

Research on Student Departure in Russia and the U.S.

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Abstract. Demographic perturbations plus modernizations in the economy and in education have been making student departure an ever more frequent phenomenon, particularly for colleges in economically depressed regions. Research on student departure is in its infancy in Russia, so it appears important to set the basic terminology of analysis, develop a theoretical framework with due regard for the specific features of Russian colleges, and outline the prospects of research development. This study provides an analysis of the existing terminology in research on college dropouts and an overview of the history of such research in the U. S. Analysis

of the major conceptions of student departure in sociology, psychology, organization science, and economics reveals the practicability of making allowance for a broad range of diverse factors: social and academic integration, psychological characteristics of students, organizational characteristics of colleges, and education programs. It is vital to remember, when localizing the existing models of student departure, that dropouts from Russian colleges are largely involuntary, caused by academic failures, whereas the foreign models have been designed to describe voluntary student withdrawal. The paper also gives an overview of Russian studies that can serve as a foundation for the development of a Russian model of student departure.

Keywords: postsecondary education, student departure, college dropouts, student expulsion, academic integration, organizational characteristics of colleges.

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Student departure plays an important role in colleges' economic interests and the economy as a whole, being the source of such social problems as the lack of skilled professionals or economic inequality [DesJardins, Ahlburg, McCall 1999]. Dropout rate is a key indicator of college competitiveness in the U.S., demonstrating, on the one hand, the level of college attractiveness (its ability to retain students and keep them from transferring to another college), and on the other hand, the effectiveness of its education policy in terms of student adaptation and assistance.

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I. Zhuchkova.

While studying student departure has been a long-standing tradition in international research, little attention has been paid to the issue in Russia. Some of the reasons for this include the high tertiary education attainment rate [OECD 2012] and a comparatively low rate of student expulsion. In comparison to the college dropout rate of 43% in the U.S., the Russian index is only 22%, which is nearly twice as low¹ [OECD 2010]. Another possible reason is that Russians associate high dropout rates with college selectivity and a high level of education quality [Gruzdev, Gorbunova, Froumin 2013].

However, the problem of student departure is getting more and more acute in Russia as a result of demographic changes and modernizations in both the economy and postsecondary education. It has become particularly relevant for colleges with low acceptance rates in economically depressed regions, which have been facing a decrease in education quality and a reduction in public funding over the recent years.

The number of empirical and theoretical studies on student departure has been growing in Russia over the last decade. Most studies are descriptive, analyzing particular colleges, and devoid of any theoretical framework. Since the field of research on student attrition is only in its infancy in Russia, it appears important to set the terminology for describing the phenomenon and develop a theoretical framework considering the specific aspects of Russian higher education. This requires generalizing the results of existing Russian studies on student departure while making allowances for the international findings. This article aims to provide a review of studies on student departure in Russia and abroad in order to find the major reasons for student withdrawal and identify the factors that have been qualified as significant in both foreign conceptions and Russian studies. The findings of this study will provide the foundation for building a theoretical model of student departure in Russia. They will be advantageous to researchers designing such models and studying the factors of academic success/failure and dropout. The results can also be applied in practice by college faculty charged with managing the educational process and who are interested in developing a policy to improve educational outcomes and reduce the expulsion rates.

The article is structured as follows. The first section introduces the terms in which student departure is discussed in foreign and Russian studies. The second section outlines the main stages in the development of empirical research and student departure theories in the U.S., where the phenomenon has been studied for over 80 years. The third section dwells into some of the theories describing student departure

¹ This statistical data is applicable to tertiary-type A programs that are designed to provide sufficient qualifications for entry to advanced research programs and professions with high skill requirements. Such programs normally require 4–5 years of study.

from the perspectives of sociology, organization science, psychology, and economics. Next, the major Russian studies on college dropouts are analyzed. Finally, the closing section offers some prospects of research on student departure in Russian colleges, including the development of a theoretical framework, conducting institutional studies, and building a national database to analyze college dropouts.

Terminology of Student Departure

Foreign researchers use different terms to describe student departure, which can be explained by the variety of educational trajectories. These trajectories can be grouped into three large categories, depending on whether a student remains in the college, leaves it but continues studying in another college, or leaves the college and never resumes his/her studies [Habley, Bloom, Robbins 2012]. The term persistence is used to refer to the first category, meaning that students, once admitted, keep attending the selected college. Some authors prefer restricting the term to full-time students who graduate on time. The second category includes students committed to obtaining higher education; however, their studies are discontinuous as they may transfer from one college to another or obtain their degree later than planned. Existing publications describe a few types of students within this category: (i) part-time students and a subcategory of slowdown students, who make a transition between full-time and part-time studies; (ii) transfer students, who transfer from one four-year college to another or from a four-year to a two-year college; (iii) stopouts, who take a short break from their studies and resume them later; and (iv) swirling students, who enroll for more than one college to obtain a degree. Students in the third category—those who leave college and never complete their education—are most often referred to as dropouts. Alexander W. Astin defines this category as students who are not enrolled in college, have not obtained a degree, and do not seek to obtain it anymore [Astin, 1975].

The terms retention and attrition, related to the institutional characteristics, are used for a generalized description of a student cohort [Habley, Bloom, Robbins 2012]. Retention normally denotes students progressing to the next year, whereas attrition, accordingly, refers to students who have not progressed to the next year. Other interpretations of these terms can be found, which indicate completing a degree or a specific course instead of an academic year, or even achieving a specific education goal. Graduation and completion are synonymous to retention and are used most frequently in university management.

Russian researchers have not yet developed a unified terminology to describe student departure, mostly using terms like “expulsion/exclusion”, “academic mobility”, or “incomplete higher education” when referring to the phenomenon [Gruzdev, Gorbunova, Froumin 2013]. They also sometimes use the notion of “attrition”, thus focusing on the

involuntary nature of student departure, which is a predominant trend in Russian tertiary education [Ibid.].

This study will use the term “student departure”, which is rather neutral (not emphasizing the voluntary/involuntary nature of departure) and suitable for describing various educational trajectories (whether a student departs temporarily or definitively).

The History of Research on Student Departure in the U.S.

The key eras in research on student departure in the U.S. are analyzed below to trace how the focus of research has changed over time and what college- and society-related transformations have prompted those changes.

The first publications devoted to student departure appeared in the U.S. in the 1930s and were purely descriptive. The most well-known study of that period was performed by John Hamilton McNeely, who analyzed data from 25 universities—11 private and 14 public—in different states to make inferences about peculiarities of student departure depending on the type of college (private or public), student age and gender, selected major, year of study, college location, and other factors [McNeely 1937].

The next era of research unfolded in the 1960s, as the end of World War II prompted the increase in postsecondary education opportunities for the middle and lower classes as well as for ethnic minorities [Seidman 2012]. Such students would bring a low level of academic attainment to college, so the successful completion rates were very low. As dropout rates spiked, universities began to develop student retention and academic assistance strategies. Studies conducted back then prioritized individual psychological characteristics of students over the institutional characteristics of colleges among the factors affecting student departure [Ibid.].

The 1970s gave rise to theories of student departure, in particular the conceptions of William Spady [Spady 1970] and Vincent Tinto [Tinto 1975], built around Emile Durkheim’s sociological model of suicide. The central concept of their theories was the level of academic and social integration that affected students’ retention decisions. Tinto’s theory has been the most recognized one to date.

U.S. college enrollment rates had begun to decline by the end of the 1970s, so colleges resorted to management, marketing and recruiting practices [Demetriou, Schmitz-Sciborski 2011]. Throughout the next decade, student retention was given paramount importance in strategic college planning.

Most publications from the 1990s are dedicated to the peculiarities of dropout among students of different races and ethnicities, representatives of minorities and low socioeconomic status backgrounds. Many of the studies from that period analyzed the heterogeneity of student composition and sought measures to maintain cultural diversity in colleges in order to increase student retention [Swail 2004].

For example, Tinto argues that dropouts and retention policies should be analyzed separately for African-Americans, students from low-income backgrounds, older students, and transfer students, since they all have had different experiences [Tinto 1993]. In the second half of the 1990s, researchers zeroed in on the transition from high school to college, and many studies sought to find the most effective ways of supporting students during the transition period. Recommendations included augmenting the interaction among college departments responsible for admission, academic assistance and the educational process as well as using the most efficient methods of academic consulting.

A holistic approach to research on student departure has prevailed since the late 1990s [Demetriou, Schmitz-Sciborski 2011]. Studies on student retention stress the need to consider and optimize the interaction between students and instructors, education program managers, academic supervisors, peers, and other meaningful college agents, as these interactions are related to dropouts. Tinto [Tinto 2004] believes that colleges should offer academic, social, and psychological support to students if they want to increase their degree completion rates.

Therefore, the evolution of the theory of student departure in the U.S. is characterized by a constantly growing engagement of colleges in this field of research, emergence of theoretical conceptions explaining college dropouts, integration of research findings in college activities, and growing interaction among all educational process participants with a view to improving student retention.

The Theory of Student Departure: International Findings

Theories of student departure exist in economics, sociology, organization science, and psychology [Habley, Bloom, Robbins 2012]. By providing a review of the major conceptions in each domain, this study does not seek to embrace every theory but to present the key avenues of research on the issue as well as the main categories of the factors analyzed. For a more detailed description of the theories of student departure, see, for instance, [Melguizo 2011; Seidman 2012].

Sociological theories analyze student departure in terms of social structures and forces, attending an academic environment, family status, early socialization patterns, and support from significant others. The most prominent sociological conceptions include the theory of Joseph B. Berger, who uses the concept of cultural capital to analyze the dropout process [Berger 2000], the cultural perception of George D. Kuh and Patrick G. Love [Kuh, Love 2000], and Tinto's student integration theory [Tinto 1975; 1993].

Tinto's theory, proposed in 1975 and later revised by the author [Tinto 1993] as well as other researchers, has been the most recognized. Tinto examines the mechanisms of student departure on the analogy of egoistic suicide, which is committed, according to Durkheim, when an individual does not share all the norms and values of

her/his social group. Tinto sees university as a system with a value and social structure of its own. He points out that social factors affecting student retention are similar to the causes of egoistic suicide in Durkheim's model, i. e. insufficient interaction with other individuals in college and inconsistencies between the values of students and those of the college community. Insufficient social integration results in a low level of commitment to the system, increasing the probability of deciding to leave. In addition to social integration, an important role is played by academic integration, i. e. the extent to which students comply with the educational requirements imposed by the college. Insufficient integration of any type leads to dropout, Tinto believes. At the same time, excessive integration in any of the two environments may result in the lack of integration in the other and thus lead to dropout as well.

Apart from academic and social integration, Tinto's model includes variables of a student's past experience: social status, school experience, place of residence, and individual characteristics such as gender, race, ethnicity, or competencies. Other important elements of the model include motivation, learning expectations (the degree that a student expects to obtain), and institutional obligations (e. g. the obligation to pay tuition fees, the commitment to studying in a particular college or an institution of a particular type). The integration theory revolves around student interaction with the academic and social systems of the college, which results in changes in the individual's goals and institutional obligations, which, in their turn, may lead to various forms of dropout. Therefore, although the goals and institutional obligations that students bring to college are significant components of their academic integration, the processes in which they engage in college are way more important in terms of persistence/departure. Whether a student decides to leave or stay is determined by their daily interactions with professors, administrators, other college staff, and peers in formal and informal domains of the academic and social systems, as well as by how students perceive and assess these interactions.

The integration model analyzes departure from a particular college, not higher education as such, which makes it institutional and not systemic.

Tinto's integration theory remains the most influential and widespread theoretical framework for research on student departure [Melguizo 2011]. Yet, it has a number of limitations. First, it must be acknowledged that empirical confirmation of its ideas has been rather poor [Braxton, Sullivan, Johnson 1997]. Second, Tinto gives very broad definitions of academic and social integration and does not offer any reliable and valid measurement instrument, so authors of empirical studies operationalize these concepts variedly and their findings are difficult to compare [Braxton 2000]. Third, the integration theory leaves unattended a number of factors that are potentially important

for building the educational trajectories: changes in the education funding system on the state and national level, technology advances that are changing the face of student-teacher interaction, and other external processes affecting college activities [Ibid.]. Fourth, Tinto's theory does not exclude possible effects of student self-selection: levels of academic and social integration may be determined by the individual characteristics that students bring to college. Fifth, the theory does not take into account the peculiarities of "unorthodox" students (older students, two-year college students, part-time students, etc.), who attach more importance to employment, family relationships and financial status, or the specific aspects of academic integration of ethnic minorities [Braxton, Sullivan, Johnson 1997; Kuh, Love 2000].

As we can see, one of the limitations of Tinto's theory consists in underestimating the external factors. An attempt to overcome this limitation was made by the theory of student attrition proposed by John P. Bean [Bean 1980], who focused on the organizational characteristics. Taking his cue from Tinto, Bean approaches student departure as a complicated, long-term process, in which student interaction with the social and academic systems of the college is the central factor. Bean, however, draws attention to the effects of factors extrinsic to learning, such as family obligations, the need to work, availability of funds to pay tuition fees, and chances of transferring to another college. Learning satisfaction is thus the basic concept affecting retention decisions in his model.

Bean's model is rarely used in research on student departure as a self-sustainable theoretical framework, rather being coupled, for example, with Tinto's model [Cabrera, Nora, Castaneda 1993].

Along with sociological theories, the factors and patterns of college dropouts are also explained by psychological conceptions that make allowance for the characteristics and processes on both individual and college levels. One of the most popular psychological theories was put forward by John P. Bean and Shevawn B. Eaton [Bean, Eaton 2001]. The authors identify four psychological qualities that promote academic integration of students: self-confidence, healthy coping behavior, self-efficacy, and internal locus of control. When highly-effective students face academic or social challenges in college, they keep pursuing their goal instead of quitting. Self-confident students have no doubts about their success, while their less confident peers give up when difficulties get in their way. Students with an internal locus of control are convinced that they are in control of the situation, whereas externally-oriented students surrender to fate and withdraw from college once they start having troubles with studies or social relations.

Student motivation is another crucial psychological trait used to explain educational outcomes. One of the best-known theories of motivation was proposed by Edward L. Deci and Richard M. Ryan. According to their self-determination model, intrinsic motivation associated with inherent interest for the subject of study correlates positive-

ly with academic achievements, while extrinsic motivation propelling students to seek rewards or avoid punishment shows a negative correlation up to the point where the external regulations for specific behavior get internalized [Deci, Ryan 1991].

Other psychological theories use different constructs to explain student departure, e. g. goal-setting theory, Vroom's expectancy theory, or optimism (for an overview, see [Demetriou, Schmitz-Sciborski 2011]).

In economics, student departure is mostly analyzed in terms of the human capital theory [Becker 1964]. Students drop out when they perceive the costs of studying at a particular college as exceeding the benefits. The costs include tuition fees and missed revenues, while the benefits comprise future remuneration, acquisition of additional skills and knowledge, and life satisfaction.

We have covered the key avenues of research on student departure, having discriminated among the sociological, psychological, organizational and economic perspectives. One of the current trends in this field is about creating interdisciplinary conceptions. For example, John M. Braxton and Amy S. Hirschy brought together Tinto's ideas and empirical findings of the organizational, psychological and economic theories to construct separate models for residential and commuter colleges [Braxton, Hirschy 2005]. The residential college model is focused on the traditional criteria of college admission: academic skills, level of pre-college attainment, ethnicity, gender, parental education, and socioeconomic status. The commuter college model, on the other hand, is built around psychological factors [Habley, Bloom, Robbins 2012].

**Search on
Student
Departure in
Russia**

There have been very few studies on student departure in Russia so far. The earliest, conducted in the 1960s, analyzed the magnitude and causes of dropouts from Sverdlovsk colleges [Rutkevich 2002]: the authors examined the proportion of expelled students depending on college type, major, attainment level, year of study, and mode of study (full-time or part-time).

The topic remained outside the focus of researchers for quite a while. It was not until the early 21st century that the first publications on Russian college dropouts began to appear. The majority of them represent descriptive analysis of data from a particular college. For instance, administrative data on six departments of Moscow State University was used to analyze the likelihood of getting excluded depending on such student characteristics as gender, age, place of residence, and mode of study. Students in the selected departments were asked to assess the factors they believed to be crucial in determining the likelihood of exclusion [Chudinovskikh, Donets 2004]. The magnitude and factors of college dropouts were later analyzed on the sample of students enrolled in the MSU in 1993–2001 with due regard for

the economic costs of expulsion [Donets 2011]. The study investigates the likelihood of dropout due to either expulsion or stopout, using cohort analysis for calculations. A number of studies analyze the correlation between student departure and specific student characteristics like USE² scores [Timofeeva, Avrunev 2016] or intelligence [Bodryakov, Nigmatullina, Fomina 2009].

Along with descriptive studies, there are studies that use regression models to assess the effects of a confluence of factors on student departure. For instance, both descriptive analysis of event occurrence and the Cox regression model were used to measure the dropout rate and identify the factors increasing the risk of dropping out from the Higher School of Economics in Moscow. The study tested such variables as age of college entrance, gender, field of studies, mode of admission, state- or self-funded status, USE scores, the fact of having a gold medal for high-school achievements, and place of residence before entering the college [Kolotova 2011]. Modern Russian researchers use Tinto and Bean's models in their studies, in particular to assess how academic adaptation of students affects the likelihood of getting expelled at the end of the first year [Gorbunova 2013]. The author was the first to integrate information from colleges' administrative databases with results of sociological surveys of students to analyze student departure, as well as the first to use structural equation modelling in studying college dropouts in Russia. The findings have confirmed the hypotheses about direct and indirect (attainment-mediated) influence of academic adaptation on student exclusion as well as direct effects of social adaptation. A significant positive correlation between risk acceptance and probability of expulsion was revealed based on student data from a highly-selective Russian university [Kochergina, Prakhov 2016]. The authors believe that risk attitude as an individual student characteristic may influence the process of academic integration (e.g. students more inclined to risk find themselves poorly integrated in the academic system) and determine how successful it is. Olga Kondratjeva and her co-authors analyze the factors of student departure using administrative data from two Russian and eight American colleges. The authors use Clifford Adelman's theory of academic momentum [Adelman 1999, 2006] as a theoretical framework and examine the following indicators of academic momentum: delayed college entry, reporting one's major soon after enrollment, first-year grades, changes in grades, taking remedial courses, and learning persistence during the first period of college studies (number of units or credits obtained). Analysis results demonstrate that higher levels of academic momentum reduce the likelihood of getting expelled, but this correlation is contingent on college selectivity, student gender, and the field of study [Kondratjeva, Gorbunova, Hawley 2017].

² Unified State Examination

A recent study uses network analysis methods to see how the dynamics of peer relationships correlate with academic failure [Valeeva, Dokuka, Yudkevich 2017]. The authors have confirmed the hypothesis on social isolation of students with low levels of educational attainment. Students without academic arrears tend to form stable and long-lasting relationships with one another during the academic year, whereas students with unfulfilled assignments are classified less and less often as friends by their peers and establish fewer and fewer contacts over time. Empirical evidence shows that friendly relations between successful students and low achievers are very likely to be broken off within a year.

Occasionally, some studies use qualitative data to analyze student departure, e. g. the role of faculty in college dropouts [Gruzdev 2013]. Foreign theories pay little attention to qualitative data, most studies in the field being focused on examining student departure through the individual characteristics of students. Using the results of unstructured interviews conducted in four Russian colleges of different types, the author provides a classification of attitudes that faculty members tend to adopt in assessing students. The typology is based on three criteria: requirement-oriented selection (how strictly a teacher follows the course program requirements when assessing students), characteristic of the institutional culture (student assessment and expulsion criteria prevailing in the academic community of their department), and perception of the institutional culture (whether a teacher shares the student assessment and expulsion criteria prevailing in the academic community of their department). Ivan Gruzdev describes six possible teacher roles in student assessment: “gardener”, “fan of make-up tests”, “forest generalist”, “quota allocator”, “cultivator of ‘A’ students”, and “Mr. Nice Guy”. According to the author, various ratios of these roles in faculties may explain the differentiation of departments (or majors) by the dropout rate.

Discourse analysis of semi-structured interviews with instructors in nine other Russian colleges provides grounds for consolidating all the student departure narratives into a metaphor of a trial, with discrimination among the discourse of a prosecutor, that of a judge, and that of a lawyer [Terentyev, Gruzdev, Gorbunova 2015]. On the whole, the teacher discourse is always denunciative with regard to students. This is most clearly seen in the prosecutor’s discourse, yet the other two versions also place the responsibility for dropouts on students.

Elena Gorbunova, Olga Kondratjeva, and Joshua D. Hawley assessed the factors of departure among students of engineering and economic majors based on semi-structured interviews with college faculty, administrators, and dropouts of one American and two Russian high-selectivity colleges. The authors identify two groups of factors describing the causes of student departure: those related to challenges in academic integration (low level of high school attainment, difficult course program, inconsistencies between college and high

school teaching methods and learning standards, overestimation of one's academic competencies, and insufficient diligence) and those related to their psychological characteristics. Results of the interviews with dropouts indicate that the conflict of interests between learning and other spheres of student life as well as changes in a student's priorities amidst the learning process lie at the heart of academic failure and student departure [Gorbunova, Kondratjeva, Hawley 2016].

As can be seen from the above, the field of research on college dropouts in Russia is at its infancy stage. Yet, the available findings are enough to assert that the significant factors of student departure in Russia include individual student characteristics (gender, age, level of high school attainment, diligence, and academic performance), faculty attitudes toward student assessment, college policies for managing poor performance, social environment of students, and institutional parameters (college selectivity, selected major). Meanwhile, the psychological mindset of today's students is characterized by finding one's own identity in both personal and professional development as a vital goal of college education.

**The Prospects of
Research on
Student Departure
in Russia: Theoretical
Framework,
Data, and
Objectives**

This study provides an overview of terminology used to describe student departure, the major stages of student departure research in the U.S., and the most influential theories in sociology, psychology, economics, and organization science.

The overview of foreign theories allows grouping the factors of student departure into three categories: individual characteristics that students bring to college (social status, gender, ethnicity, race, family and financial status, competencies, and level of high school attainment), characteristics of the learning process (academic and social integration, changes in learning motivation, coping behavior, and learning satisfaction), and institutional characteristics (college selectivity, course difficulty, etc.). Having an idea of the factors of student departure, colleges can develop policies to provide academic, social and psychological support to their students.

There has been a rapid growth in the number of Russian studies on student departure lately. Most publications are descriptive, analyzing data from particular colleges, and devoid of any theoretical framework. However, more and more studies elaborate the concept of Russian college dropouts, compare data from several colleges, conduct comparative analysis of college dropouts in Russia and abroad, and use advanced methods of data analysis.

It is becoming an urgent necessity to develop the theoretical framework of research on student departure in Russia. Such a framework certainly can include elements of foreign theories, yet allowance should be made for the peculiar aspects of Russian colleges. Unlike in the U.S. system of postsecondary education (which is at the heart of most existing conceptions of student departure), where decisions

to withdraw are largely taken by students voluntarily, Russian students are much more often expelled as a result of an academic failure. Consequently, the model for Russian colleges should prioritize factors that affect academic performance and the probability of encountering difficulties in learning. The model may include processes of social and academic integration but probably not as its primary factors. Data for developing the model of student departure in Russia can be obtained from Russian studies on college dropouts, including those that use qualitative methods (interviews with students, college faculty, and administrators). Development of such a model implies defining exactly the subject of research, i. e. which of the events that can be classified as student departure is meant in each specific case: withdrawal from college, stopout, suspension, etc.

Institutional research on particular colleges appears to be a promising avenue of study in the field of student departure. Such studies can use administrative databases containing information on student enrollment (sociodemographic characteristics, admission test results, high school grades) as well as the educational process and outcomes (academic load, educational attainment and its dynamics). This data does not allow for taking into account all the factors affecting college dropouts, but analysis results can be used by college administrators to predict which students are likely to be at risk of exclusion and develop student retention policies. Such results can be complemented with data from interviews with various agents of the educational process in a particular college.

Creating an information database is an important task in the context of promoting Russian research on student departure. Some countries possess centralized databases aggregating the history of student enrollment and studies from a few colleges, often a category of colleges. For example, the Higher Education Information System in the U.S. contains the individual characteristics of students in all state-supported Ohio colleges and universities. It includes detailed demographic, enrollment, course and financial aid data on every student. Developing a similar database in Russia would make it possible to obtain representative data on the trends of student departure as well as propose initiatives to reduce dropout rates on a national level.

Organization of national longitudinal surveys of Russian college students will allow for analyzing a wider range of dropout factors and test the theoretical models of student departure. Some projects of this kind have already been initiated. The intercollege research project Trajectories and Experience of Russian University Students (TERUS)³ is being implemented as leading universities are networking under Project 5–100. TERUS is an annual survey of college students, from freshmen to seniors, which is complemented with administrative data

³ https://ioe.hse.ru/collaborative_project/about

on educational attainment, student allowance, and financial aid. Data has been collected since 2015 and will continue to be gathered until 2020. Within a few years, this data can be used to analyze the factors of academic performance and dropouts in Russian colleges. It is advisable to start longitudinal studies of this type in secondary school, e. g. from the eighth grade, as in the USA's National Educational Longitudinal Study⁴, or senior grades, as in the USA's High School & Beyond⁵, in order to take due account of additional factors that could potentially have an impact on student departure: the influence of parents and peers on educational trajectories, characteristics of school experience, career and educational aspirations at such crucial transition moments as finishing the eighth grade, taking exit examinations, or entering college.

Therefore, the most promising avenues of research on student departure in Russia appear to consist in designing the theoretical framework, conducting institutional studies on college dropouts to enhance the educational process quality, and developing the research database (creating a cumulative base of administrative data from public colleges on every student's history of studies and organizing national student surveys).

References

- Adelman C. (1999) *Answers in the Tool Box: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment*. Washington, DC: U. S. Department of Education.
- Adelman C. (2006) *The Toolbox Revisited: Paths to Degree Completion from High School through College*. Washington, DC: U. S. Department of Education.
- Astin A. W. (1975) *Preventing Students from Dropping out*. San Francisco: Jossey-Bass.
- Bean J. P. (1980) Dropouts and Turnover: The Synthesis and Test of a Causal Model of Student Attrition. *Research in Higher Education*, vol. 12, no 2, pp. 155–187.
- Bean J., Eaton S. B. (2001) The Psychology Underlying Successful Retention Practices. *Journal of College Student Retention: Research, Theory and Practice*, vol. 3, no 1, pp. 73–89.
- Becker G. S. (1964) *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*. New York: National Bureau of Economic Research.
- Berger J. B. (2000) Optimizing Capital, Social Reproduction, and Undergraduate Persistence: A Sociological Perspective. *Reworking the Student Departure Puzzle* (ed. J. M. Braxton), Nashville, TN: Vanderbilt University, pp. 95–124.
- Bodryakov V., Nigmatullina E., Fomina N. (2010) K voprosu o vliyaniy struktury intellekta po Amthauer na otchisleniya studentov matematicheskogo fakulteta URGPU postupleniya 2006 g. [To the Question of the Influence of the Amthauer Intelligence Structure on the Expulsion of Students of the Mathematical Faculty of the Ural State Pedagogical University Enrolled in 2006].

⁴ <https://nces.ed.gov/surveys/nels88/>

⁵ <https://nces.ed.gov/surveys/hsb/>

- Proceedings of the V Regional Research-to-Practice Conference "Kolmogorov Reading—2009" (Vladikavkaz, February 12–16, 2009). P. 32–37.
- Braxton J. M. (ed.) (2000) *Reworking the Student Departure Puzzle*. Nashville, TN: Vanderbilt University.
- Braxton J. M., Hirschy A. S. (2005) Theoretical Developments in the Study of College Student Departure. *College Student Retention. Formula for Student Success* (ed. A. Seidman), Westport, CT: American Council on Education / Praeger, pp. 61–87.
- Braxton J., Hirschy A. (2004) Reconceptualizing Antecedents of Social Integration in Student Departure. *Retention and Student Success in Higher Education* (eds M. Yorke, B. Longden), Buckingham, UK: Open University, pp. 89–102.
- Braxton J. M., Sullivan A. V., Johnson R. M. (1997) Appraising Tinto's Theory of College Student Departure. *Higher Education: Handbook of Theory and Research. Vol. 12* (ed. J. C. Smart), New York: Agathon, pp. 107–164.
- Cabrera A., Nora A., Castaneda, M. (1993) College Persistence: Structural Equations Modeling Test of an Integrated Model of Student Retention. *The Journal of Higher Education*, vol. 64, no 2, pp. 123–139.
- Chudinovskikh O., Donets E. (2004) *Vozmozhnosti i ogranicheniya zaversheniya obrazovaniya v elitnom vuze: na primere Lomonosov State University* [Opportunities and Limitations of the Completion of Higher Education in an Elite University: The Example of the Lomonosov Moscow State University]. Moscow: MAKS.
- Deci E. L., Ryan M. R. (1991) A Motivational Approach to Self: Integration in Personality. *Nebraska Symposium on Motivation. Vol. 38* (ed. R. Dienstbier), Lincoln, NE: University of Nebraska, pp. 237–288.
- Demetriou C., Schmitz-Sciborski A. (2011) Integration, Motivation, Strengths and Optimism: Retention Theories Past, Present and Future. Proceedings of the 7th National Symposium on Student Retention, Norman, OK: University of Oklahoma, pp. 300–312.
- Des Jardins S. L., Ahlburg D. A., McCall B. P. (1999) An Event History Model of Student Departure. *Economics of Education Review*, vol. 18, no 3, pp. 375–390.
- Donets E. V. (2011) Opyt issledovaniy studencheskikh otchisleniy na primere MGU [Practices in the Study of Expulsion of Students by the Example of Moscow State University. *Monitoring universiteta*, no 6, pp. 33–38.
- Gorbunova E. (2013) Vliyanie adaptatsii pervokursnikov k universitetu na veroyatnost ikh otchisleniya iz vuza [Impact of Adaptation of First-Year Students to the University on the Probability of their Expulsion from the University]. *Universitas*, no 2, pp. 59–84.
- Gorbunova E., Kondratjeva O., Hawley J. (2016) Izuchenie faktorov vybytiya studentov iz vysokoselektivnykh vuzov Rossii i USA [Studying of Students' Withdrawal Factors from Highly Selective High Schools of Russia and the USA]. Proceedings of the VII Moscow International Conference of Higher Education Researchers "University between Global Challenges and Local Commitments", Moscow: HSE, pp. 87–91.
- Gruzdev I. A. (2013) The Role of Teachers in Dropping out of Students: An Empirical Study on the Example of four Russian Universities. *Universitas*, no 2, pp. 45–58.
- Gruzdev I., Gorbunova E., Froumin I. (2013) Studencheskiy otsev v rossiyskikh vuzakh: k postanovke problemy [Academic Dismissal in Russian Higher Education Institutions: Defining the Problem]. *Voprosy obrazovaniya / Educational Studies. Moscow*, no 2, pp. 67–81.

- Habley W. R., Bloom J. L., Robbins S. (2012) *Increasing Persistence: Research-Based Strategies for College Student Success*. San Francisco, CA: Jossey-Bass.
- Kochergina E., Prakhov I. (2016) Vzaimosvyaz mezhdru otnosheniyem k risku, uspevaemostyu studentov i veroyatnostyu otchisleniya iz vuza [Relationships between Risk Attitude, Academic Performance, and the Likelihood of Dropouts]. *Voprosy obrazovaniya / Educational Studies Moscow*, no 4, pp. 206–228. DOI: 10.17323/1814-9545-2016-4-206-228
- Kolotova E. V. (2011) Izuchenie otchisleniy sredi studentov bakalavriata/spetsialiteta HSE [Studying of Expulsion among Students of Bachelor's Degree / Specialist's Degree of HSE]. *Sotsiologicheskie metody v sovremennoy issledovatel'skoy praktike* [Sociological Methods in Modern Research Practice] (ed. O. A. Oberemenko), Moscow: HSE, pp. 271–279.
- Kondratjeva O., Gorbunova E., Hawley J. D. (2017) Academic Momentum and Undergraduate Student Attrition: Comparative Analysis in US and Russian Universities. *Comparative Education Review*, vol. 61, no 3, pp. 607–633. <https://doi.org/10.1086/692608>
- Kuh G. D., Love P. G. (2000) A Cultural Perspective on Student Departure. *Reworking the Student Departure Puzzle* (ed. J. M. Braxton), Nashville, TN: Vanderbilt University, pp. 196–212.
- McNeeley J. H. (1937) *College Student Mortality*. U. S. Office of Education Bulletin № 11. Washington, DC: US Government Printing Office.
- Melguizo T. (2011) A Review of the Theories Developed to Describe the Process of College Persistence and Attainment. *Higher Education: Handbook of Theory and Research* (ed. J. C. Smart), New York: Agathon, pp. 395–424.
- OECD (2010) *Education at a Glance 2010: OECD Indicators*. Paris: OECD.
- OECD (2012) *Education at a Glance 2012: OECD Indicators—Russian Federation*. Paris: OECD.
- Rutkevich M. (2002) *Sotsiologiya obrazovaniya i molodyozhi: izbrannoe (1965–2002)* [Sociology of Education and Youth: Favorites (1965–2002)]. Moscow: Gardariki.
- Ryan R. M., Deci E. L. (2000) Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, vol. 25, no 1, pp. 54–67.
- Seidman A. (2012) *College Student Retention: Formula for Student Success*. Lanham, MD: Rowman & Littlefield.
- Spady W. G. (1970) Dropouts from Higher Education: An Interdisciplinary Review and Synthesis. *Interchange*, vol. 1, no 1, pp. 64–85.
- Swail W. S. (2004) *The Art of Student Retention: A Handbook for Practitioners and Administrators*. Austin, TX: Educational Policy Institute.
- Terentyev E., Gruzdev I., Gorbunova E. (2015) Sud idet: diskurs prepodavately ob otseve studentov [The Court Is Now in Session: Professor Discourse on Student Attrition]. *Voprosy obrazovaniya / Educational Studies Moscow*, no 2, pp. 129–151. DOI: 10.17323/1814-9545-2015-2-129-151
- Timofeeva A., Avrunev O. (2015) Otchisleniya studentov v protsesse obucheniya: obyasnitel'naya sila USE [The Expulsion of Students during the Learning Process: The Explanatory Power of the USE]. *My prodolzhaem traditsii rossiyskoy statistiki. I Otkryty rossiyskiy statisticheskiy kongress* [We Continue the Tradition of Russian Statistics. I Open Russian Statistical Congress], Novosibirsk: Russian Association of Statisticians; Federal Service of State Statistics and the Russian Federation; Novosibirsk State University of Economics and Management, pp. 133–140.
- Tinto V. (1975) Dropout from Higher Education: A Theoretical Synthesis of Recent Research. *Review of Educational Research*, vol. 45, no 1, pp. 89–125.

- Tinto V. (1993) *Leaving College: Rethinking the Causes and Cures of Student Attrition*. Chicago: University of Chicago.
- Tinto V. (2004) *Student Retention and Graduation: Facing the Truth, Living with the Consequences*. Washington, D.C.: The Pell Institute.
- Valeeva D., Dokuka S., Yudkevich M. (2017) Razryv družheskikh svyazey pri akademicheskoy neuspekhe: sotsial'nye seti i peresdachi u studentov [How Academic Failures Break Up Friendship Ties: Social Networks and Retakes]. *Voprosy obrazovaniya / Educational Studies. Moscow*, no 1, pp. 8–24. DOI: 10.17323/1814-9545-2017-1-8-24