

## **Decrease of the cognitive dissonance of the foreign students at the Russian university based on the extracurricular activities**

Roman Sergeevich Nagovitsyn<sup>a, \*</sup>, Aleksander Yurievich Osipov<sup>b,c,d</sup>, Mikhail Dmitrievich Kudryavtsev<sup>b,d,e,f</sup>, Konstantin Konstantinovich Markov<sup>g</sup>

<sup>a</sup> Department of Physical Culture, Methodology and Sports, Glazov State Pedagogical Institute, Russia

<sup>b</sup> Department of Physical Culture, Siberian Federal University, Russia

<sup>c</sup> Department of Physical Culture, Krasnoyarsk State Medical University named after professor V.F. Voyno-Yasenetsky, Russia

<sup>d</sup> Department of Physical Training, Siberian Law Institute of the Ministry of Internal Affairs of the Russian Federation, Russia

<sup>e</sup> Department of Physical Education, Reshetnev Siberian State University of Science and Technology, Russia

<sup>f</sup> Department of Physical Culture and Valeology, Krasnoyarsk State Pedagogical University of V.P. Astafyev, Russia

<sup>g</sup> Department of Physical Culture, National Research Irkutsk State Technical University, Russia

\* Corresponding author

E-mail addresses: [gto18@mail.ru](mailto:gto18@mail.ru) (Roman Sergeevich Nagovitsyn), [ale44132272@ya.ru](mailto:ale44132272@ya.ru) (Aleksander Yurievich Osipov), [kumid@yandex.ru](mailto:kumid@yandex.ru) (Mikhail Dmitrievich Kudryavtsev), [k\\_markov@mail.ru](mailto:k_markov@mail.ru) (Konstantin Konstantinovich Markov)

### **Abstract**

This article reviews the various features of the cognitive dissonance state of the foreign students arising at the beginning of their studies at the Russian University. The aim of the study is to identify the features and level characteristics of the cognitive dissonance of the foreign students and reduce this state on the basis of the author's individual trajectory for the implementation of the extracurricular activities at the Pedagogical University. Study participants: the second-year international students studying in the bachelor's degree program (n=149) at the Russian

University. The results of the study were processed using (X2) by the Statistical Program SPSS Statistics 20. The experimental intervention included the activation of foreign students in the process of extracurricular activities of the university based on the author's individual trajectory. These students actively participated in social and educational activities that were implemented at the institute. Extracurricular activities at the Pedagogical University were represented by a complex of main areas: the center of student initiatives, the student scientific society, the department of student self-government, the center of leisure and creativity of students, the student sports and fitness club, the department of student teaching teams. Three main indicators of the cognitive dissonance were identified in the study: the level of the socio-psychological maladaptation of the students, neuro-psychiatric instability of the students and the level of their psycho-emotional discomfort. As a result, foreign students who were actively involved in the implementation of extracurricular activities along the author's individual trajectory had a significantly reduced ( $p < 0.01$  and  $p < 0.05$ ) state of cognitive dissonance for each indicator from a high to a low level.

**Keywords:** cognitive dissonance, foreign student, extracurricular activities, individualization of learning, University

## **1. Introduction**

Under the influence of Russian higher education reforms, the modern education has entered the next stage of the modernization - the formation of some mechanisms for ensuring the education quality based on the innovative changes (Kwan et al., 2018). In the educational process, the innovations are introduced in the content of education, methods, technologies, forms, tools, as well as in the organization and management of the educational organizations (Kaufman, Scott, 2016; Nagovitsyn et al., 2019). Today, the geopolitical situation in the Russian Federation and in the world makes it a priority educating the young generations in the field of intercultural interaction (Rostovtseva et al., 2018). A distinctive feature of the modern Russian higher education institutions is the growing number of the foreign students (Nagovitsyn et al., 2018). The education of this students' category is a certain indicator of the status of the University, Institute or faculty (Klassen, Tze,

2014). The quality standard of Russian higher education makes it attractive choosing the occupational training programmes for the foreign students (Hammerness, Klette, 2015; Nagovitsyn et al., 2019). In this regard, the issue of adaptation and socialization of the foreign students to the educational process in a multicultural environment becomes the key to organizing the effective and conflict-free professional training (Kalman, Lattery, 2019).

In turn, the process effectiveness of adaptation and socialization of the foreign students depends on the level of their cognitive dissonance (Carkenord, Bullington, 1993; Maddi et al., 2012; Maurer, 2006), which is manifested in the first training stage (Avdeeva, Tulyakova, 2018; Merckelbach, Merten, 2012). For some students, this condition can be expressed at the stage of entrance tests (Toom et al., 2017). The concept of the cognitive dissonance (Festinger, 1995) was proposed by the American psychologist L. Festinger. In the study this definition is understood (Carkenord, Bullington, 1993) as a state of mental discomfort of the foreign student based on the collision in his mind of the conflicting ideas in the new educational environment (Barutchu et al., 2013; Elliot, Devine, 1994; Maurer, 2006), which is connected and arises as a result of interaction with the Russian students who have a different culture, values and overall preference in the education, livelihoods and life (Carkenord, Bullington, 1993).

In this regard, it is necessary searching for the new approaches to improving the training effectiveness of the foreign students through their adaptation and socialization in the Russian Institute by reducing the level of their cognitive dissonance.

The state of the cognitive dissonance among the students, mostly foreign students studying at the Russian University, starts showing itself and becomes the most relevant in the public life of the XXI century. By the way, the foreign students who are from different cultures and have different values and preferences often have a low level of awareness about the political, economic and social life of the Russian Federation (Nagovitsyn et al., 2019). As well as about the norms, customs, traditions and culture of the people, the way of life in the country and the higher education system (Klassen, Tze, 2014). In turn, the socialization, as one of the key components

of the cognitive dissonance (Festinger, 1995; Maurer, 2006) is a synergistic process of introducing the student into the structure of a society (Burke et al., 2017; Carkenord, Bullington, 1993) by mastering the social rules, values, orientations and traditions (Schmeichel et al., 2003). In turn, their knowledge helps the foreign student becomes an effective individual in the new society (Kalman, Lattery, 2019; Rostovtseva et al., 2018). On the one hand, the student perceives the social experience (Merckelbach, Merten, 2012) and on the other hand, the student develops his relationships and connections actively (Baier et al., 2019). Performing a variety of role functions, the student transforms the surrounding society and himself (Kwan et al., 2018). In the process of group activity in the society, the main role is the socialization, which allows the student becoming a member of the social groups and educational collectives (Corcoran, O'Flaherty, 2017; Toom et al., 2017).

Many foreign students face the problem of internationalization, the need to communicate with people of different social, ethnic and national norms (Kalman, Lattery, 2019). This is why it becomes necessary to provide comfortable living and learning conditions in a new social environment (Hammerness, Klette, 2015; Stepanchenko, Briskin, 2019). Co-education of the students in a multicultural group has a number of advantages (Shower, 2017). First of all, it is an opportunity forming the intercultural interaction between the representatives of different cultures, learn more about other ethnic groups, their culture and customs (Carckenord, Bullington, 1993), as well as creating the favorable working conditions and a spirit of mutual understanding and cooperation (Kalman, Lattery, 2019).

The relevance of this study, which is focused on solving the stated problem, is confirmed by the requirements of the results of mastering the bachelor's degree program on "Pedagogical education" on the example of a Pedagogical Institute. In particular, the need of forming the general cultural competencies of the students – the future teachers. Moreover, the ability to communicate orally and in writing in Russian and foreign languages solving the problems of interpersonal and intercultural interaction. And a willingness to work in a team, tolerant of social, cultural and personal differences (Nagovitsyn et al., 2019).

The Federal set of competencies required developing them for each student requires an interdisciplinary approach and integration of the students' academic and extracurricular activities at the Pedagogical Institute (Baier et al., 2019). This will be effective through the implementation of non-traditional programs in the training of the future teachers (Kaufman, Scott, 2016; Kwan et al., 2018), implementation of the principles of multiculturalism, integration and synergy in the implementation of the educational and upbringing process (Rostovtseva et al., 2018; Toom et al., 2017). It is necessary to organize the occupational training not only to the substantive preparations, but also in the extracurricular time of the students (Shawer, 2017) involving all students in the training process purposefully taking into account their individual cognitive interests and emotional mood (Corcoran, O'Flaherty, 2017; Erturan et al., 2020; Hammerness, Klette, 2015).

Thus, the scientific literature has thoroughly studied the issues of training the students in the conditions of the educational and upbringing activities in different levels of the multicultural groups based on the various technologies (Baier et al., 2019; Corcoran, O'Flaherty, 2017; Shawer, 2017). However, the development of features and improvement of the professional training of the foreign students on the basis of their active implementation of the extracurricular activities to reduce their state of the cognitive dissonance has not been carried out to date.

If the foreign students who have a high or medium level of the cognitive dissonance are actively participated in the extracurricular activities of the Pedagogical Institute on the basis of the author's individual trajectory, then their level of the cognitive dissonance will be significantly reduced. This may ultimately affect the effectiveness of the implementation of professional training of the future teachers from the foreign contingent in the Russian Institute.

**The aim of the study:** to identify the features and level characteristics of the cognitive dissonance of the foreign students at the Russian University and reduce this state on the basis of the author's individual trajectory for the implementation of the extracurricular activities at the Pedagogical Institute.

## **2. Materials and Methods**

The research work was based on the implementation of a system of the theoretical methods for the analysis of Russian and foreign psychological and pedagogical theory, practice and experience in the field of features and characteristics of the cognitive dissonance of the students from the Higher school of different social groups. As a result, the main components of the foreign student's cognitive dissonance were developed. There were three synergistically interrelated qualitative and quantitative indicators: the level of socio-psychological maladjustment of the students, neuropsychiatric instability of the students and the level of their psycho-emotional discomfort.

The experimental study is implemented using a set of experimental methods such as the modeling, analysis, synthesis, comparison, collate and synthesize of the results and conclusions in the study. Also, in the study the following diagnostic tools are used that systematically reflect the level of the cognitive dissonance. The social and psychological questionnaire of adaptedness by K. Roger and R. Dymond (Rogers, Dymond, 1978), the multi-level personality questionnaire “Adaptability” (Maddi et al., 2002) and the adaptive resilience test using the techniques of C. Maddi and the California test for evaluating goals in Khan's life (Maddi, 2006; Maddi et al., 2012).

Based on these diagnostic procedures, the main indicators of each state indicator of the cognitive dissonance among the foreign students were identified:

*Socio-psychological maladjustment of the student*

The “Communication” indicator allows you diagnosing the level of communication between the foreign students and Russian students, as well as the ability to form and improve the interpersonal relationships of the students during the academic and extracurricular time (Baier et al., 2019; Kalman, Lattery, 2019). On one side, this indicator includes in its content the integration of a set of personality traits, such as the conflict (Metzger et al., 2020; Stepanchenko, Briskin, 2019) and on the other hand, the social traits such as having an experience, motivation and needs for the process of communication and mutual assistance (Avdeeva, Tulyakova, 2018; Goldberg, Grandey, 2007; Shower, 2017).

The “Dominance” indicator determines the orientation level of the foreign student to lead or manage the interpersonal relationships with the students from different cultures and with other value orientations (Festinger, 1995). The diagnostic procedures for this indicator allow us determining the individual-differentiating mobility of the student through the state analysis of adaptation and maladaptation (Burke et al., 2017; Corcoran, O’Flaherty, 2017). This indicator allows us identifying the students' perceptions features of the degree of positive adaptation to the professional training (Maurer, 2006) or the level of negative maladaptation in the process of interpersonal relations between the foreign and Russian students (Rostovtseva et al., 2018).

The “Morality” indicator allows you diagnosing the ability of the foreign student to perceive a certain social role adequately offered to them in the professional training process (Carkenord, Bullington, 1993; Hammerness, Klette, 2015). The student’s ability to perceive, analyze and synthesize his moral norms without compromising himself (Maddi et al., 2002), representations and values (Burke et al., 2017; Schmeichel et al., 2003). The readiness of the foreign student accepting the norms of the new society and meet the requirements of the immediate social environment at the University and beyond it.

#### *Student's neuro-psychiatric instability*

The “Self-acceptance” indicator reflects a positive level of friendliness and a negative level in relation to one’s own “identity” of the foreign student, compared to the personal feelings of the Russian students (Toom et al., 2017). This indicator determines the degree of stress tolerance of the foreign student and their ability regulating their behavior in the first half of the day during the academic classes (Maurer, 2006) and in the second half of the day during leisure activities (Carpenter, 2019; Elliot, Devine, 1994). It should be noted that psychological-adaptive adaptabilities are determined based only on a holistic assessment of neuro-psychiatric stability through monitoring the level of their behavioral regulation (Avdeeva, Tulyakova, 2018; Merckelbach, Merten, 2012; Rogers, Dymond, 1978).

The “Acceptance of others” indicator reflects a positive degree of friendliness and a negative degree of hostility (Elliot, Devine, 1994; Rogers, Dymond, 1978)

among the foreign students to other students in the group, at the faculty, at the University and in the dormitory (Kalman, Lattery, 2019). On the one hand, the diagnostic procedures for this indicator allow us identifying at what level the foreign student feels like in terms of the self-esteem and stability (Carpenter, 2019; Toom et al., 2017), and on the other hand, the need for positive or negative approval by the Russian students. This indicator reliably demonstrates the ability of a person to creatively and actively adapt to the educational and extracurricular environment of the pedagogical process (Burke et al., 2017; Olefir et al., 2019; Schmeichel et al., 2003).

The “Challenge” indicator allows you determining the degree of the student's conviction that everything that happens to them contributes to their formation as a person due to the knowledge, skills and abilities derived from the pedagogical experience (Toom et al., 2017), on the one hand, a positive experience and on the other, negative one (Klassen, Tze, 2014). Performing a diagnostic procedure on this indicator shows the level of acceptance of the surrounding educational environment as the main way acquiring the professional experience, readiness for active activity (Metzger et al., 2020), despite the lack of reliable guarantees of the success (Hammerness, Klette, 2015). Besides, the monitoring shows the activity degree of the student on the principle of "at your own risk", considering the desire for simple comfort and safety as a factor of reducing pleasure (Merckelbach, Merten, 2012) and the harmony of the implementation of professional training of the future teacher. The diagnostic procedure is based on an analysis of the level of students ' acceptance of the individual risk of unrealisation of their future professional activities (Corcoran, O’Flaherty, 2017).

#### *The emotional discomfort of the student*

The “Internality” indicator shows at what level the foreign student feels like an active object of their own academic and extracurricular activities, and at what level they feel like a passive object of the actions of other students (Carkenord, Bullington, 1993) in micro and macro groups and external circumstances (Elliot, Devine, 1994). This indicator reflects the predominance of positive or negative emotions in the educational process, as well as in the everyday life of the foreign students. Moreover,



the diagnostic procedures reliably represent the student's level of confidence that the considerable activity can influence the outcome of what is happening (Schmeichel et al., 2003). Even if this activity may affect a small number of the subjects of the educational process (Maurer, 2006; Melki et al., 2018) and despite the fact that the success and results are not guaranteed (Shawer, 2017). As a negative side of the personality, this indicator can diagnose the feeling of individual helplessness of the foreign student. Such a student with a highly developed indicator may feel that he chooses his own activity and his most effective educational trajectory (Carkenord, Bullington, 1993).

The “Resilience” indicator allows you analyzing the foreign student's system of beliefs about themselves, the world, and their relationship to them as an individual (Carpenter, 2019), which allow them to withstand and effectively overcome stressful situations in the course of academic and extracurricular activities (Klassen, Tze, 2014). Besides, the diagnostics shows the individual characteristics of the student's resilience clearly according to the levels of stress tests (Kalman, Lattery, 2019). Also, the monitoring of this indicator shows the indicative models of measures increasing the resilience in the educational environment of the Pedagogical Institute (Avdeeva, Tulyakova, 2018).

The “Commitment” indicator allows you determining the degree of conviction of the foreign student in the degree of their involvement in various areas of the environment (Toom et al., 2017). As far as he has the maximum or minimum chance to find what is really necessary for him (Maddi, 2006) and interesting activity for his personal formation (Festinger, 1995). This indicator reveals the development level of involvement from getting the pleasure from the individual educational and extracurricular activities to the lack of such conviction, which in some cases can give a rise to a sense of negativity within the micro or macro academic group, as well as a sense of being rejected as a person (Baier et al., 2019). Monitoring this indicator to some extent allows you determining the degree of self-confidence of the foreign student and whether the personal self-esteem corresponds to the opinion of other students (Carkenord, Bullington, 1993).

All the indicators presented above and diagnostic procedures adapted for their monitoring are intended for the students from 16 years old without any restrictions on educational, social and professional characteristics. Each diagnostic procedure, depending on the severity of the corresponding characteristic, differentiates the students into three levels: high, medium and low. The proposed personal characteristics each of which includes a system of indicator values form an integral system for monitoring the cognitive dissonance state at the levels of the students of the higher educational organization of the pedagogical specialty. It should be noted that when formulating the final conclusions of the study after the implementation of the diagnostic procedures for the indicators presented above, the obtained high-level indicators show the opposite result when diagnosing the cognitive dissonance. Namely, the manifestation of a low state of the cognitive dissonance of the student, as a positive or harmonious state, corresponds to the high levels of the indicators presented above. In turn, the manifestation of a high state of the cognitive dissonance of the student, as a negative or disharmonic state, corresponds to the low levels of the indicators presented above.

*The low level* of the cognitive dissonance corresponds to the high adaptability of the student existing in the educational environment of the University in accordance with the requirements of the academic society (Maurer, 2006; Merckelbach, Merten, 2012). Some students in this category have a high level of determinism in their emotional attitude to the current reality (Goldberg, Grandey, 2007; Rogers, Dymond, 1978), surrounding the objects and phenomena in the process of educational and extracurricular activities (Carpenter, 2019; Festinger, 1995). The student with a low level of the cognitive dissonance has a high self-esteem and a degree of satisfaction with their individual characteristics of the personality (Elliot, Devine, 1994). Moreover, the foreign students of this category have a high motivation and need communicating with the Russian students, in co-education and extracurricular activities.

*The medium level* of the cognitive dissonance is manifested among the students with a low or medium level of fitness to implement the professional training in a new environment. For this contingent, due to the lack of compliance of their own needs,

motives and interests on the one hand (Burke et al., 2017; Carpenter, 2019) and these same characteristics of other students on the other hand, there is uncertainty of the expression of emotions to social reality (Metzger et al., 2020). Besides, the students show low or medium self-confidence in learning success and a degree of satisfaction with their individual qualities and abilities (Carkenord, Bullington, 1993; Elliot, Devine, 1994; Rogers, Dymond, 1978). Also, the foreign students of this category have a low or medium need for interaction and communication in the academic group and at the faculty and do not seek implementing the group educational and extracurricular activities.

*A high level* of the cognitive dissonance is manifested among the students who have a high degree of dissatisfaction with their individual's personal traits and individual national and regional characteristics (Festinger, 1995; Maurer, 2006). They are actively moving away from the interaction with the academic group, from team and social activities (Kalman, Lattery, 2019; Rogers, Dymond, 1978). This group of the students shows immaturity of personality, disharmony in the sphere of decision-making and failure in the learning process (Burke et al., 2017). These students clearly feel insecure, depressed and lethargic about the surrounding educational environment (Schmeichel et al., 2003) absolute inactivity in the process of academic and extracurricular activities at the University.

#### *Statistical analysis*

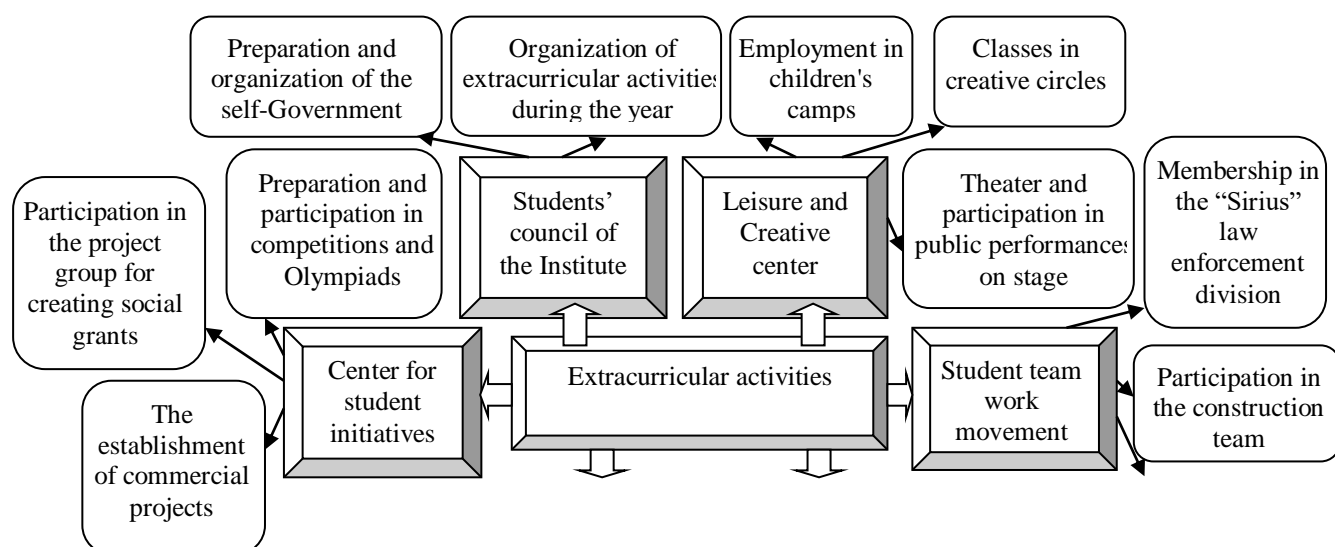
The results of the study were processed using the Statistical Program SPSS Statistics 20. The significance of differences of the results was determined using the Chi-squared ( $X^2$ ) by  $p < 0.01$  and  $p < 0.05$ . Statistical analysis was performed between the indicators of the experimental and control groups for each indicator and indicator proposed in the study. The choice of this criterion for the statistical analysis is determined by the following characteristics: it allows you comparing the distributions regardless of whether they are distributed normally or not, as well as regardless of the different number of the respondents in the focus groups. The criterion can be applied when the results of the focus groups are divided into more than two categories, in our case (high, medium and low), in accordance with the state of the indicator being studied.

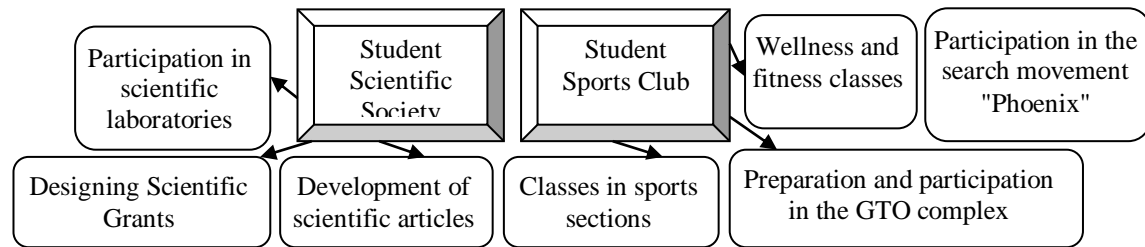
### *Study participants*

The foreign second-year students studying for bachelor's degree programme on Education and Pedagogical Sciences (n=149). These students came to study at the Glazov State Pedagogical Institute (Udmurt Republic) and Siberian Federal University (Krasnoyarsk Region) from Turkmenistan, Tajikistan and Kazakhstan. In the preliminary section before the experiment, the foreign students were diagnosed with their level of the cognitive dissonance at the end of their first year (June 2018). As a result, a sample of the students was formed (n=104) who had a medium or high level of the cognitive dissonance. Some students with the indicators corresponding to a low level of the cognitive dissonance were excluded from the experimental process.

### *Research organization*

The study was implemented from September 2018 to July 2019 (full academic year). The students from Turkmenistan, Tajikistan and Kazakhstan were actively involved in the extracurricular activities of the Pedagogical Institute, in addition to the implementation of the educational process in the first half of the day. Under the terms of the experimental work, these students were offered to attend the Pedagogical Institute during their extracurricular time and actively participate in the social and educational activities that were implemented at the Institute. The extracurricular activities submitted a set of key areas at the Pedagogical Institute: the center of the student initiatives, student scientific society, student self-government, and the center of leisure and creativity of the students, student athletic & fitness club, division of the student pedagogical teams. In turn, each area of the extracurricular activities at the Pedagogical Institute was differentiated into different types and forms of the educational, upbringing and scientific activities (Fig. 1)

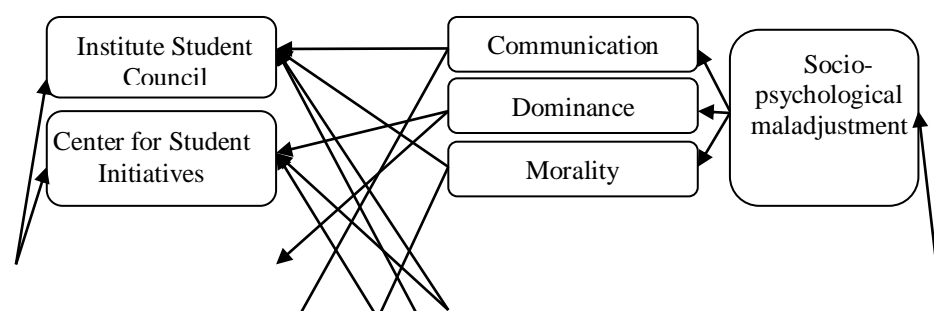


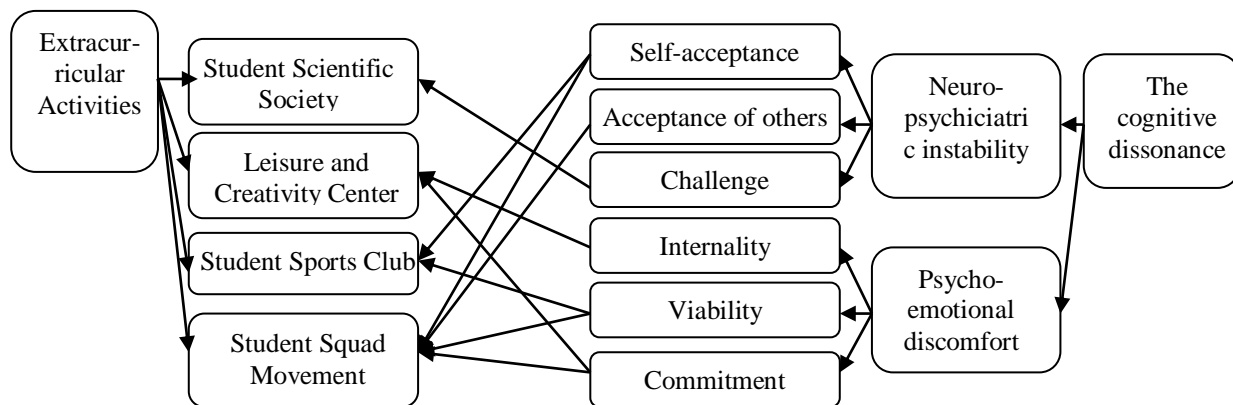


**Fig. 1.** The model of extracurricular activities at the Pedagogical University

At the first stage of the study, from September 2018 to January 2019 (fall semester of the school year), the foreign students of the experimental sample, at their request, engaged in social and educational activities in various areas of the extracurricular environment of the Pedagogical Institute. Some students from Turkmenistan, Tajikistan and Kazakhstan were actively involved in various areas presented in the model of the extracurricular activities at the Pedagogical Institute (Fig. 1). Nevertheless, a part of the foreign students joined passively or did not join at all to some extracurricular activities in this period of the school year. This happened due to the fact that some of these students were not motivated, and some could not independently choose for themselves the direction of their extracurricular activities.

At the second stage of the study, from February 2019 to July 2019 (the spring semester of the school year), some foreign students of the experimental sample engaged in social and educational activities in various areas of the extracurricular environment of the Pedagogical Institute, as well as with the help of the author's recommendations. The author's recommendations were compiled on the basis of the analysis recorded before the experiment of level indicators of the cognitive dissonance among the foreign students and the development of the author's individual-differentiated trajectory of the implementation of the extracurricular activities at the Pedagogical Institute (Fig. 2).





**Fig. 2.** Model of individually-differentiated trajectory for the implementation of the extracurricular activities for the foreign students at the Pedagogical Institute

The individually-differentiated trajectory is proposed for the implementation of the extracurricular activities (Fig. 2). This trajectory is designed for some students from Turkmenistan, Tajikistan and Kazakhstan who have a high or medium level of the cognitive dissonance recorded before starting the experimental work. However, in the experimental sample not all students were actively involved in the extracurricular activities during the school year. Despite the author's recommendations in the second half of the experiment, these students passively participated in the educational and social activities of the Pedagogical Institute in the second half of the school day or did not participate at all. From this contingent of the experimental sample of the foreign students, a control group was formed, then CG (n=46). Moreover, the foreign students who actively participated in the experiment on their own and on the basis of the author's individually-differentiated trajectory for the implementation of the extracurricular activities were included in the experimental group, then EG (n=58).

Thus, on the basis of an individual desire to participate in the experiment of each foreign student of the experimental sample, two groups were formed: the EG from foreign students actively participating in the extracurricular life of the institute, and the CG from foreign students who refused to take part in the extracurricular activities of the institute.

### 3. Findings

After the implementation of the experimental work (July 2019), a second diagnosis was carried out to identify the levels of the cognitive dissonance of the foreign students of the EG and CG. These groups were not equal in the number of participants in them. In this regard, the amount was converted to percent (%) obtaining a more reliable result. It should be noted that in the preliminary diagnostics implemented before the experiment, these students had only two levels of the cognitive dissonance: high and medium. Statistical analysis of the results at the X<sup>2</sup> method that were found in the EG and CG before the experiment showed an insignificant significance of the results for each indicator at  $p > 0.05$  with the degree of freedom (df)=1.  $X_{2emp}$  before the experimental work was  $2.088 \pm 1.247$  for all indicators. This value is less than  $X_{2cr(0.05)}$ . This confirms that these two groups were statistically equal before the experiment. After the end of the experiment, the implementation of the diagnostic procedures showed the following data (%) of the students by the indicators levels of the social and psychological maladaptation of the student (Table 1):

**Table 1.** The experiment results identifying the students (%) by the levels according to the indicators of their socio-psychological maladjustment:

Levels	Communication		Dominance		Morality	
	EG	CG	EG	CG	EG	CG
High	71	48	62	57	36	20
Medium	29	41	38	43	60	72
Low	0	11			4	8
df	2		1		2	
X <sub>2emp</sub>	<b>17.504</b> > X <sub>2cr(0.01)</sub>		<b>0.332</b> < X <sub>2cr(0.05)</sub>		X <sub>2cr(0.01)</sub> > <b>6.996</b> > X <sub>2cr(0.05)</sub>	
P	<b>&lt;0.01</b>		>0.05		<b>&lt;0.05</b>	

Based on the statistical analysis data in comparing the EG and the CG after experimental work, the effectiveness of the study was revealed. The experiment had a significant effect ( $p < 0.01$ ) to a greater extent on the foreign students increasing their communication skills. To a lesser extent ( $p < 0.05$ ), the impact is fixed on their moral attitudes in the new educational environment. However, the implementation of the experimental work reliably ( $p > 0.05$ ) did not affect the increase in the number of the foreign students with the dominant positions in interaction with other students.

According to the following indicator “Neuro-psychiatric instability” after the end of the experiment, the implementation of the diagnostic procedures showed the following data (%) of the students by the levels and by each indicator (Table 2):

**Table 2.** The experiment results identifying the students (%) by their levels according to the indicators of their neuro-psychiatric instability:

Levels	Self-acceptance		Acceptance of others		Challenge	
	EG	CG	EG	CG	EG	CG
High	67	57	79	56	34	22
Medium	33	43	21	33	64	59
Low			0	11	2	9
df	1		2		2	
X <sup>2</sup> <sub>emp</sub>	1.72 < X <sup>2</sup> <sub>cr(0.05)</sub>		17.584 > X <sup>2</sup> <sub>cr(0.01)</sub>		X <sup>2</sup> <sub>cr(0.01)</sub> > 6.722 > X <sup>2</sup> <sub>cr(0.05)</sub>	
P	p > 0.05		p < 0.01		p < 0.05	

The implementation of the statistical analysis of the obtained comparative data of the EG and the CG in terms of the “Neuro-psychiatric instability” indicator showed the significant effectiveness of the impact of the extracurricular activities of the foreign students. After the experiment, the number of the foreign students significantly increased ( $p < 0.01$ ), able to perceive the values of the Russian students internally and externally. And also a statistically significant ( $p < 0.05$ ) increase of the number of the students who have a high degree of conviction in the importance of the new educational environment for forming them as a person through the knowledge, abilities, learned from the pedagogical experience. However, the implementation of the experimental work statistically valid ( $p > 0.05$ ) did not affect the increase in the number of the foreign students with dominant positions in interaction with other students. The experiment did not have a significantly considerable influence on the increasing number of the students who can positively perceive their own “Myself” in a new professional environment.

According to the last of the measured indicators “Psycho-emotional discomfort” after the implementation of the experimental work and the final diagnostic procedures, the following data (%) of the students for each indicator were revealed (Table 3):



**Table 3.** The results of the experiment to identify the students (%) by the levels according to the indicators of their psycho-emotional discomfort:

Levels	Internality		Viability		Commitment	
	EG	CG	EG	CG	EG	CG
High	74	57	64	55	38	26
Medium	26	43	36	45	60	65
Low					2	9
df	1		1		2	
X <sup>2</sup> <sub>emp</sub>	X <sup>2</sup> <sub>cr(0.01)</sub> > <b>5.664</b> >X <sup>2</sup> <sub>cr(0.05)</sub>		<b>1.328</b> <X <sup>2</sup> <sub>cr(0.05)</sub>		X <sup>2</sup> <sub>cr(0.01)</sub> > <b>6.904</b> >X <sup>2</sup> <sub>cr(0.05)</sub>	
P	<b>p&lt;0.05</b>		p>0.05		<b>p&lt;0.05</b>	

The obtained statistical data of the diagnostic procedures for the indicator “Psycho-emotional discomfort” revealed a significant positive effect after the experiment. Statistically significant ( $p<0.05$ ) the number of the foreign students with a high and medium level of internality and motivated to perceive a new culture and social beliefs was increased. After the experiment, an unreliable ( $p>0.05$ ), but a visible increase was recorded in the number of the foreign students with a high level of vitality in the new educational and upbringing environment of the Russian higher education.

#### 4. Discussions

The results obtained are consistent with a number of the research works that prove that the training of a future teacher should be carried out not only on the basis of academic studies (Kalman, Lattery, 2019; Klassen, Tze, 2014) and educational or industrial practice (Corcoran, O'Flaherty, 2017; Hammerness, Klette, 2015; Melki et al., 2018). The full process of the formation of a teacher should be accompanied by an immersion in the educational and social environment of the institution of each student (Stepanchenko, Briskin, 2019; Shaver, 2017; Toom et al., 2017), especially those students who are included not only in the higher education system, but also in general in the new culture of the state. Only the active extracurricular activities of such a student, in the context of our study, the student of the Russian University who came studying from another country, it will allow him to become a competent, harmoniously and comprehensively developed young specialist for the system of secondary and additional education. As the results of this study showed, it was the active, goal-oriented activity of the foreign students in the development of a

multifaceted extra-curricular environment that allowed us to obtain the positive dynamics of their adaptation and socialization reliably to the Russian University.

The revealed indicator characteristics of the state of the cognitive dissonance that the student experiences when immersed in a new educational environment presented in this study complement the theoretical and practical studies of the Russian and foreign scientists (Baier et al., 2019; Carpenter, 2019; Nagovitsyn et al., 2018; Schmeichel et al., 2003). While substantiating this state of the socio-psychological adaptation of a person (Burke et al., 2017; Carkenord, Bullington, 1993; Olefir et al., 2019), some scientists give the main emphasis in substantiating this state; some researchers determine the level of the psychological stability of the youth (Carpenter, 2019; Rostovtseva et al., 2018). However, in the presented study, an attempt was made to combine the presented states synergistically and add another important component in understanding the state of the cognitive dissonance. It is the psycho-emotional comfort of the student in the positive vector (Carpenter, 2019) and the psycho-emotional discomfort from the negative side that can systemically supplement the content of the cognitive dissonance (Goldberg, Grandey, 2007; Klassen, Tze, 2014). Due to the detailed differentiation of each state indicator of the cognitive disability from the psycho-emotional comfort to the socio-psychological adaptation and neuro-psychiatric instability according to some indicators, the study obtained statistically valid ( $p < 0.01$ ,  $p < 0.05$ ), versatile and systemically substantiated results.

The study obtained the results of the inefficiency of the extracurricular activities of the students using the author's individual route. Despite the individualization of the active immersion of some foreign students in the educational and social environment of the Pedagogical Institute, inefficiency is revealed by some indicators. The indicators "Domination", "Self-acceptance", "Resilience" received not reliable results on increasing the number of the students with a low level of the cognitive dissonance. These data are consistent with the results of other experimental studies (Carpenter, 2019; Hammerness, Klette, 2015). The scientists have proven (Carkenord, Bullington, 1993; Goldberg, Grandey, 2007) that external exposure to the students changing the student's belief system about themselves, the world, and

their relationship as an individual requires a longer experimental period (Kalman, Lattery, 2019). In turn, a change in one's attitude to individual values, an adjustment in self-acceptance of one's own "Myself" requires deeper motivational and value-based (Carkenord, Bullington, 1993) and psychological studies (Merckelbach, Merten, 2012; Rogers, Dymond, 1978), which go beyond scope of this study. This circumstance is oriented toward the continuation of the research work on the study of the cognitive dissonance in these statistically unreliable areas.

### *Limitations*

The presented scientific work was limited to a sample of the foreign students from the Glazov State Pedagogical Institute and Siberian Federal University who entered the Pedagogical Institute according to bachelor's degree programs on pedagogical specialties. In this regard, the number of the study participants was heterogeneous in size in each experimental sample. The foreign students of the experimental group, when implementing their occupational training outside the classroom, used the author's experimental, individually-differentiated program based on the preliminary observation, implemented before the experiment. In turn, the foreign students of the control group used a standard model of the occupational training focused on the educational activities of the learning process only during the academic studies and educational practice. This model is common for the system of higher educational institutions of the Russian Federation for the preparation of the bachelors on teacher training education. The obtained experimental sample of some foreign students does not make it possible to cover the entire target audience, since the study was conducted at only two universities. In accordance with this, the results can be determined as preliminary, and for further more detailed analysis it is necessary conducting a comparative analysis of several higher educational institutions of the others Russian regions. A larger sample of the students will provide more diverse information on this subject.

### *Future scope of the work*

The results of the experiment will be of interest to a wide range of the students and specialists in the field of pedagogical science, as well as to the teachers and administrative staff of some faculties and universities of other non-pedagogical

spheres. The author's recommendations on the implementation of the diagnostic procedures for monitoring the state of the cognitive dissonance among the students will allow holistically realizing the adaptation and socialization of the students of different contingents to the new educational environment which ultimately can help increasing the students' motivation to set individual goals in the field of improving the professional results. Some further research will be aimed at studying the influence of the various states of the cognitive dissonance among the students on their success in academic studies and the formation of the competencies set according to the standard and curriculum of the university. This direction is especially relevant for the further development, in connection with the activation of this problem in the scientific works (Goldberg, Grandey, 2007; Maddi et al., 2012; Maurer, 2006). Moreover, the future experimental research will cover a large sample of the students with various individual gender, social and age characteristics, as well as the psychological and physiological characteristics and training needs.

## **5. Conclusion**

Thus, the introduction of individually differentiated technologies in the professional training of the future teachers contributes to the fact that some methods and approaches in the pedagogy of cooperation and intercultural interaction should be improved and mobilized in the multicultural environment of the university. In the context of integration processes in the system of higher education in Russia, they should be focused on the search for more effective, efficient ways of the transformation, development, thanks to the modern introduction of innovations in the process of training the young specialist. The implementation of the extracurricular activities of the students in all its diversity and multifaceted, is especially important for improving the system of the modern teacher education. However, the influence of innovations requires the development of the deep theoretical and practical base, which, in its turn, will be the object of the further scientific research, and organizational and managerial decisions.

The obtained statistically significant results for six ( $p < 0.01$ ,  $p < 0.05$ ) of nine indicators allow us to conclude that there is a statistically significant pattern in the implementation of the professional training of the foreign students in Russian higher

education. The environment of the Russian Pedagogical Institute into which the student is immersed from the Near Abroad should contain two of its main synergistically related components: educational and extracurricular. Only with experimentally substantiated mentoring or tutoring activities of the teachers to orient the foreign students and help in choosing their individual direction or trajectory of their extracurricular activities, a positive result is possible. A harmoniously developed foreign student, not only with the educational component, but also with the social and cultural direction, will become a worthy young teacher in his homeland who will correctly and consciously understand the Russian society, Russian culture and some Russian individual.

#### *Declaration of conflicting interests*

The authors declared no potential conflicts of interest with respect to the research, authorship, and publication of this article.

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