Trajectories of Building a Career of a Teacher within Academic Competition

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Abstract
The article analyzes the values, motives, preferences and expectations of teachers of Russian universities through the prism of the choice of the trajectory of building their career. The sample for the study was formed by 36 experts – the representatives of the academic staff of Russian universities, who took part in a focus group survey. In order to validate the presented toolset, the results of the focus group interview were concretized with the data of in-depth interview, which made it possible to formulate a description of the limitations and possibilities in achieving the career goals of teachers in higher education. According to the results of the study, it has been concluded that the career strategies of a university lecturer are based on the intersection of three areas: advance of academic degree and academic title; obtaining an administrative position within the framework of “merit system”. Based on the survey materials, the time, financial and emotional costs of building a career have been determined. The assessment of the degree of their “payback” is differentiated depending on the level of motivation, personal ambitions and a number of other conditions. The utmost effectiveness and justification of costs is achieved at the intersection of two career trajectories (degree and merit), which is due to the devaluation of the value of the administrative resource. The stereotypes and value-normative attitudes of the academic staff in some cases block the mechanisms of the university’s motivational policy. The article reveals the role of institutional factors determining the process of building a teacher’s career, defines the significance of such aspects as value-normative, motivational-stimulating, synergistic.

Keywords: university teachers, academic competition, rating system, personnel policy, career strategies, salary, research chops.

1. Introduction
Modern trends in the development of higher education lead to significant transformations in the academic career of university lecturers (King, 2004; Must, 2006). The inclusion of universities in the rating race (Mautner, 2005; Salmi, 2013; Altbach et al., 2011), the change in the performance
indicators of higher-education teaching personnel (Vinkler, 2008; Reitz, 2017) leads to the need to build flexible career trajectories and strategic planning of career growth.

The introduction of innovations in education and economy, the removal of the state’s economy from the protracted crisis, the development of production capacity (Frolova, Rogach, 2017) addresses the issue of “filling the staff hunger” through improving the quality of scientific and educational activities of faculty of universities (Mulyukin, 2012). The system of education is not purely market-based and it produces primarily public goods that cannot be assessed in the market coordinates of efficiency, with the result that the assessment of the performance of such organizations is based on artificially created criteria (Volchik, 2013).

This situation is reflected in the requirements for the activity of the teaching staff of educational organizations, obliging academic staff to increase their competitive advantage in the global scientific space (Kirillova, Soloshenko, 2012). At the same time, the main indicators of academic competitiveness are bibliometric indicators such as the publication activity of scientists and the number of citations that ensure recognition of the results of their scientific works by the international scientific community (Markusova, 2008).

The change of the vector from the traditional teaching profession of higher education workers towards increasing their research potential has led to the expansion of the content of the academic profession. According to a number of scientists, the teaching profession in the organization of higher education is not similar in its content to the profession of a research, since its function primarily involves working with students to generate new specialists (Hammersle, 1993). The teacher and the researcher appeal to different value systems, which requires their deliberate integration in new conditions (Teelken 2012; Ylijoki et al., 2013). In addition, the expectations around academic success due to the transformation of the foundations of higher education also change, which requires early career building (Kathryn, 2015).

The contracts concluded by the employees of higher education are not typical for other areas of business. The main difference lies in the principles that they reflect: in particular, the contracts of academic personnel rely on the principle of “up-or-out” (Song, 2008) in order to combat archaic and inert teachers and scholars (Abramov, 2011). This means that in developed countries, higher school teachers who increase their performance receive guarantees of lifetime employment, whereas in the case of a lack of positive dynamics, they are forced to leave the university (Dickinson, 2008). The specificity of such contracts consists, firstly, in the fact that they imply a long trial period of 3-5 years; secondly, at the end of this period, a decision is made on permanent employment (Corcoran, Goldhaber, 2013). In conditions of limited number of vacancies and high competition for them among professors, the personnel policy of life-long employment ensures the stability of the teacher’s workplace, organizational commitment (O’Flaherty, Siow, 1991; Peterson, 2007).

Academic career paths in Europe are heterogeneous, and the chances of becoming a permanent member of the academic profession in the early stages of a career differ from country to country (Höhle, 2015). In some countries, employment prospects are highly volatile. For example, in Russia, labor contracts are concluded for a period of not more than 5 years, usually for 1-2 years. The lack of stability in the workplace ensures a high level of competition between university lecturers and a general fear of being dismissed (Rogach et al., 2016).

In this context, the intersection of formal and informal norms that determine the specificity of the construction of career trajectories acquires special significance (Bartunek et al., 2008). In developed countries, the approach to building career strategies has undergone a number of changes over time. Initially, it is customary to associate competitive mobility with formal rules and regulations adopted within the university community (Turner, 1960). Later, an alternative “model of the tournament” was proposed, according to which the teacher’s career was based on the principle of “knockout competition” (Rosenbaum, 1984). In modern conditions, the basis for building career strategies is the ratio of remuneration and costs, which determines the degree of individual involvement into academic competition.

Another innovation is the introduction of an effective contract, which, in addition to the traditional employment contract, includes consideration of the teacher’s performance and creativity (Zamarro et al., 2015; Podgursky, Springer, 2007). The experience of developed countries in using the system of incentive payments to the teachers of higher education indicates a
relationship between the attitude to online ratings and age and gender characteristics of university professors (Goldhaber, Walch, 2012).

Building a career as a university teacher in the framework of the modern concept of “adaptive career” presented by R.Kh. Waterman, J.A. Waterman and B.A. Collard is carried out by assuming the responsibility to dispose of one’s own career, to monitor the ongoing changes in the trends of socio-economic development, mastering the necessary competencies to quickly adapt to the changing external environment and market requirements.

Thus, the authors set the purpose of the study is to identify constraints in the implementation of career strategies of high school teachers in the new conditions for the assessment of teaching work based on an analysis of factors for building successful career trajectories. The analysis provides a partial filling of the research gap in the monitoring of career trajectories of university workers within the context of the transformation of the foundations of higher education.

2. Materials and methods

The methodological basis of the study was an interdisciplinary approach to the problems of career mobility of teachers in the context of academic competition, covering the economic and social aspects of university teacher behavior.

The outlines of the social exchange theory, institutional approach were used. Successful reforming of higher education and science depends primarily on whether institutions that will become the basis for the reproduction of productive recurring interactions within organizations and regulatory mechanisms are formed or not (Volchik, 2013). Institutional factors are the most significant determinants that regulate the effectiveness of the development of personnel potential of higher education, creating the conditions for the implementation of career trajectories (formal and informal norms, role expectations, values, interaction parameters of the subjects in the system of higher education). The historical and institutional context determines the individual’s behavioral strategies (Ghezzi, Mingione, 2007), social rules and restrictions determine individual choice (Urpelainen, 2011).

The outlines of the theory of social exchange are important within the framework of this study. The effectiveness of the implementation of career trajectories is determined by a number of parameters: the expenses or costs necessary to move to the next stage of the career hierarchy, the estimated benefits and patterns of behavior, fixed depending on the cost-benefit ratio (Homans, 1984).

The survey sample was formed by 36 faculty members from leading Russian universities, who took part in a focus group survey (N = 36). In order to validate the presented tools, the results of the focus group interview were concretized with in-depth interview data (N = 10). The principle of sampling was to focus on the search for informants who are able to provide the most complete picture of the ongoing career transformations of a higher school teacher. This made it possible to form a description of the limitations and opportunities in achieving the career goals of higher school teachers.

The main blocks of in-depth interview included an analysis of formal and informal constraints, costs and results in the building of career trajectories in the following areas:
- gaining a scientific degree and academic titles;
- administrative career;
- career strategies based on “merit system” (publication activity, participation in international conferences, participation in research activities, etc.).

The study also used such research methods as the Spearman’s rank correlation method and the Pearson’s $\chi^2$ test. Statistical significance was set at $p < 0.05$.

3. Results

3.1. Proceeding to an Academic Degree and Academic Rank as a Factor of Building Career

The conducted transformations of the foundations of higher education, in the opinion of the university teachers surveyed, very strictly defined the formal conditions for the construction of the career trajectory of university personnel. Achieving career goals through gaining academic degrees and academic titles runs up against a number of restrictions, shaped by the specifics of the formation of a modern scientist. In particular, in the course of the focus group study, the
respondents noted significant time and financial costs for the search for the dissertation council. Tightening of control by the State Commission for Academic Degrees and Titles led to a reduction in the number of dissertation councils. A fairly limited number of universities in modern Russia are implementing doctoral training programs. “The increased level of corruption in postgraduate education” significantly limits the possibility of proceeding to an academic degree by an applicant, and time and financial costs also increase. “Applicants, when admitting to defense, have to wait for their turn” (Osipyan, 2010).

Doctor of Science, 47 years old: "After the closure of our Dissertation Defense Committee, we had to search for where we could defend our theses. And then the cost of such attaching is not cheap"

In the course of the focus group study, difficulties in finding an appropriate base for testing the results of the dissertation research were also identified. For many lecturers in the status of the applicant of a scientific degree, the costs of gaining it exceed the possible positive benefits from the acquisition of status.

**Table 1.** Evaluation of the Costs of Gaining a Degree Depending on the Status (Degree) of a University Teacher (N = 36)

<table>
<thead>
<tr>
<th>Evaluation of Financial and Time Costs to Proceed to an Academic Degree</th>
<th>Unreasonable</th>
<th>Very high, but justifiable</th>
<th>Insignificant, in comparison to the status gained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having of Degree of Doctor of Science</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Having of Degree of Candidate of Science</td>
<td>8</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Lack of an Academic Degree</td>
<td>7</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

By analyzing the data in Table 1 using the Pearson’s $\chi^2$ test, the following has been determined: the number of degrees of freedom is 4. The value of the $\chi^2$ criterion is 3,282. At a significance level of $p < 0,05$, the critical value of $\chi^2$ is 9,488. Accordingly, we see that the relationship between the academic status of a teacher and the estimates of financial and time costs associated with gaining a degree is not statistically significant, the significance level is $p > 0,05$.

The revealed dynamics of strengthening the teaching load is also considered by the respondents as a limiting factor, which does not allow enough time to be spent on research work.

Candidate of Science, 33 years old: "Every year the classroom hours increase. We have to take one or even three new disciplines each year, and to prepare them. There is no time left for writing a dissertation”

**Table 2.** Publication Activities of University Teachers in Scopus International Base, Depending on Academic Degree (or Lack Thereof) (N = 10)

<table>
<thead>
<tr>
<th>Code of university teacher in in-depth interview</th>
<th>Academic Degree</th>
<th>Number of Publications in Scopus International Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Doctor of Science</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>Doctor of Science</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>Doctor of Science</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>Candidate of Science</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>Candidate of Science</td>
<td>4</td>
</tr>
</tbody>
</table>
Spearman’s correlation coefficient (R) equals 0.673. The connection between the studied characters is direct, the correlation ratio according to the Chaddok scale is meaningful. The number of degrees of freedom (f) is 8. The critical value of the Spearman criterion for a given number of degrees of freedom is 0.648. The dependence is statistically significant (p < 0.05). This confirms the authors’ hypothesis that a university lecturer who does not have an academic degree due to an increased number of hours of study does not have time to conduct research and write high-quality scientific articles.

According to university teachers who do not have a degree, and who are at the beginning of their career path, the lack of systemic support for “young professionals” becomes a significant barrier to their development as competitive employees in higher education. In view of this circumstance, many of them feel excluded from the context of both existing small groups and the scientific team as a whole. In the course of the focus-group study, this category of respondents noted: “the feeling of being detached”, “useless”, “too much loading”, “confusion about the inconsistency of their expectations and the real situation”, “you give up when you need to prepare for classes, write a thesis, publish articles, participate in educational work with students, and a whole lot more”.

Note that, the price of “loss” in the transition to the status of a candidate of sciences for a university teacher who does not have an academic degree is quite high and for the most part leads to the end of teaching. According to respondents, “30 years is a certain milestone when a teacher without an academic degree is unlikely to pass a competition”. The respondents also note that having an academic degree provides higher salary, strengthened authority among the colleagues. These preferences are a significant factor for applicants for Doctor of Science, but not decisive, especially when assessing the size of related costs (they are significantly higher than in the case of defending a master’s thesis: by the number of publications, the level of requirements for the quality of materials, testing, etc.). In addition, informal barriers (closedness of the scientific community, cultivation of a feeling of superiority of members of dissertation councils to potential applicants) are assessed as higher.

### 3.2. Administrative Career of University Staff

The idea of the existence of significant barriers that reduce the access of teachers to administrative positions in higher education organizations has traditionally dominated. However, the results of the study are not so linear. The attractive effect of this career trajectory is not high enough, which is associated with a high routine loading, significant time costs for the implementation of administrative functions, the lack of flexible schedule.

During the focus group survey, a certain devaluation of the administrative career was noted. For example, the position of head of a university department, in the opinion of the respondents, has ceased to be attractive in view of the high loading with “not enough high pay,” and therefore, does not appear to be the object of career claims for most teachers.

Doctor of Science, 50 years old: “The holder of chair, unfortunately, today has a minimum of opportunities at maximum load, performing rather secretarial than organizational or managerial functions, that is, to notify everyone, collect documents, pass information upstairs”.

Under current conditions, university teachers prefer a scientific career to administrative advancement, choosing the tactics of evading offers to take a particular position in the management apparatus. Subdominant positions retain their attractiveness for persons have no an academic degree. The lack of remuneration for a novice university teacher actualizes the potential benefits of an administrative career. As such, an increase in teacher’s professional status, stability of the workplace, possible levers of influence in determining the teaching load, information resources were noted. A significant role here is played by the amount of monetary reward. Leadership positions in high schools with a high status are attractive for career-oriented teachers seeking to realize their administrative resources.
Table 3. The Attractiveness of the Administrative Career for University Teachers (N = 36)

<table>
<thead>
<tr>
<th></th>
<th>Administrative career in university is attractive</th>
<th>Avoiding of the administrative career</th>
<th>Administrative career opens up opportunities in gaining an academic degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor of Science</td>
<td>3</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Candidate of Science</td>
<td>4</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>A university teacher who has no academic degree</td>
<td>8</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

By applying the analysis using the Pearson’s $\chi^2$ test, the authors determined a statistically significant relationship between the presence of a degree and the attitude to the administrative career at university ($\chi^2 = 10.813; p < 0.05$).

Formal selection rules for administrative positions are determined by job descriptions. The dominant factor for subdominant positions is responsibility, discipline, and efficiency. For higher career positions within the framework of the university hierarchy, in addition to formal norms (work experience, academic degree, merit), informal selection criteria (personal sympathies, business communications, loyalty to the management, diligence) play a crucial role.

3.3. Career Strategies Based on “Merit System”

Modern trends in the development of higher education entail the identification and consolidation of key areas for improving the performance of the faculty of the university through transferring teaching staff to an effective contract. In Russian higher educational institutions, unlike their foreign counterparts, the term of the contract is limited to the period of 1 to 5 years. At the same time, according to the results obtained, the overwhelming majority of teachers in higher education conclude a one-year contract. This practice, according to the focus group study, provides an increased psychological tension among the university teachers, regardless of their place in the academic ranking, provokes the feeling of frustration and uncertainty about tomorrow in academic staff. Annual competitive procedures and reduction of rates at the departments contribute to the occurrence of tension in the interpersonal and professional relations of teachers (Rogach et al., 2017). Almost a third of the respondents noted that they began to notice more often when communicating with colleagues that they had a “feeling of rivalry”, “envy” and “irritability”.

In the focus groups, it has been found that due to the introduction of an effective contract and the change in the very approach to the evaluation of teaching from the position of the research chops in the educational environment, latent conflicts began to arise associated with increased competition between teachers for vacant jobs. Moreover, the higher the individual rating of the teacher is, the more acutely the competitive struggle for “leading positions” is carried out. The lack of long-term guarantees of work, in the opinion of teachers, reduces their efficiency and effectiveness of work.

As a formal constraint for university workers building their career within the traditional teaching path, the focus group survey noted the difficulty in achieving quantitative indicators. Candidate of Science, 32 years old: “For example, the publication of a standard article in a foreign journal requires only about 150-200 dollars for initial translation, we add the payment for the publication itself to the expenses, which is about 400-1000 dollars, and we have got an impressive amount. In addition, there is a big risk of not accepting an article for publication, which makes the expenditure completely non-payable”.

The formal institutional framework for building a career based on the “merit system” includes high requirements for international publications, while low level of knowledge of a foreign language, high cost of publications, organizational fees and other expenses for participation in international conferences are becoming significant barriers for university teachers.

It has been established that the orientation of teachers towards maintaining high rates of research and building up their scientific potential, as promising areas of entry into the world scientific community, greatly reduces the quality of their teaching activity. The following provisions were established in the course of the focus groups survey: “lack of time to prepare classes”, “discomfort
during classes because of insufficient study of educational material”, “fear of additional questions from students”, etc. Thus, the teachers noted their vulnerable position on the subject.

In the focus groups, it is also found that the career aspirations of workers who build their strategies on the basis of the merit system are accompanied by informal restrictions. So, some respondents noted the absence of a formed active position in raising their academic rating, lack of readiness to maintain high rates of research activity. The stereotypes and value-normative attitudes of the faculty staff in some cases block the mechanisms of the university’s motivational policy. Among the teachers, there is some distance, the rejection of the “rating race”, the rejection of ongoing innovations.

In the opinion of the overwhelming majority of the respondents, the current trends in the development of the world scientific space do not allow us to consider the academic degree of a teacher in isolation from the dynamics of its scientometric indicators. In connection with this circumstance, age teachers in the course of the focus groups noted, in particular: “a sense of loss of credibility”, “loss of personal and professional positions”. The transition to a quantitative assessment of labor contributes to their “formation of complexes”, “lack of self-confidence”, “losing firm ground”. Often in one interpretation or another, the following statement is: “everything is now measured by the Hirsch index, the number of Scopus publications ..., which zeroes out all my teaching and scientific experience at a time”.

Table 4. Attitude to the Rating Race in the Context of Academic Status of University Teachers (N = 36)

<table>
<thead>
<tr>
<th>An opportunity of entering the international scientific level</th>
<th>An opportunity of extra earnings</th>
<th>Races do not reflect a real science but develops a pseudoscience only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor of Science</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Candidate of Science</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>A university teacher who has no academic degree</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

The value of the criterion is $\chi^2 = 6.578$, $p > 0.05$, the number of degrees of freedom is equal to 4. Accordingly, we can talk about the absence of a direct statistical relationship between the presence of an academic degree and attitude to the rating race.

The samples of role expectations, according to the chosen career trajectories, as well as the value orientations of university teachers (work, home, status, etc.) largely determine the effectiveness of the mechanisms for intensifying the research activities of the faculty of higher education organizations. In the context of the shift of teachers’ career expectations from the teaching component to the research component, as well as the introduction of quantitative indicators for assessing the activities of university workers, the overwhelming proportion of university teachers has adapted to the new conditions, “incorporating their long-term behavioral strategies into existing institutional constraints” (Khalil, 2013).

4. Conclusion

Providing the principle of complementarity of values, informal patterns of behavior to the regulatory requirements of academic community, as well as the effective functioning of the motivation system creates conditions for the development of sustainable career trajectories of the university teacher. The role of institutional factors can be explicated in the following aspects:

1. Value-normative – the formation and legitimization of norms, samples of role expectations, values of research activities. First of all, we are talking about the formation of the
prestige of teaching profession, the importance of scientific and publication activity, while respecting international publishing ethics.

2. Motivational-stimulating – the formation of conditions and specific incentives that contribute to the effective career development of teachers, providing a satisfactory ratio between the costs and remuneration of employees.

3. The synergistic aspect ensures the integration of the benefits received by teachers while reducing their costs to achieve their career goals. Realization of successful career trajectories is provided in the conditions of constructive cooperation of academics and educational institution (long-term guarantees (5 year contract), teaching load optimization, the provision of research leave for thesis writing). Another source of development of career trajectories is the internalization of relevant norms and values in the practice of interaction between the scientific and pedagogical community (horizontal links between universities, reduced competition, the formation of groups, support for young personnel).

It has been established in the focus group study, that the career strategies of a teacher of a higher education organization are formed at the intersection of three areas: a career based on the enhancement of academic degree and academic title; administrative career and merit based career. The price of each career trajectory is high, and traditionally consists of the ratio of time and money. However, the greatest effectiveness and justification of costs is achieved by intersection of two career paths (degree and merit). This is due to the devaluation of the value of the administrative resource. Within the conditions of increased bureaucratic burden on universities, involvement in the administrative hierarchy blocks the research activity of a university teacher.

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