PERSONAL WELL-BEING OF UNIVERSITY TEACHER IN PROFESSIONAL ACTIVITY: EXPERIENCE OF EMPIRICAL RESEARCH

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Abstract

The article presents the development of diagnostic tools, which provides an opportunity to assess the state of subjective well-being / ill-being of university teachers in their professional activities. These diagnostic tools were formed on the basis of a model that uses two criteria: 1) significance; 2) time cost. Eight aspects of the professional activity of a University teacher, previously identified by experts, are considered. Pairwise comparison of the respondents of these aspects occurs twice: first, according to the criterion of personal significance, then – according to the criterion of time cost. An indicator of a lecturer's well-being or ill-being is the difference between the frequencies of each component's selection based on these criteria. The assessment uses four States that respondents can be in: the "normal" state, if the difference in the assessment of a component of activity according to two criteria is ≤1, the "at risk" state, if this difference is >1 and ≤3, the "stress zone" state, if the difference is > 3 and ≤ 5, and, finally, the "value-semantic conflict" state, if the difference is > 5. Approbation of the developed methodology showed that for a sample of 117 respondents - teachers of Russian universities, the most conflicting component of activity is "working with documents". Subjective well-being of more than 80% of teachers who participated in the testing is assessed as a state of "tension" (over 37%) and "value-semantic conflict" (over 43%). There were no teachers whose condition could be described as normal.

1. Introduction

It is known that the subjective well-being of a university teacher in professional activity is an integral psychological characteristic that reflects the teacher's attitude to various components of his activity, as well as the measure and nature of his involvement in their implementation (Belyaeva & Belyaeva, 2019). To assess the subjective well-being of a university teacher in his professional activity, a special model was developed (Fishman et al., 2020). This model allows one to represent the relationship between the subjective world and real professional activity felt by the university teacher. In the specified model:

- components of professional activity are considered as the basis of a subjective picture, which characterizes the relationship between the existential and everyday experience of the teacher;
- two criteria are introduced, the first of which makes it possible to assess the importance and significance of each of the components of the professional activity of a university teacher, thereby reflecting his existential experience, and the second - the teacher's time spent on each of the components of this activity, thereby representing everyday experience;
- two differential indicators are used, the values of which are determined by the total choice of each component of professional activity in pairwise comparison of the components according to the first and second criteria, respectively;
- the ratio between the values of the first and second indicators for each component of professional activity is considered as a resultant indicator that makes it possible to assess the degree of subjective well-being / ill-being of a university teacher in this activity.

The ratio between the values of the first and second indicators for each component of professional activity indicates the degree to which the two types of experience correspond to each other – existential and every day. A greater degree of conformity indicates greater subjective well-being, while non-conformity indicates a state of subjective distress.

However, there are still no substantiated and tested procedures that, based on the difference between the values of the first and second indicators for each component of the teacher's professional activity, determine the resulting characteristics of his subjective well-being in this activity.

2. Problem Statement

Since the above model uses two criteria (the importance and significance of the components of the lecturer's professional activity and the time spent on the same components of activity), the methodology for assessing the subjective well-being of a university teacher in his professional activity should be two-criteria. The literature describes the two-criterion method of LRVA (the level of the ratio of "value" and "availability" in various spheres of life), proposed by Fantalova (2001). This method allows us to assess the respondent's dissatisfaction with the current life situation and characterize the mismatch that exists in his motivational-personal sphere, based on the discrepancy between the indicators of "value" and "availability".

In this study, we searched for an answer to the question: "how, using an analogy with the LRVA methodology, to determine and justify the procedures that provide an indirect assessment of the subjective well-being of a university teacher in his professional activity?"

3. Research Questions

Note that the model under consideration is of a conceptual nature. The components of professional activity are the means to present a subjective picture of subjective well-being / ill-being of a university teacher in his professional activity. It is necessary to specify this model by determining: a) which components describe the professional activity of a university teacher in its entirety; b) how these components are reflected in the minds of teachers in terms of criteria of significance and time cost; c) whether there are significant discrepancies between the significance and time cost of each of the components. The presence of such a discrepancy can be interpreted as a state of subjective ill-being and the absence of such a discrepancy – on the contrary – as a state of well-being.

It is clear that the subjective well-being of a university teacher is a phenomenon that characterizes the internal state of the teacher and is felt only by him. Therefore, empirical data on the state of subjective well-being can only be obtained from teachers themselves, while minimizing the risks of cognitive distortion (Blanco, 2017). An analysis of possible methods for collecting such empirical data has shown that the method of pairwise comparison of professional activity components for each of the two criteria used is most suitable for this purpose (Fishman et al., 2020).

Let there be M components of professional activity that are compared in pairs based on the criterion of their importance (significance) and on the criterion of time spent on them. This means that subjective well-being is represented by a set containing $C_M^2 = M(M-1)/2$ empirical data, where C_M^2 is the number of combinations of M components of 2. Since there are too many such data, we need to determine a small number of resulting indicators that allow us to assess and adequately characterize the state of subjective well-being for each University teacher in his professional activity. In addition, it is necessary to introduce appropriate procedures for calculating the values of the resulting indicators, which are convenient for practical use.

4. Purpose of the Study

This study aims to develop and approbation methods and procedures that provide an assessment of the subjective well-being of a university teacher in his professional activities. Along the way, we consider the possibility of using the same empirical data to determine other parameters that characterize the specificities of the personal status of a university teacher.

5. Research Methods

The model described above makes it possible to assess the subjective well-being of a University teacher in professional activities, if the teacher's ideas about the composition of this activity are used. To specify its composition, a multi-stage expert method was used, in which university teachers were the experts. At the first stage, 15 teachers from different universities of the country recorded specific forms of their activity in the University for three days (for example, they gave a lecture, organized a discussion, searched the Internet for material for classes, wrote an article, communicated with colleagues, etc.).

At the second stage, the information received was analyzed and the existing duplication was eliminated.

At the third stage, cluster semantic analysis was performed, which allowed us to group closely related forms of activity, thereby forming components of professional activity of teachers. As a result, eight such components were identified: 1) preparation and conduct of training sessions; 2) managing the activities of students, undergraduates, and postgraduates; 3) participation in scientific events; 4) work on scientific products; 5) working with documents; 6) professional development; 7) professional interaction and communication; 8) extracurricular work with students (Moskvina & Fishman, 2020). The meaning of each of these components was represented by a list of specific forms of activity that are included in this component.

At the final stage, the completeness of the obtained components of the lecturer's professional activity was checked.

Two special Google-forms were prepared to implement the pairwise comparison method. In each of them, in a convenient form for respondents, all pairs of compared components of professional activity were given in turn, with a detailed explanation of their meaning. In the first Google-form, each participant indicated in the pair under consideration this component of their activity, which they consider more important and more significant for themselves. In the second form, the Respondent chose the component that in his opinion think spends more time on. In addition, participants provided depersonalized information about themselves (gender, age, direction of training, their pseudonym). The interval between filling out the first and second Google-forms was from 15 days to 25 days.

Let's denote the results of comparing the i -th and j -th components in the first and second Google-forms by the symbols $\alpha_{i,j}^1(k)$ and $\alpha_{i,j}^2(k)$, respectively, where k is the ordinal number of the participant.

Let $\alpha_{i,j}^1(k) = 1$, if the i -th component was chosen in the completed first Google-form, and $\alpha_{i,j}^1(k) = 0$, if the j -th component was chosen. Then the complete set of empirical data contained in this Google-form can be represented by a table of values $\alpha_{i,j}^1(k)$, $i \neq j$, $i = \overline{1,8}$, $j = \overline{1,8}$, $k = \overline{1,N}$, where N is the sample size of participants. Such table contains N rows and $C_8^2 = 28$ columns (by the number of compared pairs of professional activity components). A similar table contains a complete set of empirical data on the election of participants recorded in the second Google-form.

The values of the first indicator that characterizes the existential experience of the k -th university teacher form a cortege $\{v_1^1(k), v_2^1(k), ... v_8^1(k)\}$, where $v_i^1(k)$ is the total number of choices of the i -th activity component made by this teacher in all comparison pairs of the first Google-form:

$$v_i^1(k) = \sum_{\substack{j=1 \\ j \neq i}}^{8} \alpha_{i,j}^1(k). \qquad (1)$$

The values of the second indicator, which characterizes the everyday experience of the k -th university teacher, form a cortege $\{v_1^2(k), v_2^2(k), ... v_8^2(k)\}$, where $v_i^2(k)$ is the total number of choices of the i -th activity component made by this teacher in all comparison pairs of the second Google-form:

$$v_i^2(k) = \sum_{\substack{j=1 \\ j \neq i}}^{8} \alpha_{i,j}^2(k). \qquad (2)$$

Now eight discrepancies between the values of the first and second indicators can determined. They form a cortege $\{\delta_1(k), \delta_2(k), \dots \delta_8(k)\}$, where

$$\delta_i(k) = v_i^1(k) - v_i^2(k), \qquad i = \overline{1,8}. \qquad (3)$$

By analogy with the LRVA method (Fantalova, 2001), we think that the cortege $\{\delta_1(k), \delta_2(k), \dots \delta_8(k)\}$ is the resulting differential indicator that characterizes the subjective well-being of the k-th University teacher in the context of professional activity components.

The values of $\delta_i(k)$ allow us to assess the state of subjective well-being of the k -th lecturer in relation to the i -th component of his activity, using the following criteria:

a) the state is "normal" if the condition $|\delta_i(k)| \leq 1$ is met.

b) the state "at risk" if condition $1 < |\delta_i(k)| \leq 3$ is met.

c) the state "in the stress zone" if condition $3 < |\delta_i(k)| \leq 5$ is met.

d) the "value-semantic conflict" state, if the condition $|\delta_i(k)| > 5$ is met.

To form a general assessment of the state of subjective well-being of the k -th university teacher, the rules for determining this assessment are used, according to which:

- «value-semantic conflict» is a general assessment of the state of subjective well-being of the k -th teacher, if the assessment of at least one component of his activity is «value-semantic conflict»;

- «in the area of stress» is a general assessment of subjective well-being of the k -th teacher if he has no constituents in a state of "value-semantic conflict", but evaluation of at least one component – "in tension zone»;

- «at risk» is a general assessment of the state of subjective well-being of the k -th teacher, if he has no components in the states of «value-semantic conflict» and «in the zone of tension», but the assessment of at least one component – «at risk»;

- «normal» – the overall assessment of the state of subjective well-being of the k -th teacher, if he has all the components – «normal».

Note that the obtained indicators also make it possible to assess additional parameters that reflect the characteristics of the personal status of a university teacher.

So, using the values $v_i^1(k)$, it is possible to determine the correlation coefficient between the total choice of the i_p -th and i_q -th components of professional activity by the teachers according to the first criterion – $r_{p,q}^1$, $p \neq q$, and using the values $v_i^2(k)$, a similar correlation coefficient can be determined by the second criterion – $r_{p,q}^2$, $p \neq q$. This will allow us to characterize the measure of the relationship between the preferences of teachers when choosing the components of professional activity for each of the criteria.

Based on the values $v_i^1(k)$ and $v_i^2(k)$ for each university teacher, it is possible to form and evaluate the hierarchy of preferences of the components of professional activity according to the first criterion and according to the second criterion, respectively.

6. Findings

In 2016 the method described above was probated. Both Google-forms were filled out by 117 teachers from different Russian universities, including 78.7% women and 21.3% men (the average work

experience of the surveyed teachers was 15 years). The sample of respondents included lecturers from nine Russian cities – from Kaliningrad to Petropavlovsk-Kamchatsky.

Consider a cortege $\{\varepsilon_1, \varepsilon_2, \ldots \varepsilon_8\}$, in which ε_i is the resulting relative indicator that characterizes the subjective perception of all participants of the i –th component of the professional activity of a university teacher ($i = \overline{1, 8}$):

$$\varepsilon_i = \left(100 \times \sum_{k=1}^{117} \delta_i(k) \right) / 819,$$

where $819 = 7 \times 117$ is the largest possible value that the sum modulus $|\delta_i(k)|$ can have for any i from the sample 117 respondents.

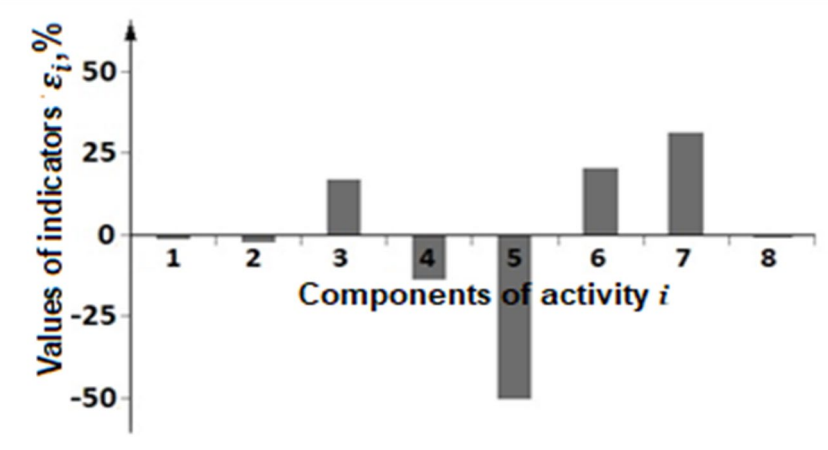Figure 1 shows the values of ε_i for all $i = \overline{1, 8}$.

Figure 1. Values of the indicators ε_i

Values of the indicators ε_i, which characterizes the subjective perception of university teachers of the components of their professional activity. The components are numbered as follows: 1 – preparing and conducting training educations; 2 – managing the activities of students, undergraduates, and postgraduates; 3 – participating in scientific events; 4 – working on scientific products; 5 – work with documents; 6 – professional development; 7 – professional interaction and communication; 8 – extracurricular work with students.

Analysis of the data shown in this figure indicates significant differences in the subjective perception of University teachers of their activities. So, "working with documents" and "working on scientific products" are components of professional activity, the subjective significance of which for university teachers is noticeably lower than the time spent on them. The corresponding values ($\varepsilon_5 =- 50,8$ % and $\varepsilon_4 = -13,6\%$) show that these components form the states whose existential value is perceived by lecturers significantly lower than their everyday value. At the same time, "professional interaction and communication", "professional development" and "participation in scientific events" are components of professional activity, the subjective significance of which is higher than the time spent on them by university teachers. This is evidenced by the values corresponding to the specified components of $\varepsilon_7 =$

31,3%, $\varepsilon_6 = 20{,}3\%$ and $\varepsilon_3 = 16{,}8\%$. All these states indicate an imbalance between the subjective world of the University teacher and his real professional activity. They carry risks of developing subjective stress.

The values of the parameters $\delta_i(k)$, determined by the formula (3), were used to assess the state of subjective well-being of each lecturer. For the anyone k-th lecturer a cortege $\{\delta_1(k), \delta_2(k), \dots \delta_8(k)\}$ was formed, which contained discrepancies between the values of the first and second indicators. Then in the specified cortege there was the value δ^* – the largest modulo value $\delta_i(k), i = \overline{1,8}$, i.e.

$$\delta^* = \sup_{i=\overline{1,8}} |\delta_i(k)|. \qquad (4)$$

In accordance with the above rules, an empirical assessment of the state of subjective well-being of the k-th teacher was determined by the value of δ^*. The grades obtained for each participant made it possible to form 4 groups of university teachers. Each group contains lecturers with the same assessments of the state of subjective well-being in their professional activities. Based on the data obtained, the distribution of the specific weights of such groups in the sample of teachers under consideration was determined. This distribution is shown in Table 1.

Table 1. Distribution of teachers in groups with different assessments of the state of subjective well-being in professional activities

Indicator of distribution of lecturers by state	Groups of teachers with state ratings			
	Normally	In the risk zone	In the stress zone	A value-sense conflict
Share of each group of teachers, %	0,00	18,80	37,61	43,59

This table shows that the group containing university teachers with an internal value-semantic conflict has the maximum share (in terms of number). The subjective well-being of more than 80% of the participants in the sample of teachers is assessed as a state of "tension" and "value-semantic conflict". At the same time, teachers with subjective well-being "normal" were not found. The state of subjective well-being in about 19% of teachers is characterized as being "at risk".

The results of using the pairwise comparison method can be presented as a hierarchy of component of the activity for each respondent. The following rule is used: the greater the value of the total number of selections of the i-th component of the activity according to the s-th criterion – $v_i^s(k)$, the higher the rank of this component in the corresponding hierarchy of the k-th teacher's selections.

Analysis of each hierarchy allows you to characterize the measure of its fuzziness. The hierarchy of choosing a lecturer is strict if all the components in this hierarchy have different ranks. University teachers who have clear hierarchies of election are included in group 1. All other teachers have fuzzy hierarchies. Those lecturers whose two components of activity have the same rank in the hierarchy are contained in group 2. Teachers whose three components have the same rank are grouped into group 3, and so on. Group 8 completes this procedure.

Note that in the case of four or more components, no distinction was made between the situation when all equally frequently selected components of activity had the same value of the frequency of selection, and the situation when there were several groups of equally frequently selected components. It is clear that if there were several groups, the frequency of selecting the components of one group was different

from the frequency of selecting the components of another group. For example, group 8 contains a hierarchy in which 4 components of activity were selected 4 times, and the 4 remaining components were selected 3 times.

On a figure 2 it is presented the distribution of specific weights of groups of hierarchies that display the results of pairwise comparison of University teachers of their components of activity according to criterion 1 and criterion 2, respectively.
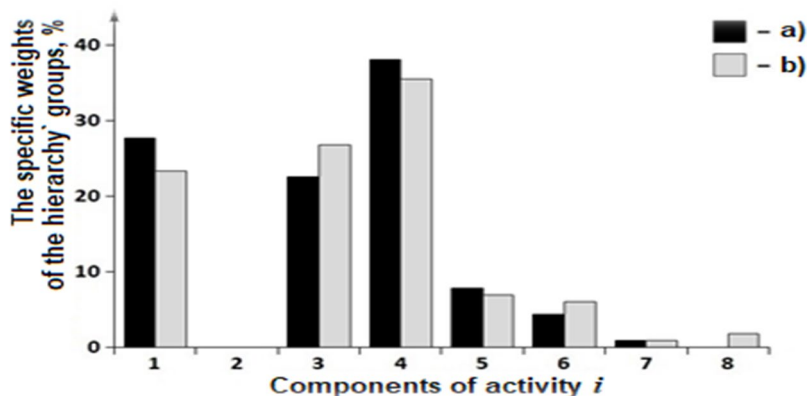

Figure 2. Distribution of specific weights of groups of hierarchies that reflect the value preferences of University teachers in their professional activities and subjective assessments of teachers' time spent on these components – histograms of distribution a) and b), respectively

This figure 2 shows that less than 30% of lecturers have strict hierarchies that reflect their existential experience, as well as hierarchies that reflect everyday experience. At the same time, there is a second maximum distribution of specific weights (group 4), the values of which are 38% and 35%, respectively, for the hierarchy that reflects value preferences, and for the hierarchy that reflects the subjective estimates of university teachers' time spent on the components of their production activities. In addition, a significant part of teachers has value hierarchies containing 5 or more components of activity that have the same ranks: 10% – by the criterion of importance (significance) and 16% – by the criterion of time spent.

7.   Conclusion

The analysis of the values of the indicator ε_i, presented in Figure 1, allows us to identify those components of the activity of University teachers, which are associated with their internal subjective ill-being. The most conflict – prone component of a University teacher's activity is "working with documents". For the majority of respondents, the subjective significance of this work is much lower than the subjective assessment of the time it takes to complete it. In addition, another component of the activity that causes noticeable internal tension and even a state of emptiness is "work on scientific products". This is consistent with the research, which shows that domestic teachers are often forced to engage in research activities and do not perceive it as a natural part of their activities (Lovakov, 2015).

At the same time, "professional interaction and communication" and "professional development" are components of the activity, the significance of which is assessed significantly higher than the time spent

by teachers who are able to allocate to them. There is a shortage of sources of resource support and support for teachers, both emotional and meaningful. This state of Affairs leads to the fact that the disunity of the teaching staff is growing, and the mechanisms of professional identification are being weakened. Reduced "university teacher's personality, the personality of the Professor, and because – "eventfulness education", "the eventfulness of identity" (Robotova, 2018).

Empirical assessments of the state of subjective well-being in the activities of each University teacher, presented in table 1, confirm these conclusions. It follows from this table that the condition of most teachers associated with their activities can be described as a problem. At the same time, we are not talking about a small salary or a large amount of classroom workload, but about the distortion of the essence and nature of professional pedagogical activity in its internal subjective picture, which is carried by each teacher. This is also evidenced by the problems associated with the professional activities of University teachers, which in recent years have been the subject of numerous studies. The literature notes: irrational use of the intellectual potential of the teaching staff, suboptimal distribution of time for various types of activities, distortion of the meaning of this activity, deterioration of health and decrease in the quality of life, etc. (Fitch et al., 2017; Krasinskaya, 2015; Moskvina & Fishman, 2020; Pace et al., 2019).

As for the hierarchies shown in Figure 2 value preferences and time spent by university teachers, then such hierarchies are formed by multidirectional processes. On the one hand, maintaining and developing the subjectivity of university teachers in changing conditions increases the role of their own value preferences. The dominance of these processes among teachers leads to clearer hierarchies, ensuring that they fall into the first group. The higher of the level of teacher`s subjectivity in his professional activity, the clearer and more stable is the value hierarchy of the various components of this activity. On the other hand, the self-determination of teachers may be limited to their adaptation to the requirements and conditions of everyday life. Such university teachers implement only short-term plans that are determined by the situation and external incentives. Their hierarchies of value preferences are not clearly expressed.

The resulting dynamic balance of these multidirectional processes led to the fact that the probability distribution of teachers to get into a particular group had a maximum for group No 4. This group combined those participants in the sample whose fuzzy hierarchy had:

- four components of university teacher activity that were selected equally frequently;
- two pairs of activity components with the same frequency of selection for each pair (for example, one pair "a" and "b" had a frequency of selection of components equal to 3, and the second pair "c" and "d" had a frequency of selection of components equal to 5).

It is necessary to note the wide versatility of the developed diagnostic tools describing the prospects for its using,

First, now it is possible to determine the individual profile of University teachers' subjective well-being in the context of their professional activity components. This makes it possible to assess their condition, indicating those components of professional activity in relation to which they have an internal tension or value-semantic conflict. Secondly, it is possible to solve new problems that are important for the educational system of the university. As an example, we can point to the following tasks:

* optimal distribution of functions in the university teaching staff of each faculty and department;

* selection of teachers for the formation of such groups of professional development, whose participants in relation to the same components of professional activity have internal tension or value-semantic conflict;

* development of an individual trajectory of professional development of a particular teacher based on the profile of their subjective well-being/ill-being, etc.

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