Satisfaction with the Educational Environment of the University as a Subject of the Research Process in Foreign Psychology*

Alexander Panyukov
National Research University
Bauman Moscow State Technical University (BMSTU)
Moscow, Russia
E-mail: apanukov@mail.ru

Yulia Panyukova
Psychological Institute of Russian Academy of Education (PI RAO)
Russian State Agrarian University- MAA named after K.A. Timiryazev
Moscow, Russia
E-mail: apanukov@mail.ru

Anna Ammon
Faculty of Counselling and Clinical Psychology of Moscow State University of Psychology and Education (MSUPE)
Moscow, Russia
E-mail: AnnaAmmon@mail.ru

Abstract—**There was carried out the review of the foreign studies dedicated to the problem of the students' perception of university's educational environment. Within the review number of main environmental "elements" was indicated: physical, social and psycho-didactic. It has been found that among the significant elements in the structure of the physical component of the educational environment of the university are the features of the organization of the educational space, allowing you to see and hear what is happening in lectures and seminars, temperature intherooms, lighting, and availability of places for individual and group work. Relationships with the curator as well as the socio-psychological climate on campus are considered as important elements of the social component. The most differentiated component of the educational environment is psychodidactic, which includes various features of learning - teaching, and more associated with satisfaction with the educational environment.**

Keywords—satisfaction; physical environment; lighting; temperature requirements in classrooms; availability of places for individual and group work; advising; campus; training programs; university satisfaction

I. INTRODUCTION

The problem of psychological representation of the educational environment of the university by students is the sustained subject in both domestic and foreign studies [1] [2]. In the following article, we have attempted to analyze the trends and methodical tools which are used in modern foreign psychology to study the peculiarities of psychological representation of the educational environment of the university by students. In general, by "representation" we understand the "image" endowed with both certain psychologically relevant formal-dynamic and meaningful characteristics of a certain element of the subject's environment, including subject itself, events, other people, etc. Analysis of foreign studies (based on the materials of the periodic press) which are devoted to the psychological representation of the students of the educational environment of the university, gave us the permission to distinguish the construct of "satisfaction" in the educational environment as a psychologically relevant index, which is considered by researchers as a psychologically relevant, qualitative attribute of representation. Analysis of studies on student satisfaction with the educational environment can be structured by the elements of the educational environment. Otherwise one can analyse what exact "structural elements" of the educational environment are the content of representations and are connected to the satisfaction/dissatisfaction: physical environment, spatially-subject environment, learning process, relationships with teachers and other students, etc. If we rely on the construct of the "socioecological system" which is admitted in the national psychology for analysis, inter alia for analysis of educational systems, we can acknowledge that all construct's elements: physical, valuable and social are submitted in studies which are related to the representation of the educational environment and to the satisfaction/dissatisfaction with the above environment.

II. FACTS OF SATISFACTION WITH PHYSICAL FACTORS AND THE SPATIAL ORGANIZATION OF THE EDUCATIONAL ENVIRONMENT

J. Yang, B. Becerik-Gerber and L. Mino investigated student satisfaction with various characteristics (temperature, air quality, artificial lighting, natural light, acoustics, visibility, auditorium planning, furniture, technical equipment, software) educational environment, and how much, according to students' opinion, these characteristics effect on their activities. They found that the most important things for students are: visibility (the ability to see a board, projector, visual aids, etc.), technical equipment (projector, computer, audience response system, interactive board, etc.), acoustics (the possibility to hear the teacher, speakers, etc.), at the same time, students were not satisfied with the acoustics and natural light. Chinese scientists assessed students' preferences for different auditorium layouts, individual areas in auditorium, and students' perceptions of the influence of auditorium space on their efficiency. It was found out that only 2.68% of the surveyed students are definitely sure that the place where they sit in the auditorium does not affect them, and many of the surveyed students (22.32%) are definitely sure that it is vice versa, the rest of the students have intermediate position. Besides, the majority (over than 60%) of students in this study pointed out that such factors as auditorium temperature, lighting, auditorium size and student density in it also influenced their educational process, while about 30% of surveyed students agreed with the influence of software and computer technology agreed about.

R. Beckers, T. van der Voordt, G. Dewulf analysed students' preferences, comparing the choice of places for individual classes, when one need concentration, with their choice for joint classes with fellow students, where the intercommunication is supposed. Researchers found out that students' choice of place did not depend on their personal preferences for privacy, on the possibility of interaction or independence, as well as it did not depend on the perceived importance of comfort, aesthetics, technical equipment and planning. Students consider the characteristics of the educational environment to be an important factor which influences on the results of their tests and on the interaction with coursemates [6]. J.J. Miller found out that those students who are more likely to attend a university's recreation centre are much more likely to attend university; they feel connection with that place and social affiliation to the recreation centre and to the university, together with sense of integration with the university.

III. FACTS OF SATISFACTION WITH SOCIAL-PSYCHOLOGICAL FACTORS OF EDUCATIONAL ENVIRONMENT

The sphere of research interest includes the social element, namely, the peculiarities of students' representation of various aspects of the relationship of the educational process subjects, in particular, the perception of students' curators. Peterson, M., Wagner, J. A., & Lamb, C. W. investigated the perception of the educational environment by students who had dropped out early and found that the overall impression of the educational environment was most strongly influenced by curation [8]. N. Eduljee and R. Michaud studied the perception of curation and determined that students believe that their curators communicate with them confidentially, respect their opinions and feelings, have a sense of humour and are available for communication; they create an open atmosphere of care [9]. More than 60% of the students were satisfied with the level of curation. Most often questions discussed between students and curators are: enrolment, planning of the educational process and academic progress. It was also noted that those students who had longer-lasting and more frequent interactions with the curator had higher curation satisfaction rates [10]. There is a large number of studies which are devoted to the analysis of the socio-psychological climate on student campuses.

A "community feeling" is the subject of the study in a D.X. Cheng's work. It is related closely to the feelings a sense that students are cared for, that they are valued as individuals and accepted as a part of the community. Also it is related with the quality of social life on campus.

M. Hoffman, J. Richmond, J. Morrow, K. Salomone, using focus groups, found out that "the community feeling comes from the perception of valuable involvement into the university's environment. It depends on having a functional supportive relationship with coursemates and feeling a sense of a care-about on the part of teachers [12].

M. Meeuwisse, S. Severiens and M. Born found that members of small ethnic groups feel themselves at home in case they have good formal relationships with teachers and coursemates, while for members of large ethnic groups this is associated with informal relationships with coursemates.

IV. SATISFACTION WITH PSYCHODIDACTIC EDUCATIONAL FACTORS

Another component of the educational environment of the university, the peculiarities of representation of which are the subject of research interest - is the component of value, i.e., any psychodidactic attributes of the educational system: educational subjects, pedagogical technologies and teaching methods, forms of self-organization of students, place and functions of information technology, etc. In particular, Medine Baran, together with her colleagues, used a structured interview to assess the gender-specific difference in the perception of teaching a physics course, and found out that male students saw themselves as more successful in studying physics and passed fewer difficulties in the educational process. At the same time, regardless of the gender, the students considered the physics course as entertaining and important, and the knowledge gained - remembered for a long time [14].

We have presented researches, which demonstrate the tendency of foreign scientists to differentiate the educational environment very carefully, and to make some of environmental elements the subject of local scientific projects that analyze the role of a factor in the students' satisfaction with the educational environment in general. It should be noted that a special methodical toolkit has been developed for empirical research, and it could be interesting for domestic experts dealing with the problems of

humanitarian examination of an educational environment. Domestic psychology is also focused on analyzing the environmental predictors of the psychological well-being of the educational process subjects, however, we cannot speak yet about the structuring level of the environmental factors in which context educational and professional activities of the educational environment subjects are being implemented [15].

V. SATISFACTION WITH EDUCATIONAL ENVIRONMENT AS A SYSTEM

One of the trends of modern foreign studies of the representation peculiarities of the university's educational environment by students - is the analysis of the perception of the educational environment in general, all its components in totality. In the format of this view, the problem of searching psychologically relevant indicators of students' representation of the educational environment of the university is updated. One such indicators - is the "satisfaction" of students with the educational process. To make the graded analysis of this indicator, researchers refer to the study of students' representation of the university. Thus, A. Gibson in his work reviewed studies from 15 previous years on student satisfaction with university, and found out that the main "subjects" of satisfaction were:

- Academic staff/teaching (Quality of instruction, expertise and interest in subject, degree of caring, helpfulness, accessibility, feedback provided);

- Classes/curriculum (Overall design and delivery, usefulness, scheduling, content, availability, class size/logistics, level of difficulty);

- Advising support (Accessibility, reliability, professionalism, helpfulness, responsiveness, understanding);

- Skills developed (Relationship skills, critical thinking, intellectual growth, social/ moral awareness);

- Preparation for future (Preparation for or furthering career, expecting good job/quality of life);

- Services/facilities (Availability, access, physical aspects, usefulness, IT support) [16];

- Social integration (Opportunities to socialise, campus safety, sense of belonging, enjoyable experience, diversity of student body) [17];

- Student centeredness/ responsiveness (Responsiveness to student concerns/suggestions, helpfulness, academic support, financial aid);

- Pre-enrolment factors (Accuracy of information provided, 1st, 2nd, 3rd choice, admissions and orientation, degree to which met expectations) [18] [19].

The perception of teachers and the curriculum is usually most strongly related to students' satisfaction with the educational institution. Variables related to skills development and preparation for the future is usually more

important for the satisfaction of business programs – based students. Focusing/interest on students and a level of social integration are especially important for students at large universities that offer many diverse programs. The availability and quality of services and educational conditions are somewhat less important for the terms of satisfaction than academic factors. It is important to note that services/infrastructure are usually "dissatisfiers" – i.e., negative perceptions of services/infrastructure could lead to dissatisfaction, while positive perceptions do not lead necessarily to satisfaction. The main variables associated with student satisfaction with the university are a positive assessment of the learning process, in general, the development of skills, the relevance of learning in connection with preparation for the future and focus of the organization of the educational environment students' needs. Support of curators is also a "dissatisfier". Regression rates show that some variables have little influence on overall satisfaction (such as curatorial support and social integration) but they are convenient to distinguish between more and less satisfied students.

S. Farahmandian, H. Minavand, M. Afshardost studied students' satisfaction in relation to the perception of the quality of educational services by 5 factors - advising (opportunity to get the necessary support on the educational process), curriculum, teaching quality, financial assistance and tuition costs, facilities, and found out the positive correlation between them [20].

In order to obtain information on both the satisfaction of the educational environment, in general, and on the "contribution" of separate factors to students' and teachers' satisfaction with the educational environment, following methodical tools are used: Dundee Ready Educational Environment Measure (DREEM), College and University Classroom Environment Inventory (CUCEI), Beginning College Survey of Student Engagement (BCSSE) and others.

VI. CONCLUSION

Analysis of foreign psychological studies on the problem of students' satisfaction with the educational environment allows us to conclude that the studies of the peculiarities of students' perception of the educational environment of the university are quite graded, and as a subject they capture various aspects of the educational environment: physical, social and psycho didactic. The institution of curators is defined as an independent "element" of the educational system of the university, the peculiarities of which students have a strong influence on satisfaction with the educational environment. In addition to studying students' perception of certain aspects of the functioning of the university's educational environment, such a construct as "satisfaction" is proposed, which notes both the degree of importance of the individual "component" of the educational environment, and features of the emotional coloration of these "components" for students.

REFERENCES

[1] V.Yu. Ivlev, Yu.V. Ivlev V.Yu., M.L. Ivleva, "Logical-argumentative basics of educational culture," Proceedings of 4th International Conference on Education, Language, Art and Intercultural Communication (ICELAIC 2017). Series "Advances in Social Science, Education and Humanities Research", vol. 142, pp. 173-177, 2017. DOI: 10.2991/icelaic-17.2017.38

[2] N.N. Gubanov, N.I. Gubanov and L.O. Rokotyanskaya, "Apollo's Challenge as a Driving Force in Education," Proceedings of the International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSES 2018). Series "Advances in Social Science, Education and Humanities Research", vol. 283, pp. 13-17, 2018. DOI: 10.2991/cesses-18.2018.4

[3] G.A. Kovalev, "Psihicheskoe razvitie rebenka i zhiznennaya sreda," Voprosy psihologii, no. 1, pp. 13-23, 1993

[4] G.A. Kovalev, Mental development of the child and the living environment. Questions of psychology, no. 1, pp. 13-23, 1993.

[5] V.I. Panov, Psihodidaktika obrazovatel'nyh sistem: teoriya i praktika. SPb.: Piter, 2007.

[6] V.I. Panov, Psychodidactics of educational systems: Theory and Practice, St. Petersburg: Piter, 2007.

[7] Z.Yang, B.Becerik-Gerber, L.Mino. (2013). A study on student perceptions of higher education classrooms: Impact of classroom attributes on student satisfaction and performance. Building and Environment, 70, 171-188.

[8] R.Beckers, T. van der Voordt, G.Dewulf. (2016) Learning space preferences of higher education students, Building and Environment, doi: 10.1016/j.buildenv.2016.05.013.

[9] J.Miller. (2011). Impact of a university recreation centre on social belonging and student retention. Recreational Sports Journal, 35, 117–129.

[10] M.Peterson, Mark, A.Wagner, W.Charles. (2001). The Role of Advising in Non-Returning Students' Perceptions of Their University. Journal of Marketing for Higher Education, 10(3), 45-59.

[11] N.N. Gubanov, N.I. Gubanov and L.O. Rokotyanskaya, "Factors of Black Humor Popularity," Proceedings of the International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSES 2018). Series "Advances in Social Science, Education and Humanities Research", vol. 283, pp. 379-383, 2018. DOI: 10.2991/cesses-18.2018.85

[12] N.Eduljee, R.Michaud. (2014). Student perceptions and levels of satisfaction about academic advising. International Journal of Psychosocial Research. 3. 1-12.

[13] D.Cheng. (2004). Students' sense of campus community: What it means, and what to do about it. NAPSA Journal, 41(2), 216–234.

[14] M.Hoffman, J.Richmond, J.Morrow, K.Salomone. (2003). Investigating 'Sense of Belonging' in first-year college students. Journal of College Student Retention, 4(3), 227–256.

[15] M.Meeuwisse, S.Severiens, M.Born. (2010). Learning environment, interaction, sense of belonging and study success in ethnically diverse student groups. Research in Higher Education, 51(6), 528–545.

[16] M.Baran. (2016). An Analysis on High School Students' Perceptions of Physics Courses in Terms of Gender (A Sample from Turkey). Journal of Education and Training Studies, 4(3), 150-160.

[17] K.V. Fedorov and T.R. Suzdaleva, "Discussion on Classical and Real Education in Russia in the Second Half of the 19th Century," Proceedings of the 3rd International Conference on Contemporary Education, Social Sciences and Humanities (ICCESSH 2018). Series "Advances in Social Science, Education and Humanities Research", vol. 233, pp. 97-100, 2018. DOI: 10.2991/iccessh-18.2018.22

[18] V.Yu. Ivlev, M.L. Ivleva and V.P. Sedyakin, "Information Metaphors and Classification of Information Sciences," Proceedings of the International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSES 2018). Series "Advances in Social Science, Education and Humanities Research", vol. 283, pp. 874-879, 2018. DOI: 10.2991/cesses-18.2018.193

[19] N.N. Gubanov and N.I. Gubanov, "Mental Bases of Social Solidarity," Proceedings of the International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSES 2018). Series "Advances in Social Science, Education and Humanities Research", vol. 283, pp. 998-1002, 2018. DOI: 10.2991/cesses-18.2018.219

[20] V. A. Inozemtsev, M.L. Ivleva, V. Yu. Ivlev, "Artificial intelligence and problem of computer representation of knowledge," Proceedings of the 2017 2nd International Conference on Contemporary Education, Social Sciences and Humanities (ICCESSH 2017). Series "Advances in Social Science, Education and Humanities Research", vol. 124, pp.1151-1157, 2017. DOI: 10.2991/iccessh-17.2017.268

[21] A.Gibson. (2010) Measuring business student satisfaction: A review and summary of the major predictors. Journal of Higher Education Policy and Management 32: 251–259.

[22] S.Farahmandian, H.Minavand, M.Afshardost. (2013). Perceived Service Quality and Student Satisfaction in Higher Education. IOSR Journal of Business and Management, 12, 65-74. https://doi.org/10.9790/487X-1246574.