Y line. Of the 88 wells, 47 have inflow of oil and gas, and 33 provide pure oil. There are 32 wet holes and 9 dry ones.

The diagrams (Fig. 3) show that 100% of cores with surface methane homologue concentration of 0.0025 g or higher are either water-bearing or they have not revealed reservoirs in potential oil-bearing horizons. None of the productive wells has shown zero content. A total of methane homologues – 0.00007 g/t, can be a conditional threshold that lines the diagram's “background area.” The 0.0007 g/t to 0.0025 g/t range comprises all types of wells. However, wet holes that are located in areas with optimal total gas content show lower concentrations of methane homologues compared to oil wells. Therefore, it is possible to outline an area in a diagram, which has optimal general gas content and optimal total content of methane homologues. The area comprises 31 wells with oil influx, which is 66% of the total number of wells. Also, three water wells fall within the area – 7.3% of all non-productive wells.

Figure 3: Assessment hydrocarbon influx probability based on quantitative surface geochemical field parameters: 1 – dry wells, 2 – water wells, 3 – traces of hydrocarbons or oil, gas and water, 4 – oil and gas wells (according to Zavatsky M.D.) [7]



On the whole, it is 90% probable that sites in this area, will be productive. The majority of commercial wells, which are outside of the optimal value range, tend to retain a share of gas homologues in the mix, given the growing general concentration of hydrocarbon gases. Two productive wells with trace homologous gas concentrations and high surface gas saturation levels should be regarded as a measurement error due to the sparse sampling network For both value ranges – productive and non-productive – trends of dependence of gas homologue concentration on general gas saturation levels have been identified. Both have produced a second-degree polynomial with a high approximation ratio for productive ( $R^2 = 0.65$ ) and non-productive ( $R^2 = 0.92$ ) sites.



Therefore, analysis of absolute indicators of hydrocarbon migration intensity and composition can help to effectively locate areas with highly active stratum waters while relying on seal rock defects [7]. Local subvertical decompactification of sedimentary rocks affects both container rock and seal rock; i. e. they can be a positive factor up to a certain limit, and improve container rock porosity and permeability, but increased vertical microfissurization robs the seal of fluid-resistance, and the decompactification zone becomes a drain channel for stratum waters. Therefore, flooding of such wells is inevitable, and use of surface-active substances will not be effective [8].

## RESULTS AND DISCUSSION

As follows from the potential of X-ray computed microtomography as a micro-level reservoir study method, as well as surface geochemical surveys, which help detect localized decompactification areas over a large sedimentary mantle, it is certain that these two methods do provide a volume of information that can help successfully develop Cenomanian low-pressure gas deposits.

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## REFERENCES

- Bembel, S. A. V. P. A. M. P. R. S. (2019) Evaluation Of Filtration-Capacitive Properties Of Complex Reservoir Rocks Using The Results Of Core Microtomography Neftyanoe Khozyaystvo. Pp. 86-88..
- Efimov A.A., S. Y. G. S. S. E. G. V. (2016) Research Of Oil Reservoir Rocks' Wettability Using X-Ray Core Microtomography. Scientific Work Of The Srđi Neftegaz Socar, Volume 4, Pp. 55-63..
- Khasanov M.M., I. A. Z. E. K. M. L. D. (2019) Specifics Of Development Of Oil Deposits With High Conductivity Strata. Issue 12, Pp. 38-43.
- Vaganov Yu.V., Y. A. A. S. (2016) Change Of Reservoir Rock Surfaces' Molecular Structure During The Use Of Cenomanian Low-Pressure Gas Deposits. Issue 3, Pp. 38-44..
- Zavatskii, M., Veduta, O. Surmyatova, Y. & Kobylnskii, D., N.D. Interpretation Of Land Geochemical Survey Data While Identifying The Lateral Boundaries Of Oil-Bearing Geological Bodies. International Journal Of Applied Exercise Physiology, Issue 8, Pp. 469-477.
- Zavatsky M.D., P. A. P. I. L. D. (2016) Prospects Of Relevance of Hydraulic Fracture With The Use Of Complex Computed Tomography And Geochemical Survey Results. Issue 5, Pp. 9-15.
- Zhbakov V.A., P. A. L. A. P. S. R. N. S. E. T. G. (2005). Methods Of Evaluation Of Porosity And Gas Saturation Of Cenomanian Reservoirs In Deposits Of The Tyumen Oblast. Issue 16.
- A.A., P., (2019) Methods Of Indirect Evaluation Of The Presence Of Oil Generation In Clayish And Bituminous Rocks Using Mw Wavelengths. Issue 2, Pp. 28-31.

# The Role of Statistical Analysis on Nanofluid Flow and Heat Transfer over Cylinder with Porous Medium

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## ABSTRACT

Nanofluids are fluid materials that consist of solid nanoparticles or nanofibers suspended in liquid. A porous medium is a material consist of solid matrix, and void space or pore space that can be filled with one or more fluids. This study was conducted to investigate the mathematical model on flow and heat transfer of nanofluid in cylindrical surface with porous medium. Using Buongiorno nanofluid model, governing boundary layer equation obtained which consider the effects of Brownian motion and thermophoresis. Using similarity transformation, the partial differential equations from governing equation are transformed into a set of ordinary differential equations. Then it will be solved numerically by using shooting method. The influences of the governing parameters, porosity  $K$  are presented graphically. In the outcomes, velocity profiles, temperature profiles and nanoparticle concentration profiles using different values of porosity  $K$  are shown. When value of  $K$  increases, it makes the velocity temperature as well as nanoparticle concentration profiles increase. Using startistical resedual analysis, the correlation between porosity and heat transfer carcteristics.

**KEY WORDS:** NANOFUIDS, POROUS MEDIUM, BOUNDARY LAYER FLOW, HEAT TRANSFER, BUONGIORNO MODEL

## INTRODUCTION

Nanofluids are fluid composite materials comprising of material called nanoparticles or nanofibers that have the size of 1-100 nm suspended in fluid. Nanofluid usually been used in engineering application and become important in industry that involve heat transfer [1], [2],

[3], [4]. Application using nanofluid and porous medium have been getting attention in engineering industry [5], [6]. Porous medium said to increase contact surface area between fluids thus increase the heat transfer rate. Because of that, by integrating the usage of nanofluid and porous medium, the heat transfer rate can be maximized for further purposes [7], [8], [9]. With the ongoing upgrades of research in nanotechnology, there is clear way of displaying heat transfer convection in nanofluids.

The concept was pursued by Buongiorno [10] who considered slip instruments which created a relative speed between the base fluid and nanoparticles. With all the slip instruments considered, Brownian motion as well as thermophoresis are imperative to remodel the

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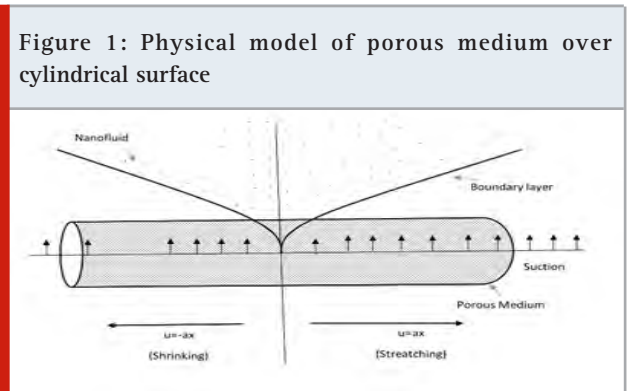


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convective transport in nanofluids. Investigation of fluid flow and heat transfer around cylinders surface has been a popular subject because of its significance in variety of applications such as heat exchangers, power generators, nuclear plants and thermal apparatus.

Mass suction is important to sustain the flow within the boundary layer [11]. The applications of flow near to a stretching sheet are widely used in manufacturing such as rubber sheet and glass fibre for thermal insulation. Little particles suspended in a nonisothermal gas get a mean velocity with respect to the gas toward the path inverse to the temperature gradient. This is called thermophoresis. Brownian motion is the movement of particles in a fluid in random as they will always collide with other molecules [12], [13], [14].

To predict and forecast the effects of an independent variable on the average heat and mass transfer, many researchers have considered the applications of regression analysis. [15] examined the laminar fluid flow from the stretching of a flat surface in a nanofluid and presented the linear regression for Nusselt and Sherwood number in their research. The influence of Brownian motion, thermophoretic and buoyancy ratio parameter on local Nusselt number has been forecasted by [16] using linear and quadratic regression models. The linear regression model for local Nusselt and Sherwood number was further presented by [17] who studied the nanofluid's natural convective flow. Further, [18] performed a quadratic multiple regression analysis on skin friction coefficient and Nusselt number of mixed convection stagnation point flow towards a stretching surface. Moreover, [19] explained the heat transfer including regression analysis over a stretching/shrinking sheet in nanofluid. Hence in this article new mathematical model using porous effect in cylindrical surfaces is proposed. In addition, regression coefficient is also considered to determine the relationship of proposed parameter with the heat transfer characteristics.



**MATERIAL AND METHODS**

**Governing Boundary Layer Equation:** The theory of continuum mechanics describes the mathematical modelling of the flows. Conservation equations and constitutive equations are included in the governing equations obtained from Buongiorno Model. The

conservation equations are obtained based on the principle of conservation of mass. The equation also takes the basis of the principle of balance of energy and the principle of linear momentum. Referring to the governing equations from [19], the new boundary layer of partial differential equations with cylindrical and porosity are written in equations (1), (2), (3) and (4). Whereas the schematic diagram of the proposed model is state in Figure 1.

$$\frac{\partial}{\partial x}(ru) + \frac{\partial}{\partial r}(rv) = 0 \tag{1}$$

$$u \frac{\partial u}{\partial x} + v \frac{\partial u}{\partial r} = \nu \left( \frac{\partial^2 u}{\partial r^2} + \frac{1}{r} \frac{\partial u}{\partial r} \right) - \frac{\nu}{k} u \tag{2}$$

$$u \frac{\partial T}{\partial x} + v \frac{\partial T}{\partial r} = \alpha \left( \frac{\partial^2 T}{\partial r^2} + \frac{1}{r} \frac{\partial T}{\partial r} \right) + \tau \left[ D_b \frac{\partial C}{\partial r} \frac{\partial T}{\partial r} + \frac{D_t}{T_\infty} \left( \frac{\partial T}{\partial r} \right)^2 \right] \tag{3}$$

$$u \frac{\partial C}{\partial x} + v \frac{\partial C}{\partial r} = D_b \left( \frac{\partial^2 C}{\partial r^2} + \frac{1}{r} \frac{\partial C}{\partial r} \right) + \frac{D_t}{T_\infty} \left( \frac{\partial T}{\partial r} + \frac{1}{r} \frac{\partial T}{\partial r} \right) \tag{4}$$

Using similarity transformation, the partial differential equations from governing equation are transformed into a set of ordinary differential equations. Then it will be solved numerically by using shooting method. Brownian motion as well as thermophoresis are considered in the model of nanofluid. The governing parameters considered are porosity K, curvature parameter  $\gamma$ , mass suction parameter S, Brownian motion parameter Nb and thermophoresis parameter Nt on the heat, flow and mass transfers properties are presented in this research. Similarity transformations is method that reduce the number of independent variables of a system of partial differential equations to obtain the similarity solution.

The equation must be one less than from the original equation of partial differential equation. Similarity solutions is the solutions that come from using the similarity transformations. In term of mathematics, similarity solutions of partial differential equations are obtained when the number of independent variables decrease by one less of original equation by transforming the variables. Shooting methods is a way to transform a boundary value problem into initial value problem. There must be alternatives to solve boundary value problems (BVPs), specifically if the equations are in nonlinear form. To solve the similarity solutions of governing boundary layer equation with the subject to boundary conditions by using method of similarity transformations:

$$\eta = \frac{r^2 - R^2}{2R} \left( \frac{c}{\nu L} \right)^{\frac{1}{2}}, \psi = \left( \frac{\nu c}{L} \right)^{\frac{1}{2}} x R f(\eta), \theta(\eta) = \frac{T - T_\infty}{T_f - T_\infty}, \phi(\eta) = \frac{C - C_\infty}{C_w - C_\infty} \tag{5}$$

where,  $\eta$  is the similarity variable, and  $\psi$  is the stream function.  $\psi$  are defined as  $u = r - 1 \partial \psi / \partial y$  and  $v = r - 1 \partial \psi / \partial x$  which similarly satisfies continuity equation by using  $\eta$  in this form, the boundary conditions at  $r = R$  decrease to the boundary conditions at  $\eta = 0$ . Substituting the

similarity transformations into momentum equation and energy equation, we obtain the following nonlinear ordinary differential equations:

$$(1 - 2\eta\gamma) f''' + 2\gamma f'' + f f'' - f'^2 - K' = 0 \tag{6}$$

$$\frac{1}{Pr} [(1 + 2\eta\gamma)\theta'' + 2\gamma\theta'] + f\theta' + (1 + 2\eta\gamma)Nb\theta'\phi' + (1 + 2\eta\gamma)Nt\theta'^2 = 0 \tag{7}$$

$$(1 + 2\eta\gamma)\phi'' + Le f\phi' + 2\gamma\phi' + (1 + 2\eta\gamma)\frac{Nt}{Nb}\theta'' + 2\gamma\frac{Nt}{Nb}\theta' = 0 \tag{8}$$

boundary conditions as stated which become,

$$f(0) = S, f'(0) = \varepsilon + \sigma f''(0), \theta'(0) = Bi(\theta - 1), \phi(0) = 1 \tag{9}$$

$$f'(\eta) \rightarrow 0, \theta(\eta) \rightarrow 0, \phi(\eta) \rightarrow 0 \text{ as } \eta \rightarrow \infty \tag{10}$$

With

$$S = -\frac{v_w r}{R(vc/L)^{1/2}} = \frac{v_0}{(vc/L)^{1/2}} \tag{9}$$

where  $v_w = v_0 R/r$ ,  $v_0$  is the constant mass flux velocity. Besides that,  $S > 0$  ( $v_w < 0$ ) where it is referred to mass suction meanwhile  $S < 0$  ( $v_w > 0$ ) referred to mass injection. From this, we identify  $\varepsilon$  where it represented the parameter of stretching/shrinking. When  $\varepsilon > 0$  is related to stretching sheet while  $\varepsilon < 0$  is related to shrinking sheet [8].

## RESULTS AND DISCUSSION

By using the numerical method, the nonlinear transformed boundary layer that are subjected to the boundary conditions are solved. There are few parameters that are independent and dimensionless used namely porosity  $K$ , curvature parameter  $\gamma$ , mass suction parameter  $S$ , Brownian motion parameter  $Nb$  and thermophoresis parameter  $Nt$ . In this research, will be explained the finding results in graphical display of preceding parameters for nanoparticle, temperature and velocity concentration profiles. The results then are discussed and analyzed. Figure 1 demonstrates the velocity profiles, Figure 2 elucidates the temperature profiles, whereas Figure 3 illustrates the nanoparticle concentration profile for shrinking cylinder case with the effect of the porosity  $K = 0, 0.05, \text{ and } 0.1$ , respectively.

From these figures, it is noticeable that there exist multiple solutions in the profiles, however, the momentum boundary layer thickness for second solutions is thicker than first solutions. Also, we can see that the solutions

converged asymptotically. It can be noticed that the velocity boundary layer thickness increases with the increase of  $K$  which made the momentum boundary layer becomes thinner. From research before, we knew that the presence of porous medium will provide restriction to the fluid that caused the fluid velocity decrease. In other graph, raising the  $K$  value would increase temperature profile as well as nanoparticle concentration profile. This will lead to the thermal and nanoparticle concentration boundary layer becoming thinner. The boundary layer thicknesses decrease in the case of cylinder surface when we compared with flat plate. Besides that, nanoparticle, temperature and velocity concentration gradient increase when the value of  $K$  increased. This will cause the values of skin friction coefficient increase which lead to the heat transfer rate and mass transfer rate to also increase when we increase the value  $K$ .

Figure 2: Velocity profile with the effect of the porosity,  $K$

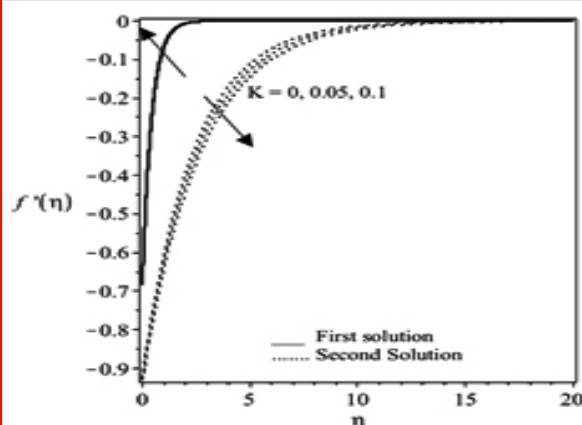
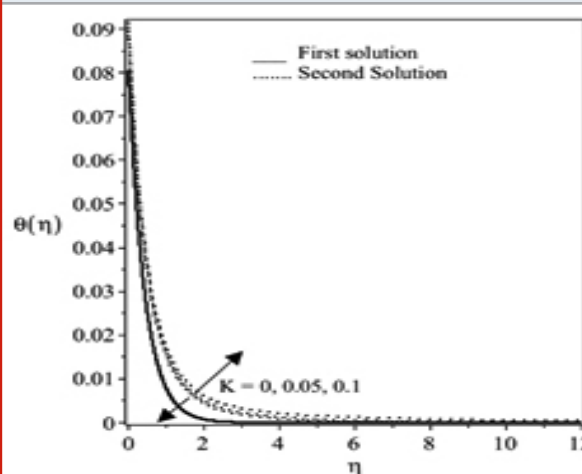


Figure 3: Temperature profile with the effect of the porosity,  $K$



**Statistical Analysis:** Regression analysis is done to estimate the value of the first solution, which incorporates the variation of skin friction coefficient, local Nusselt number and local Sherwood number for parameter  $K =$

0.005. The estimated form of the regression analysis as in (12):

$$\hat{h} = \hat{\beta}_0 + \hat{\beta}_1 x_i + e_i, \quad i = 1, 2, \dots, n, \quad (12)$$

where  $\beta_i$  are the regression coefficients and  $e_i = |h_i - \hat{h}_i|$  is the residual. To perform the regression analysis for the skin friction, local Nusselt and Sherwood number, the value of porosity parameter  $K$  are fixed at 0.05. Thus, using (9), the estimated liner regression analysis for skin friction coefficient, heat and mass transfer as below:

$$Cf_{est} = Cf + a_1 \varepsilon \quad (13)$$

$$Nu_{est} = Nu + a_2 \varepsilon \quad (14)$$

$$Sh_{est} = Sh + a_3 \varepsilon \quad (15)$$

Figure 4: Nanoparticle concentration profile with the effect of the porosity,  $K$

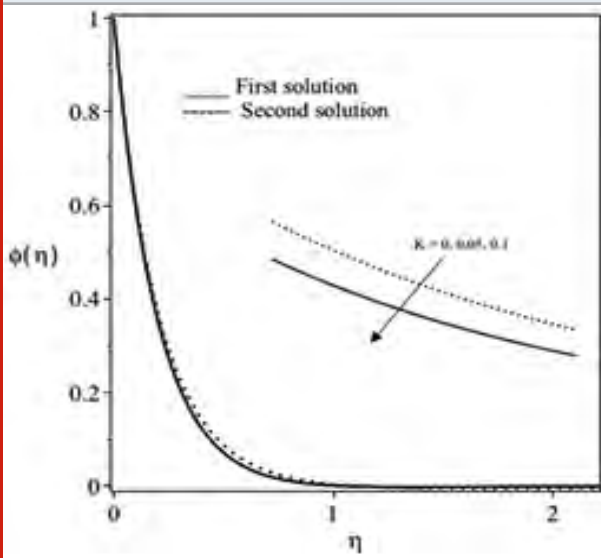
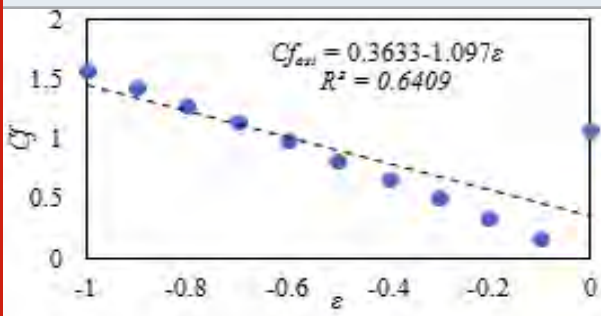


Figure 5: Regression analysis for variation of skin friction coefficient versus shrinking sheet



where  $a_1$ ,  $a_2$  and  $a_3$  represent the linear regression coefficient. Table 1, Table 2 and Table 3 shows the estimated regression analysis at different values of the shrinking sheet along with their residual. From the above formulation, the resulting regression equation

(13) means that the role of skin friction coefficient becomes least with an increase in  $\varepsilon$ . Further, to explore the impact Nusselt number on heat transfer rate, linear regression (14) is carried out for shrinking sheet, and it can be observed that the rate of heat transfer is increases proportionately as the value of  $\varepsilon$  is increased. Similarly, the role of the Sherwood number in mass transfer also rises with increment  $\varepsilon$ . These results agree with the graphical results presented in Figure 5-Figure 7.

Figure 6: Regression analysis for variation of local Nusselt number versus shrinking sheet

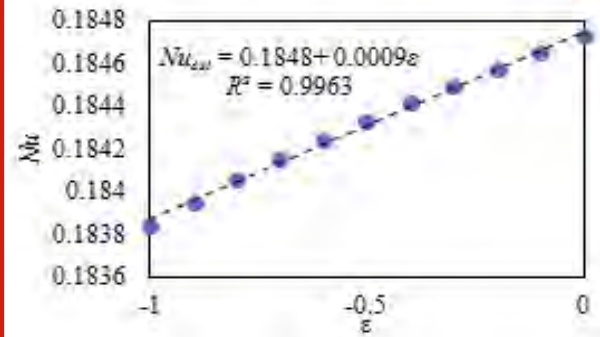


Figure 7: Regression analysis for variation of local Sherwood number versus shrinking sheet

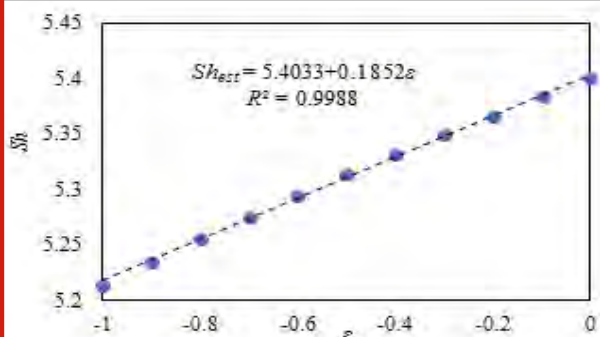


Table 1. Linear regression analysis and residual for the estimated  $CfRex^{1/2}$

$\varepsilon$	Cfest	Cf	ei
-0.2	0.5827	0.33932	0.24338
-0.4	0.8021	0.66873	0.13337
-0.6	1.0215	0.98694	0.03456
-0.8	1.2409	1.29226	0.05136
-1	1.4603	1.58240	0.12210

The values of correlation coefficients are calculated for skin friction coefficient, local Nusselt and Sherwood number. Besides, the apparent error of these correlation coefficients are also estimated. The  $R^2 > 0.7$  defines a strong linear association between the parameter

variables. Moreover, the practice of probable error is important in order to evaluate the accuracy of the correlation coefficient. The values of  $r / P.E (r)$  are shown in Table 1. If the  $r / P.E (r) > 6$ , As seen in Table 1 above, it is noticeable that the estimated skin friction coefficient, Nusselt, and Sherwood number for flow, heat and mass transfer satisfy  $r / P.E (r)$ , which confirms that the correlation coefficient is statistically significant.

Table 2. Regression analysis and residual for the estimated  $Nu_x Re_x^{-1/2}$

$\epsilon$	Nuest	Nux	ei
-0.2	0.18462	0.18473	0.00007
-0.4	0.18444	0.18442	0.00002
-0.6	0.8426	0.18424	0.00002
-0.8	0.18498	0.18405	0.00003
-1	0.18390	0.18384	0.00006

Table 3. Regression analysis and residual for the estimated  $Sh_x Re_x^{-1/2}$

$\epsilon$	Shest	Shx	ei
-0.2	5.36626	5.36634	0.00008
-0.4	5.32922	5.33121	0.00199
-0.6	5.29218	5.29440	0.00222
-0.8	5.25514	5.25558	0.00044
-1	5.21810	5.21438	0.00372

Table 4. Values of  $r / P.E(r)$ .

	$r^2$	P.E(r) [19]	$r / P.E(r)$
Cfest	0.6409	0.07303	10.96211
Nuest	0.9963	0.00075	1326.501
Shest	0.9988	0.00024	4095.174

## CONCLUSION

In conclusion, this research show that the porous medium affects the boundary layer flow, heat and mass transfer. This research can be applied into heat transfer industry and industry such as energy production, automotive and chemical industry. Besides that, the research knowledge of porous medium can be benefited in material and product manufacturing. The nonlinear system of ordinary differential with boundary conditions is solved with the help of shooting method. The profiles show that the solutions converge asymptotically and exist dual solutions. However, the momentum boundary layer thickness for the second solutions are found thicker than first solutions. Also, the velocity boundary layer

thickness increases with the increase of K, and raising the value of K would increase temperature profile as well as nanoparticle concentration profile. Hence, it leads to the thermal and nanoparticle concentration boundary layer becoming thinner. A regression analysis is also performed which resulted that the correlation coefficient is statistically significant.

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## REFERENCES

- A. Aziz, W. A. Khan. (2012) Natural convective boundary layer flow of a nanofluid past a convectively heated vertical plate, *International Journal of Thermal Sciences*, Vol.52, 83-90.
- A. Jedi, A. Shamsudeen, N. Razali, H. Othman, N. A. Zainuri, N. Zulkarnain, N. A. A. Bakar, K.D. Pati, T. Y. Thanoon, (2020) Statistical modeling for nanofluid flow: A stretching sheet with thermophysical property data, *Colloids Interfaces*, Vol.4, No.1.
- A. Jedi, N. Razali, W.M.F.W. Mahmood, and N.A.A. Bakar (2019) Statistical Criteria of Nanofluid Flows over a Stretching Sheet with the Effects of Magnetic Field and Viscous Dissipation Symmetry, 11(11), 1367.
- A. V. Kuznetsov, D. A. Nield. (2010) Natural convective boundary-layer flow of a nanofluid past a vertical plate, *International Journal of Thermal Sciences*, Vol.49, No. 2, 243-247.
- G. S. Seth, M. K. Mishra, R. Tripathi, (2018) Modeling and analysis of mixed convection stagnation point flow of nanofluid towards a stretching surface: OHAM and FEM approach *Computational and Applied Mathematics*, Vol.37, No.4, 4081-4103.
- J. Buongiorno, (2006) Convective transport in nanofluids, *Journal of Heat Transfer*, Vol.128, No.3, 240-250.
- M. Miklavcic, C. Y. Wang, (2006) Viscous flow due to a shrinking sheet *Quarterly of Applied Mathematics Math*, Vo.64, No.2, 283-290.
- N. Mami, and M. N. Bouaziz, (2018) Effect of MHD on Nanofluid Flow, Heat and Mass Transfer over a Stretching Surface Embedded in a Porous Medium, *Periodica Polytechnica Mechanical Engineering*, Vol.62, No.2, 91-100.
- N. A. A. Bakar, N. Bachok, N. M. Arifin, (2017) Rotating flow over a shrinking sheet in sanofluid using buongiorno model and thermophysical properties of nanoliquids *Journal of Nanofluids*, Vol.6, No.6,1215-1226.
- N. A. A. Bakar, N. Bachok, N. M. Arifin. (2017) Moving plate in a nanofluid using buongiorno model and thermophysical properties of nanoliquids”, *Indian*

Journal of Science and Technology, Vol.14, No.1, 119-129.

N. Kishan, and S. Jagadha, (2016) Influence of thermophoresis on heat and mass transfer under non-Darcy MHD mixed convection along a vertical flat plate embedded in a porous medium in the presence of radiation Thermophysics and Aeromechanics, Vol.23, No.1, 97-108.

S. Jahan, H. Sakidin, R. Nazar, I. Pop, (2018) Analysis of heat transfer in nanofluid past a convectively heated permeable stretching/shrinking sheet with regression and stability analyses, Results in Physics, Vol.10, 395-405.

S. K. Soid, A. Ishak, (2017) Axisymmetric flow of a nanofluid over a radially stretching/shrinking sheet with a convective boundary condition", AIP Conference Proceedings, Vol.1830, No.1.

S. Mansur, and A. Ishak, (2016) Unsteady boundary layer flow of a nanofluid over a stretching/shrinking sheet with a convective boundary condition Journal of the Egyptian Mathematical Society, Vol.24, No.4, 650-655.

S. P. A Devi, M. Kayalvizhi, (2017) Viscous dissipation

and radiation effects on the thermal boundary layer flow with heat and mass transfer over a non-isothermal stretching sheet with internal heat generation embedded in a porous medium, Int. J. Energy Tech, Vol. 2, No. 20, 1-10.

U. Khan, S.T.Mohyud-Din, and B. Bin-Mohsin, (2006) Convective heat transfer and thermos-diffusion effects on flow of nanofluid towards a permeable stretching sheet saturated by a porous medium", Aerospace Science and Technology, Vol. 50, 196-203.

W. A. Khan, I. Pop (2010) Boundary-layer flow of a nanofluid past a stretching sheet International Journal of Heat And Mass Transfer, Vol.53, No.11-12, 2477-2483,.

Z. Abbas, S. Rasool, and M. M. Rashidi (2015) Heat transfer analysis due to an unsteady stretching/shrinking cylinder with partial slip condition and suction, Ain Shams Engineering Journal, Vol.6, No.3, 939-945.

Z. Harun, N.J. Suang, W.M.F.W. Mahmood, M.F. Abdullah and E.R. Lotfy, (2019) Computational Fluid Dynamics Simulation on the Heat Sink Performance of a Graphics Processing Unit Thermal Management, Jurnal Kejuruteraan 31(1): 139-147

## Influence of the Use of A Biological Preparation on the Fermentation and Quality of Alfalfa Haylage

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### ABSTRACT

The process of preparing high quality hayage silage is complex and depends on many factors, such as the presence of epiphyte microflora, conditions of gathering green mass and the sugar content in the feed. Consequently, the quality of prepared hayage silage can be very variable. To solve this problem, the primary way to effectively control the fermentation process is to use various additives. In modern feed production, biological and chemical additives have been actively used to control and prevent certain types of fermentation, thereby reducing nutrient losses and improving the aerostability of feed. This has a positive effect on the eatability and digestibility of food, and the health of animals. Nowadays, specialists prefer bio-products to chemical ones. Chemicals (formic, propionic acid, etc.) quickly acidify the plant mass to the pH level of 3.8...4.2, at which the development of pathogenic microflora becomes impossible. Antimicrobial properties of these acids are derived from their ability to pass through the cell membrane in an undissociated form and release hydrogen in the cytoplasm, thereby preventing their growth and development. The use of the latter involves the risk of harm to the health of service personnel, the environment and technical means (metal corrosion, etc.), as well as significant financial costs for their purchase. Bio-products are less expensive, environmentally safe and convenient to preserve. In this regard, this article deals with the evaluation of the effectiveness of the domestic bio-product "Ferbak-Sil" (Russia) in preserving the air-dried green mass of Lucerne under laboratory conditions. The phytomass was packaged in vacuum-tight polyethylene bags. In the course of the study, the positive effect of the studied preserving agent on the fermentation process and nutrient safety was established. "Ferbak-Sil" contributed to pH reduction by 3.48%, an increase of acetic acid mass concentration by 0.10% abs. and preservation of raw protein by 0.15% compared to control.

**KEY WORDS:** ALFALFA, BIO-PRODUCT, VACUUM, HAYAGE SILAGE, RAW PROTEIN, ACETIC ACID.

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## INTRODUCTION

Due to the intensification in the livestock industry, the demand for perennial legumen crops (Alfalfa, Eastern galega, cock's-head, etc.) has increased. If the rules of the cultivation technology of these legumes are strictly observed, it is possible to get the maximum yield of green mass up to 500 centners within several years from one hectare. However, in many countries the green mass of alfalfa is the one of the most popular. High-quality bulk feed (silage, hayage silage) from alfalfa is an important component in a complete balanced diet of ruminants, which contributes to the disclosure of the genetic potential of their dairy and meat productivity, which ultimately has a positive impact on the economic efficiency of animal production [1-6].

However, proper conservation of a given feed crop can be difficult because its high content of organic acids, salts, proteins and minerals leads to high buffer capacity. At the same time, it is considered a non-violent culture and is most often advised for the hayage silage preparation. It is believed that the "physiological dryness" of alfalfa does not allow for the development of yeast, clostridium, enterobacteria, etc. However, during the real technological process of hayage silage making it is difficult to regulate the content of dry matter in native raw materials and avoid unforeseen weather conditions (rain, etc.). Consequently, the preparation of succulent voluminous feed by spontaneous fermentation does not always guarantee success. In this regard, to improve the quality of lactic acid fermentation in the preparation of green mass of legumes for hayage silage, it is proposed to make biopreparations, which include lactic acid bacteria and enzyme preparations [7-10]. In connection with the above the objective of this study was to evaluate the effectiveness of preserving the air-dried plant mass of alfalfa using the domestic commercial bio-product "Ferbak-Sil", which includes consortiums of microorganisms and to identify their impact on the fermentation process, nutrient conservation.

## CONDITIONS, MATERIALS AND METHODS of STUDIES

The objects of our study were sowing lucerne (*Medicago sativa*) of the Aislu variety and bio-product "Ferbak-Sil" (Russia). The dosage of the preparation was used according to the manufacturer's instructions - 70 ml/t. The control was the crushed phytomass without using the preparation. "Ferbak-Sil" bio-product contains microorganisms such as *Lactobacillus plantarum*, *Lactobacillus lactis*, *Lactobacillus buchneri* and *Propionibacterium frendreichi*. The conservation was carried out in 2019 in the laboratory conditions of the Department of Agrobiological Research in three repetitions in hermetic vacuum bags of 2 l. Grinded plant mass of lucerne was laid and packed in sealed vacuum bags using vacuum packer Redmond rvs-m020 (China). According to the "Methodological recommendations" the experimental objects were stored in a darkened room at a temperature of +8 - +18 °C. After 45 days vacuum

bags were opened and full zootechnical analysis of experimental samples of ready-made feed was carried out according to GOST methods. The test equipment used was an automatic kit for the determination of raw protein using the Kjeldahl method (KV-20S digester, distiller, titrator), an automatic extractor for the determination of raw fiber (VELP Scientific, Italy).

Mass fraction of moisture was determined in accordance with GOST 31640-2012 by the method of two-step determination of dry matter content; mass fraction of raw protein - in accordance with GOST 32044. 1-2012 (ISO 5983-1: 2005) by the Kjeldahl method; fibers - according to GOST 31675-2012 (with the use of intermediate filtration); soluble carbohydrates - according to GOST 26176-91 (with the use of an anthropogenic reagent); the content of organic acids (lactic, oil and acetic) in feed - according to GOST R55986-2014 (Lepper-Fleeg method); active acidity (pH) - according to GOST 26180-84 (method of potentiometric measurement of hydrogen ion activity). Statistical data processing was performed on a PC using Microsoft Excel software of Microsoft Office 2007 package. Researches were carried out in the department of agrobiological researches of Tatniiskh - a separate structural division of FRC Kazan Scientific Center of the Russian Academy of Sciences. The article has been prepared in the frameworks of the state assignment "Mobilization of genetic resources of plants and animals, creation of innovations ensuring the production of biologically valuable food products with maximum safety for human health and environment". Registration number AAAAA-A18- 118031390148-1. Green mass, beveled in the budding phase and air-dried to a dry matter content of 51.17%, was used for hayage silage stowing. Mass fraction of exchange energy (EE) in 1 kg of dry matter of experimental raw materials was 9.06 MJ, sugar - 54.0 g, raw protein (RP) - 18.36%, raw fiber (RF) - 26.29%.

## ANALYSIS AND DISCUSSION of RESULTS

Lucerne is important in feeding all kinds of farm animals. Therefore, minimizing the loss of nutrients and energy when conserving the green mass of legumes is an important task in modern feed production [11].

The use of commercial ferment has led to some changes in the chemical composition of hayage silage. Thus, the use of the preparation "Ferbak-Sil" contributed to better preservation of raw and digestible protein in 1 kg of dry matter (DM) of ready hayage silage, the content of which was 18.85% and 139.49 g and was higher than in the control sample by 0.15% and 0.81% respectively (Table 1). What is important is the protein feeding of ruminants. In the same variant, the lowest concentration of sugars was noted, which was 2.16 times less than control hayage silage. Reduced sugar content is also observed in an experiment by Croatian scientists (Darko, Miljenko, Dario, Dubravko, 2019). They found a decrease in the concentration of sugars in finished bulk feeds from preserved with different inoculants (Pioneer 11H50, Pioneer 11AFT, Silko for alfalfa, Bonsilage alfa) in relation

to the control by 37.74...56.84%. This indicates the right course of lactic acid fermentation, as lactic acid bacteria in the process of their life consume carbohydrates and produce lactic acid and acetic acid, etc.

Important factors determining the safety of feed are the pH level, the accumulation of organic acids in the conservation process and their ratio. The results of the evaluation of these parameters for the studied variants are given in Table 2. The determination of the content of organic acids in finished hayage silage showed that when using bio-products "Ferbak-Sil" differed in terms of a better quality of organic acids compared to the

control, which characterizes the direction of fermentation processes in the conserved feed. At the same time, the studied preparation contributed to insignificant but larger formation of acetic acid (0.52 abs. %), which was higher than the control by 0.1 abs. %. Also, the biggest pH decrease to the level of 4.71 was obtained by using the preparation "Ferbak-Sil", which is 3.48% lower in relation to the control. A similar decrease in the pH level was revealed by Chinese scientists [12] when conserving the green mass of alfalfa with various inoculants, whose indicators were 4.23...4.44 and were 5.93...10.38% lower than the control.

Table 1. Chemical composition and nutrition of hayage silage from alfalfa, preserved by different bio-products in 1 kg of hayage silage dry matter

Experiment options	Chemical composition, %				NFEF (Nitrogen-free extractive fraction)	Nutrition Exchange Energy, MJ	Sugar, g
	Dry substance	Raw protein	Raw fiber	Raw fat			
Green mass	51.17±0.32	18.36±0.23	26.29±0.51	3.19±0.01	35.48±0.22	9.06±0.05	54.00±0.17
Control	50.62±0.52	18.70±0.25	26.38±0.99	2.99±0.25	32.05±0.70	8.67±0.09	30.00±3.16
"Ferbak-Sil"	49.90±1.62	18.85±0.23	25.81±0.23	2.61±0.11	32.45±0.54	8.63±0.10	13.92±2.66

Table 2. Content and ratio of organic acids in ready-made hayage silage preserved by different bio preparations

Experiment options	PH	Mass fraction of acids in abs.%				Acid Ratio, %		
		Amount of three acids, %	dairy	vinegar	butter	dairy	vinegar	butter
Control	4.88±0.11	5.42±0.58	5.00±0.57	0.42±0.07	0.00±0.00	92.15±1.37	7.85±1.37	0.00±0.00
"Ferbak-Sil"	4.71±0.05	5.22±0.27	4.71±0.23	0.52±0.06	0.00±0.00	90.12±0.80	9.88±0.80	0.00±0.00

## CONCLUSION

This laboratory study showed that the use of domestic bio-product, which includes a consortium of microorganisms, led to the production of ready-made hayage silage with higher levels of RP, DP (digestible protein), acetic acid and the lowest pH values. On the basis of the above and the generalization of experimental research data, the following preliminary conclusions can be drawn:

1. The use of bio-product "Ferbak-Sil" promotes the preservation of raw protein and digestible protein of 0.15 and 1.47% respectively.
2. The formation of acetic acid, which contributes to aerostability of canned bulk feeds, provided a positive effect on lactic acid bacteria of bio-product "Ferbak-Sil" and was above the concentration of control indicators by 0.1 abs. %.
3. The use of the studied bio-product in the preservation of the air-dried mass of alfalfa also contributed to a decrease in feed acidity, compared with the control by 3.48%.

## REFERENCES

- Arriola, K.G., Kim, S.C., Adesogan, A.T. 2011. Effect of applying inoculants with heterolactic or homolactic and heterolactic bacteria on the fermentation and quality of corn silage. *J. Dairy Sci.* 94 (3): 1511–1516.
- Bianchini, A. 2015. Lactic acid bacteria as antifungal agents. *J. Advances in Fermented Foods and Beverages*, 14:333–353.
- Bouton, J. 2013. An overview of the role of lucerne (*Medicago sativa* L.) in pastoral agriculture. *Crop Pasture Sci*, 63 Darko, U., Miljenko, K., Dario, J., Dubravko, M. 2019. The effect of bacterial inoculant on chemical composition and fermentation of alfalfa silage. *Journal of Central European Agriculture*, 20 (2): 657–664
- Tao, L., Zhou, H., Zhang, N. 2017. Effects of different source additives and wilt conditions on the pH value, aerobic stability, and carbohydrate and protein fractions of alfalfa silage. *Animal Science Journal*. 88 (1): 99–106
- Ertekin, I., Kızılsimsek, M. 2020. Effects of lactic acid bacteria inoculation in pre-harvesting period on fermentation and feed quality properties of alfalfa

- silage. *Asian-Australas. J. Anim. Sci.*, 33 (2): 245-253.
- Phelan P., Moloney A.P., McGeough E.J., Humphreys J., Bertilsson J., O’Riordan E.G., O’Kiely P. 2015. Forage Legumes for Grazing and Conserving in Ruminant Production Systems *J. Critical Reviews in Plant Sci.* 34(1-3): 281-326.
- Identification of lactic acid bacteria in the rumen and feces of dairy cows fed total mixed ration silage to assess the survival of silage bacteria in the gut. / H. Han et al. *J. Dairy Sci.* 2014; 97: 5754-5762
- Kung, L. Jr., Taylor, C. C., Lynch, M. P., Neylon, J. M. 2003. The effect of treating alfalfa with *Lactobacillus buchneri* 40788 on silage fermentation, aerobic stability, and nutritive value for lactating dairy cows. *J. Dairy Sci.*, 86: 336-343.
- Lynch, J. P., Jin, L., Lara, E. C., Baah, J., Beauchemin, K. A. 2014. The effect of exogenous fibrolytic enzymes and a ferulic acid esterase-producing inoculant on the fibre degradability, chemical composition and conservation characteristics of alfalfa silage. *Animal Feed Science and Technology*, 193: 21-31.
- Moot, D.J. 2013. An overview of dryland legume research in New Zealand. *Crop Pasture Sci.*, 63: 726-733.
- Zhang, Q., Yu, Z., Wang, X., Tian, J. 2018. Effects of inoculants and environmental temperature on fermentation quality and bacterial diversity of alfalfa silage. *Anim. Sci. J.*, 89(8): 1085-1092.
- Zinnatov F.F., Zinnatova F.F., Volkov A.H., Akhmetov T.M., Alimov A.M., Yakupov T.R., Hairullin D.D., Safina N.Yu. 2020. Studying the association of polymorphic variants of LEP, TG5, CSN3, LGB genes with signs of dairy productivity of cattle. *International Journal of Research in Pharmaceutical Sciences.* 11(2): 1428-1432.
- Zinnatov F.F., Zinnatova F.F., Akhmetov T.M., Volkov R.A., Hairullin D.D., Bikchantaev I.T., Valieva E.A., Smolentsev S.Yu. 2020. Identification of relationship of polymorphic variants of lactoferrin gene (LTF) in cows with milk production indicators depending on their lineage. *IOP Conf. Series: Earth and Environmental Science.* 548: 042038.

# Multifractal Analysis of Ozone Concentration at Monitoring Stations in Klang Valley, Malaysia

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## ABSTRACT

Ozone is a harmful gas, and its exposure can trigger serious health effects as it damages lung tissues. Thus, the study of the behavior of the ozone concentration is needed for an effective air quality management. In this study, the behavior of daily ozone maximum concentration from two types of monitoring station mainly the urban and industrial monitoring sites were investigated using multifractal approach. The presence of multifractal characteristic is found in the investigated ozone concentration time series based on the findings from the partition function plot and mass exponent function plot. The multifractal spectra for the same type of monitoring stations were found to be clustered together. This result shows that the multifractal spectra are different for the urban and industrial monitoring sites

**KEY WORDS:** MULTIFRACTAL ANALYSIS, QUALITY MANAGEMENT, CONCENTRATION TIME.

## INTRODUCTION

Ozone is an odourless gas created by a chemical reaction between nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds in the presence of sunlight and heat (Han et al. 2011; Yusoff et al. 2019). It may be considered a secondary pollutant which may lead to a diverse impact on human being and environment when are exposed to high ozone level. Ozone one of the biggest threats among other air pollutant due to its negative impact to everyone such as humans, animals, crops and others (Plejel 2000). Symptoms of ozone exposure to human may include eye irritation, coughing, chest pain, nose and throat irritation,

shortness of breath and other respiratory problems (Afroz et al. 2003; Nuvolone et al. 2018).

Ozone concentration can be regarded as a complex dynamics system. Studies on ozone concentration based on traditional statistical method are not suitable to describe this phenomenon. In this study, fractal analysis is used to overcome this drawback. Fractals are objects which are characterized for being self-similar when are viewed at different scales. By using fractal properties, the natural phenomenon of ozone can be explored at different range of scales. If only a single scaling is needed, then the fractal behaviour of the phenomenon is describe using monofractal model. Whereas multifractal model is used if multiple scaling is needed to describe the fractal behaviour. Based on (Lee 2002) and (Lee et al. 2003), the temporal characteristics of air pollution can be characterized and analysed using fractals method. Sachithanatham and Selvaraj (2012) also used fractal to predict the behavior of ozone level concentration in south Chennai. Meanwhile, Carmona-Cabezas et al. (2019)

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uses multifractal analysis to explore the ground-level ozone time series. The results show that the multifractal analysis is a suitable tool to describe the dynamics of ozone time series.

The aim of this study is to investigate the behavior of ozone concentration using multifractal approach at two different types of monitoring stations that is urban and industrial monitoring station in Klang Valley, Malaysia.

## MATERIAL AND METHODS

**Data:** Daily maximum ozone concentration data, from January 2013 to December 2016 is used in this study. The data is obtained from the Air Quality Division of the Department of Environment (DOE), Malaysia. For this study, four stations located at Klang Valley, Malaysia is chosen. Table 1 shows the list of station considered. The Klang (S1), Kajang (S3) and Shah Alam (S4) monitoring stations are surrounded by residential areas meanwhile Petaling Jaya (St3) monitoring station are surrounded by industrial areas. The data used is the original data without any pre-processing done. Based on Lee et al. (2006) and Klement and Kratky (1997), the result of fractal analysis will be affected if the data are pre-processed and this can lead to a complex interpretation of the result obtained.

Code	Name of the Stations	Type of Station
St1	Klang	Urban
St2	Petaling Jaya	Industrial
St3	Kajang	Urban
St4	Shah Alam	Urban

**Multifractal scaling analysis:** The multifractal scaling analysis used in this study is based on Ho et al. (2004). First the concentration for each hour, are normalized and partitioned into non-overlapping intervals of size  $\delta$ . In each interval, the probability mass function can be obtained:

$$P_i(\delta) = \sum_{i \in I} (P_i) = \sum_{i \in I} \left( \frac{c_i}{\sum c_i} \right) \quad (1)$$

The time resolution considered in this study are  $2^2$  to  $2^{12}$  hours. Then the partition function of order  $q$ ,  $M_q(\delta)$ , is calculated from  $P_i(\delta)$  values as

$$M_q(\delta) = \sum_{l=1}^{n_\delta} P_l^q(\delta) \quad (2)$$

where  $n_\delta$  is the total number of the interval of size  $\delta$  and  $q \in [-\infty, \infty]$ . The aim of the partition function is to study the distribution of the probability function to detect whether there exist certain power laws in the air pollution data

in order to conform the existence of scaling properties. For a multifractal measure, the partition function have the following scaling properties:

$$M_q(\delta) \propto \delta^{\tau(q)} \quad (3)$$

where  $\tau(q)$  is the mass exponent of order  $q$ .  $\tau(q)$  can be obtained from the slope of the line of log-log plot of  $M_q(\delta)$  versus  $\delta$ . If the obtained plot is a straight line, then the data is monofractal whereas if it is a convex function, then the data is multifractal.

**Spectrum of singularities:** Another method to study the scaling properties of the air pollution concentration time series is by using the spectrum of singularities. In this method, for each interval, the probability mass function is assumed to increase with the size of  $\delta$  and  $\delta$  can be written  $P_i(\delta) \propto \delta^\alpha$  as where  $\alpha$  is the singularity exponent.  $\alpha$  is also known as the local fractal dimension or a singularity index.  $\alpha$  can be determined by using Legendre transformation of the  $\tau(q)$  curve (Evertsz & Mandelbrot 1992) as.

$$\alpha(q) = \frac{d\tau(q)}{dq} \quad (4)$$

Next, for each  $\alpha$ , a scaling exponent  $f(\alpha)$  can be identified by considering that  $N_\delta(\alpha)$  is the number of intervals of a given times resolution using the following relation:

$$N_\delta(\alpha) \propto \delta^{f(\alpha)} \quad (5)$$

$f(\alpha)$  can be calculated using (Chhabra & Jensen 1989; Chhabra et al. 1989):

$$f(\alpha) = q\alpha(q) - \tau(q)$$

The multifractal spectrum is obtained from the plot of  $f(\alpha)$  versus  $\alpha$  where  $f(\alpha)$  is the fractal dimension of the set of intervals corresponds to the singularity scaling  $\alpha$ .

An alternative way to calculate  $f(\alpha)$  is by using the method used by Chhabra and Jensen, (1989) which is a method suitable for analysing experimental data. Two equation are needed to calculate  $f(\alpha)$ :

$$f(q) = \frac{\sum_{l=1}^{n_\delta} \mu_l(q, \delta) \log \mu_l(q, \delta)}{\log(\delta)}$$

Where

$$\alpha(q) = \frac{\sum_{l=1}^{n_g} \mu_l(q, \delta) \log P_l(\delta)}{\log(\delta)} \tag{8}$$

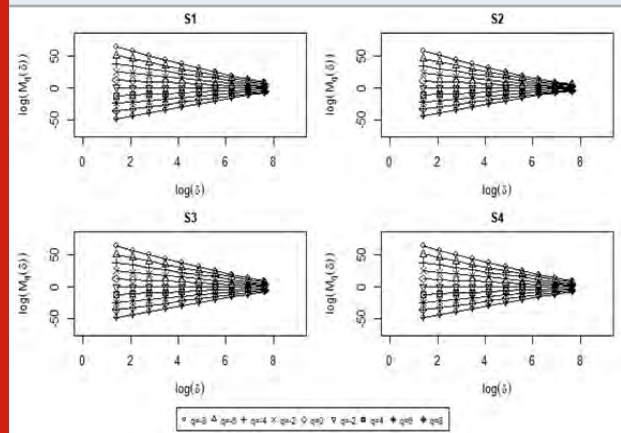
$$\mu_l(q, \delta) = \frac{(P_l(\delta))^q}{\sum_{j=1}^{n_g} (P_j(\delta))^q}$$

where Equation (7) and (8) provide an alternative definition of the singularity spectrum without using the Legendre transform of the curve. Both equations can be used to obtain  $f(\alpha)$  directly from the real-world data.

Table 2. Standard statistical parameters for the O3 time series.

Monitoring Station	Mean	Coefficient of		
		Variation	Skewness	Kurtosis
S1	0.044	0.443	1.069	1.648
S2	0.050	0.432	0.803	0.688
S3	0.062	0.380	0.920	1.192
S4	0.066	0.400	0.832	0.581

Figure 1: Log-log plot of the partition function versus the time scale for (a) S1, (b) S2, (c) S3, and (d) S4 stations at selected q-values.



## RESULTS AND DISCUSSION

Table 2 summarizes some standard statistical parameters for the ozone time series for all the four monitoring stations. Station S3 and S4 are the two-monitoring station with the highest ozone concentration compared to station S1 and S2. Monitoring station S1 has the highest value for coefficient variation which shows

Figure 2: Mass exponent function  $t(q)$  versus  $q$  for the O<sub>3</sub> time series for (a) St1, (b) St2, (c) St3, and (d) St4 stations.

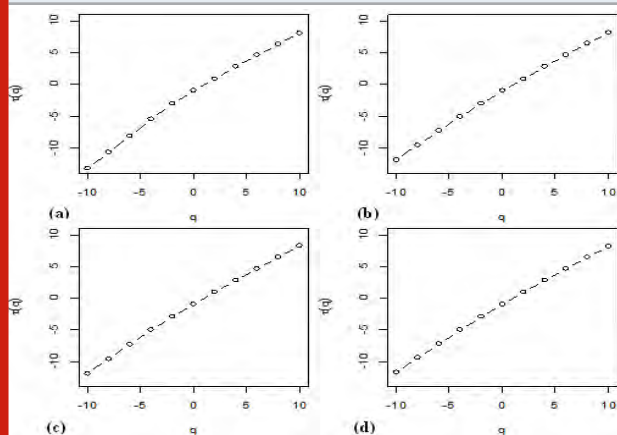
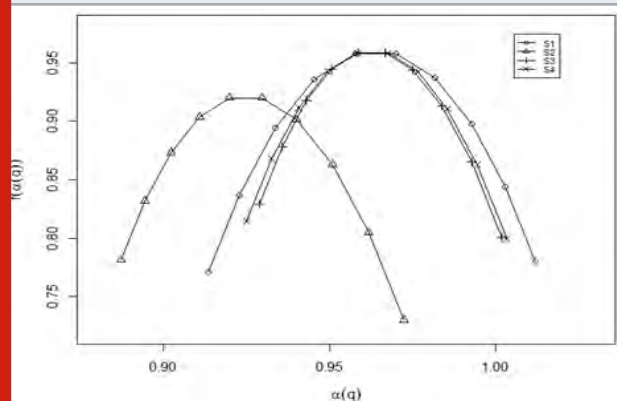


Figure 3: Multifractal spectra  $f(\alpha(q))$  vs.  $\alpha$  for the ozone time series



that the variability is the highest compared to other stations. The variability of the ozone concentration among the monitoring station increases in the order: S3<S4<S2<S1.

Figure 1 shows the plots of the log-log plot of the partition function versus the time scale for all the four stations with  $q$  ranging from  $-8$  to  $8$ . All the plots are close to being straight line for  $-6 \leq q \leq 8$ , which shows that the O<sub>3</sub> time series can be regarded as multifractal measures. The mass exponent function for the four monitoring stations is shown in Figure 2. All the  $f(\alpha)$  versus  $q$  plot shows deviation from linearity which indicates multifractality exist in the ozone time series data used in this study.

Figure 3 shows the multifractal spectra for all the four monitoring stations. The shape of the spectra is asymmetrical and right skewed except for station S1 which shows that the ozone concentrations for S2, S3 and S4 do not exhibit similar behavior. The right side of the curve corresponds to the low-intensity data

whereas the left side is related to high-intensity data. Therefore, the behavior the ozone concentration in S3 and S4 monitoring station is very similar for high values. For ozone concentration in S1, S3 and S4, the range of  $\alpha$  values increase in the order  $S3 < S4 < S1$ . This result can be connected to the values of coefficient of variation in Table 2. From Figure 3, it can also be seen that the multifractal spectra for ozone concentration in S2 are further away from multifractal spectra of the other three stations. This may be due to the type of the monitoring stations where station S2 is situated in an industrial area.

## CONCLUSION

The daily maximum ozone concentration from two types of background were analyzed using multifractal approach. Based on the partition function plot and mass exponent function plot, the multifractal characteristic exists in the investigated ozone concentration time series. By using the multifractal approach, the behavior of ozone concentrations is not the same for the four monitoring stations. Ozone multifractal spectra are asymmetric with longer right tails which shows that low values of the ozone concentration time series used in this study has a greater variability compared to high values. This can be seen for monitoring station S2, S3 and S4.

The ozone multifractal spectra for same type monitoring stations that is for station S1, S3 and S4 which are urban monitoring sites are group together. Meanwhile, the multifractal spectra for monitoring station S2 which is an industrial monitoring site are further away from the other three stations. This shows that the ozone concentration behavior is different at urban and industrial monitoring sites.

The findings may lead to the possibility of implementing the multifractal approach to examine the behavior of the ozone concentration based on the types of monitoring stations. A further investigation using more stations and other types of monitoring sites is still needed to provide a strong finding regarding the use of multifractal approach.

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## REFERENCES

Afroz, R., Hassan, M. N. & Ibrahim, N. A. 2003. Review of air pollution and health impacts in Malaysia.

Environmental Research 92(2): 71-77.

Carmona-Cabezas, R., Ariza-Villaverde, A. B., De Ravé, E. G. & Jiménez-Hornero, F. J. 2019. Visibility graphs of ground-level ozone time series: A multifractal analysis. *Science of The Total Environment* 661: 138-147.

Chhabra, A. & Jensen, R. V. 1989. Direct determination of the  $f(\alpha)$  singularity spectrum. *Physical Review Letters* 62(12): 1327.

Chhabra, A. B., Meneveau, C., Jensen, R. V. & Sreenivasan, K. 1989. Direct determination of the  $f(\alpha)$  singularity spectrum and its application to fully developed turbulence. *Physical Review A* 40(9): 5284.

Evertsz, C. J. & Mandelbrot, B. B. 1992. *Multifractal measures*. Vol. 1092 New York: Springer-Verlag.

Han, S., Bian, H., Feng, Y., Liu, A., Li, X., Zeng, F. & Zhang, X. 2011. Analysis of the Relationship between O<sub>3</sub>, NO and NO<sub>2</sub> in Tianjin, China. *Aerosol and Air Quality Research* 11(2): 128-139.

Ho, D.-S., Juang, L.-C., Liao, Y.-Y., Wang, C.-C., Lee, C.-K., Hsu, T.-C., Yang, S.-Y. & Yu, C.-C. 2004. The temporal variations of PM<sub>10</sub> concentration in Taipei: a fractal approach. *Aerosol and Air Quality Research* 4(1): 38-55.

Klement, S. & Kratky, K. W. 1997. Multifractal analysis of airborne particle count data: The influence of data preprocessing. *Aerosol science and technology* 26(1): 12-20.

Lee, C.-K. 2002. Multifractal characteristics in air pollutant concentration time series. *Water, Air and Soil Pollution* 135(1-4): 389-409.

Lee, C.-K., Juang, L.-C., Wang, C.-C., Liao, Y.-Y., Yu, C.-C., Liu, Y.-C. & Ho, D.-S. 2006. Scaling characteristics in ozone concentration time series (OCTS). *Chemosphere* 62(6): 934-946.

Lee, C. K., Ho, D. S., Yu, C. C., Wang, C. C. & Hsiao, Y. H. 2003. Simple multifractal cascade model for air pollutant concentration (APC) time series. *Environmetrics* 14(3): 255-269.

Nuvolone, D., Petri, D. & Voller, F. 2018. The effects of ozone on human health. *Environmental Science and Pollution Research* 25(9): 8074-8088.

Pleijel, H. 2000. Ground-level ozone. A problem largely ignored in southern Europe, air pollution and climate series.

Sachithanatham, C. & Selvaraj, S. 2012. Ground level ozone concentration of south Chennai by Hurst analysis. *International Journal of Current Research and Review* 4(22): 8.

Yusoff, M. F., Latif, M. T., Juneng, L., Khan, M. F., Ahamad, F., Chung, J. X. & Mohtar, A. a. A. 2019. Spatio-temporal assessment of nocturnal surface ozone in Malaysia. *Atmospheric Environment* 207: 105-116.