

# Typology of Strategies of Personality Meaning-Making During Professional Education

Dina Ye. Shchipanova<sup>a</sup>, Ekaterina V. Lebedeva<sup>a</sup>, Valentin P, Sukhinin<sup>b</sup> and Elizaveta N. Valieva<sup>c</sup>

<sup>a</sup>Russian State Vocational Pedagogical University, Ekaterinburg, RUSSIA; <sup>b</sup>Samara State Technical University, Samara, RUSSIA; <sup>c</sup>Samara State University of Economics, Samara, RUSSIA

#### **ABSTRACT**

The importance of the studied issue is conditioned by the fact that high dynamic of processes in the labour market requires constant work of an individual on self-determination and search for significance of his/her professional activity. The purpose of research is theoretical development and empirical verification of the types of strategies of meaning-making based on perceptions of future in terms of professional self-determination of the personality at the stage of vocational training. Basic research methods: modelling, psychosemantic approach, allowing to perform research process with the possibility of more in-depth analysis of the results. Research results: the model of the semantical future in the consciousness of the personality, which includes affective, cognitive, activity and intentional components is developed and empirically verified; the types of strategies of meaning-making based on perceptions of future in terms of professional selfdetermination of the personality at the stage of vocational training is identified, the typology includes the following 3 types of the meaning-making strategies: strategy of integration of the meaning of education and profession in the model of own future, strategy of disintegration and strategy of uncertainty and delay of the semantical choice. Significance of results: analysis of the semantical grounds for future professional activity will help optimize the training of a competent, competitive and adaptive specialist ready to continuous self-development, and to intensify the process of professional self-determination and building life and professional prospects of the personality at the stage of vocational training, as exactly at this stage the professional competence and identity is built up.

KEYWORDS

professional education

Meaning-making strategies, professional education and vocational training, professional selfdetermination, semantical future model ARTICLE HISTORY Received 07 May 2016 Revised 24 July 2016 Accepted 11 August 2016

#### Introduction

Professional education and vocational training process is a traditional subject of psychological research. However, most of the studies are centred on the cognitive aspect of training, whereas in the current situation, prevailing in

CORRESPONDENCE Dina Ye. Shchipanova ⊠dina\_evg@mail.ru

© 2016 Shchipanova et al. Open Access terms of the Creative Commons Attribution 4.0International License (http://creativecommons.org/licenses/by/4.0/) apply. The license permits unrestricted use, distribution, and reproduction in any medium, on the condition that users give exact credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if they made any changes.

the Russian and global education system, the great importance falls on the study of semantic grounds of vocational training (Abakumova, 2003; Yegorov, 2007; Schreiber, 2005; Ashmarina et al., 2016; Dorozhkin, Zaitseva & Tatarskikh, 2016). Modern dynamic and multialternative market of employment and educational services requires constant professional self-determination (Pryazhnikov, 2015). As a basis for meaning-making in the process of self-determination, we select the phenomenon of semantic future of the personality, being an important factor for professional development.

One of the main tasks of vocational education is the training of competent, competitive and adaptive specialist ready to continuous self-development. Therefore, one of the most required scientific and social issues is to study and to search for means of formation and activation of semantic component of life and professional perspective of the specialist at the stage of vocational training.

Despite the fact that the activities and personality of the professional are constant subject of many works, the semantic grounds of professional development remain out of the research. The subject of our research is an image of own future, including professional one, as one of the leading semantic factors of professional development. Although the regulatory role of the future in relation to the person activities was proven by many authors, however, it was rarely a subject of empirical research. Thus, the issues of study of semantic grounds of professional activity, determination of professional development, as well as the design of the semantical future remain open, which forms the problematic field of this research.

Therefore, research of strategies of meaning-making based on perceptions of future in terms of professional self-determination of the personality at the stage of vocational training is important and has scientific novelty and value.

We have been performing the empirical research of semantic grounds through the study of conjunction of the semantical future and professional self-determination since 2001 (Belova, 2004; Shchipanova, 2013).

The subject of this research is the typology of strategies of meaning-making based on perceptions of future in terms of professional self-determination of the personality at the stage of professional education.

#### Literature Review

# Theoretical Grounds and Description of the strategies of personality meaning-making based on semantic future in terms of professional self-determination

The problem of psychological time of the personality as a whole and the psychological future, in particular, is quite important and one of the least developed and researched for modern psychology

Ability to interpret a dynamic social reality is one of the factors of increase of subjective quality of life in modern Russia. It requires permanent self-determination from the personality in complex, uncertain, rapidly changing situations. The ability to self-determination and management of social and technological changes is based on the world view of the person, the important component of which is the idea of own future in terms of path of life. The well-known psychologist K. Obukhovskiy (1981) calls the future "forming reality". Therefore, the future, including the own one, is the result of the inner work of



the person on creation and maintenance of the continuity of the personal history and the integrity of the world image.

The study of the psychological future in terms of life path from the perspective of the person activity is the most productive of all approaches, as it reviews the person as the centre of determination of the life path. However, the future as a mode of time of the person life has been studied mainly from the perspective of event-driven approach, considering the chronology and content of future events (Golovakha & Kronik, 2008), the semantic representation of the future in the world view of the personality remained out of the research interests up to the present day. The analysis of theoretical and experimental studies allows to suggest that the psychological characteristics and principles of time aspects of functioning of the future differ from the semantic ones.

Thus, we propose to consider, that methodological study of the future is based on the subjective approach, which allows the person not only subjectively to perceive and evaluate his future, but also to be the centre of its determination. Thus, our approach to the study of the future differs from the commonly used event-based, allowing to study semantic aspects of the phenomenon. This helps overcome "one-sidedness" in the study of the phenomenon of the future of the personality in modern psychology. Implementation of this approach to the study required the use of the concept "semantical future", the semantic aspects of the future were studied by M.R. Ginsburg (1994). However, the concept required clearer explication and operationalization. Specific theoretical grounds in the formation of the concept "semantical future" were represented by the concept of psychological time of life (Abulkhanova-Slavskaya, 1991; Ginsburg, 1994), personal meaning (Leontiev, 2003); psychosemantic approach (Artemyeva, 1999; Petrenko, 1988; Shmelyov, 1983; Osgood, Suci & Tannenbaum, 1957). The study of semantic aspects of the future from the perspective of the psychology of subjective semantics, allows to study deeper the inner meaning system of the personality and to recreate its individual identity.

Semantic sphere of the personality has a complex structure, which includes personal meaning, semantic mindset, motive, semantic disposition, semantic construct and personal values. For the construction of the concept of "semantical future", the category "personal meaning" was used as one of the basic characteristics of semantic sphere of personality. In addition, it is important that the basic provisions of the theory have been worked out quite well in terms of methodology - as a part of the philosophy and theoretical psychology, in methodological and experimental context - as a part of one of the leading modern areas of psychological diagnosis - psychosemantics. Thus, the reliance on clear methodologies allows to present a grounded and consistent concept of semantic future.

Development of the meaning category in philosophy laid the basis for the understanding of personal meaning in psychology, defining its main characteristics, such as: contextuality, consisting of interpretation of the reality and intentionality, conditioning focus of personality on understanding and meaningful content of the reality.

The theory of personal meaning was one of the first, which appeared in the science of psychology to explain the semantic reality of the personality (Rubinstein, 1957; Leontiev, 1977; Artemyeva, 1999; Leontiev, 2003; Petrenko, 1988; Shmelyov, 1983; Osgood, 1962; 1964).

The concept of meaning has been studied in foreign psychology since the beginning of the 20th century, but the interest in this issue increased in 1950-60s, which is caused by emergence of so-called loss of meaning situation in postwar society.

The category of meaning was reviewed in the majority of foreign schools of psychology: psychoanalysis, behaviourism, cognitive, humanistic and existential psychology.

In domestic psychological science, the category of personal meaning is studied in three aspects: from the perspective of consciousness, personality and activity (Leontiev, 2003). According to D.A. Leontiev (2003), from the perspective of consciousness, the personal meaning exists in the form of semantic constructs, or "traces" of interaction of the subject with the objects of the reality, due to which the personality performs categorical assessment of the reality; activity aspect of the meaning consists of its regulatory role with respect to the activity; meaning in the structure of personality is explicated in the context of semantic sphere, which is a "particularly organized set of semantic formations (structures) and links between them, ensuring semantic regulation of the integral life activity of the subject in all its aspects" (Leontiev, 2003). In this case the personality is reviewed as an integral system, which has a few levels of regulation at its bottom, including the semantic level.

Thus, the works of the classics of Russian psychology emphasize the importance of real life relationships in the process of meaning-making of the personality; this allowed to assume that there is a relationship between the semantic aspects of the future of personality and the features of its self-determination in a particular profession.

The most productive and developed domestic approach to the study of personal meaning is an approach of D.A. Leontiev (2003), who summarized and systematized the existing ideas about the meaning in philosophy and psychology. The methodological approach to the study of the meaning, he proposed, is based on the unity of three aspects: activity defined by the dynamics of psychological processes of the personal regulation of life activity; phenomenological represented by presentation processes in the world image of the subject of the meanings of significant objects and phenomena; ontology defined by the dynamics of the life relationship of the subject with the world. D.A. Leontiev (2003) developed a semantic concept of the personality detailed in ontological context, in this aspect, semantic reality of person is achieved through the background knowledge and his relationship with it.

In our opinion, temporal aspects of the life path can also influence the semantic reality. Transformations of time parameters of the reality are closely related to the expression of partial attitude and reflection of the world by the person. Time dimension is more full of the personal than spatial meaning for the person, as person activity not always goes in the space (for example, thinking activity), but always - in time, because time always stands for the person as a universal resource of any activity. It is compatible with the person life and activity, and therefore is always full of personal meaning for the person. Personal meaning of time is expressed both in its immediate emotional assessment, and the degree of cognitive mindfulness.

In turn, we can assume the significance of professional activity as an important element of life for the formation of personal meanings. Professional

self-determination in this regard is the direct mechanism for implementation of the meanings in form of decision-making, attitude to the profession, etc.

Thus, the theory of personal meaning and the semantic concept of personality fully allow us to study the ideas of the person about his future, and their significance, as part of our work.

Based on the reviewed theoretical suppositions, semantic future will mean a subjective attitude and cognitive ideas of the person about his own future, being a fragment of the world view in the semantic field of the personality.

Phenomenologically, personal meaning is represented as an element of the semantic regulation of life activity - in function of presentation to the subject in form of role and place of reflected objects and phenomena of reality in its life activity. D.A. Leontiev (2003) believes that the displays of personal meaning are observed in the mechanisms of emotional evaluation and transformation (spatial, temporal, causal) of mental model in the consciousness of the person. In our opinion, the displays of personal meaning can be determined by the emotional identification and cognitive evaluation of the image. Consequently, the phenomenological displays of the phenomenon of semantic future of personality are emotional evaluation of the own future and cognitive idea about it by the person.

As the personal meanings are shown in the world view as a single system of integrated stable complexes, according to V.F. Petrenko (1988), the following is possible: experimental selection in the consciousness of the person of the basic semantic components, "mobile functional structures, emerging and existing within an integrated system of values of perceptual or mental image, and determined by this system", represented by the so-called categorical structures (Petrenko, 1988). Categories of individual consciousness represent some summaries based both on the subject characteristics, and emotional attitude to the objects of reality. Thus, the category may be combined on the basis of emotional states, subject characteristics and the subjective personal meaning of the objects or phenomena of reality. The analogue of the categorical structure of consciousness, according to V.F. Petrenko (1988) are the subjective semantic spaces, which represent a set of parameters of organization of the subjective systems of values (meanings) in the particular content field. On this basis, the method of the semantic differential of Charles Osgood (1962; 1964) was chosen for experimental study of semantic aspects of the future.

The foreign psychology has no direct analogue of the term "semantic structures", however the problem of integrated sustainable semantic structures of the inner world of the person is represented with the wide range of studies, mostly based on the concept of C. Osgood (1962; 1964).

Studies of C. Osgood (1962; 1964) are focused on the studies of connotative aspects of meanings. In domestic psychology, these aspects of meaning are explicated in the concept of "personal meaning" (Leontiev, 2003; Petrenko, 1988; Shmelyov, 1983; Artemyeva, 1999).

The main result of the use of semantic differential technique is a quantitative measurement of connotative (semantic) meanings of the motivation, reflecting its subjective idea in the semantic space of personality. On this basis, it becomes possible to put the characteristics of the motivation in the semantic

space of personality and to construct directly semantic spaces of the particular objects.

Application of factor or cluster analysis as the methods of the statistical processing makes it possible to identify a specific number of summarized, independent, content interpretable parameters of motivation placement in the semantic space, in the studied set of data on under test sample. The most closely related scales reflect the complexes of connotative meanings and are the main dimensions of the subjective semantic space.

Thus, we can conclude that the semantic differential method allows to empirically identify and measure main components of personal meaning - emotional and cognitive - as well as to determine the degree of impact of the estimated object on the person. This method is adequate for the study of the subject of our research.

Our author model of the future is based on the provisions of the concept of personal meaning and the semantic space of personality (Belova, 2004; Shchipanova, 2013). Semantic future includes four components:

- affective, reflecting positive or negative attitude of the person to his own future:
- cognitive, consisting in a certain degree of mindfulness, structuring and ordering of the ideas about the own future;
- activity, characterizing the degree of impact of the own future on the personality, i.e. its significance;
- intentional component, showing the focus of life, subjective experience of the objectives available in future.

Thus, we can conclude that there are various meaning-making strategies: strategy of integration of the meaning of education and profession in the model of own future, strategy of disintegration and strategy of uncertainty and delay of the semantical choice.

#### Aim of the Study

The purpose of this article is to justify the set of theoretical approaches and to identify the typology of strategies of meaning-making based on perceptions of future in terms of professional self-determination of the personality at the stage of professional education.

#### Research hypotheses

Basic research hypotheses are as follows:

- one of the grounds of the meaning-making in terms of future professional activity at the stage of training is the semantical future, including affective, cognitive, activity and intentional components;
- there are different strategies of meaning-making based on perceptions of future in terms of professional self-determination of the personality at the stage of professional education.

#### **Methods**

#### Research methods



Psychosemantic experiment, using the following methods: 1) semantic differential of C. Osgood (1962; 1964), modified by V.F. Petrenko (1983), containing 25 scales, interpreted by 6 factors: evaluation, potence, activity, ordering, structuring, comfort (students are evaluated using a 6 scale of semantic differential following notions: my profession, my study, my success, my bad, my past, my present, my future, my ego); 2) life-purpose orientations test of D.A. Leontiev (2003); 3) free self-description about "My future", developed by the author of the article. Data obtained in psychosemantic experiment were processed using content analysis methods of mathematical processing: factor (by the method of Principal components method followed by Varimax-rotation) and Hierarchical cluster analysis (by the method Between-groups linkage, measure – Squared of Euclidean distance).

### Research procedure

The study involved 216 students of the Russian State Vocational Pedagogical University, studying in the areas of "Psychology and Psychological and Pedagogical Education". The research participants were guaranteed anonymity and confidentiality of the results obtained.

#### Research stages

The first stage of the research included theoretical analysis of semantic sphere of research, professional self-determination and phenomenon of the future. The phenomenological description was presented and the concept of "semantic future" was formed and its theoretical model was presented, including affective, cognitive, activity and intentional components. The grounds of the meaning-making in the process of professional self-determination of the personality were presented.

The second stage of research consisted in empirical verification of theoretical model of semantical future and empirical detection of the typology of strategies of meaning-making based on perceptions of future in terms of professional self-determination of the person at the stage of vocational training.

The third stage consists of understanding and systematization of the obtained results, building of conclusions.

#### **Results**

# Structure and content of semantical future model

Semantic structure of the future in the total sample of students is represented by 4 factors with their forced selection (Table 1).

Factorial solution not subjected to the rotation demonstrates close relationship of all components of the semantic future included in one factor (factor 1, explaining 52.5% the proportion of explained variance (PEV)).

In order to empirically test our theoretical assumption about the number and composition of the structural components of the semantical future, we exposed the correlation matrix of indicators to Varimax-normalized rotation. As a result, 4-component solution was found (Kaiser-Meyer-Olkin MSA=0,811;  $\chi^2$ =375,162; df=21; p≤0,000), explaining in total 86.2% of the proportion of explained variance (refer to Table 1). Correction of the levels of significance was performed by the Bonferroni method.

Components of semantical future	Factors before rotation				Factors after rotation			
	1	2	3	4	1	2	3	4
Potency of future	785				676		476	
Comfort of future	730				458		493	
Structuring of future	724				491	676		
Activity of future	686	-452			910			
Evaluation of future	677						914	
Focus of life	426	800		-564				979
Ordering of future	559		717			910		
PEV= 86.2%	52.6	12.4	11.1	10.1	25.2	20.4	19.6	14.6

Table 1.Factorial reflection of the structure of semantical future in the common sampling of students (n=216)

**Note**. Bold in the table shows the main indicator rates, because we did not exclude double-entry of indicators in factors. The critical value is 0.40.

The first factor that describes 25.2% of PEV, includes indicators of strength and activity of the future, the second one (20.4% of PEV) includes structuring and ordering, the third one (19.6% of PEV) includes evaluations and comforts, the fourth factor (14.6% of PEV) is presented by the indicator of life focus. The first factor has been called activity, the second one - cognitive, the third one - affective, the fourth factor reflects time perspective and meaningfulness of the future.

Thus, our hypothesis about the structure of the semantic future was empirically proved.

Analysing the composition of semantic future of the students, we note that the activity component reflecting high importance of the future for students is the best of all integrated into its structure.

#### Typology of the strategies of meaning-making

The main objective of the study was to identify the typology of meaningmaking strategies based on the analysis of subjective semantic spaces of students.

Using the developed author technique of free self-description about "My future" and subsequent content analysis of free self-descriptions in the common sampling, 3 strategies of professional selection were identified at the stage of vocational training.

The strategy of the profession acceptance (117 persons, 54% of the total sampling) represents clear professional choice of the psychologist profession, this group of students indicates that they plan to be involved in the professional activity related to psychology, working in the speciality, they thought out their plans, which contain specific probable jobs, mentions about kinds of activity of psychologists (consultancy, diagnostics, correction, training work, etc.).

The strategy of profession denial (34 persons, 16% of the total sampling) means not the denial of profession of psychologist as a whole and everything related to it, but the reluctance (mostly for economic reasons) to work in the



speciality, which they are currently learning, these students have actually made the choice of profession, but it has been made in favour of another profession. The self-description of the students contained such phrases as: "I do not see myself as a psychologist", "my work will not be related to psychology", "I'll get a second degree" (economic degree was mentioned oftener), "I do not plan to work in the speciality". Although these students still emphasized that psychological knowledge is useful and will be used in the future.

The strategy of postponing the choice (65 persons) – basic meaning of self-descriptions of students of this group consisted in the fact that they are not ready yet to think about what they will be, and how important the education they get now will be for their future. The self-description of the students more often contained such phrases as: "it is very problematic for me yet", "I have not thought yet about what to be", "my wishes are constantly changing", "my professional future is a tabula rasa for me yet", "I am not ready to think of it", "the future is unclear", "I have not determined and chosen, also not decided yet", "it is not clear to me what I will be", "the real choice is still far away".

Then, in these three sub-samples of students with the different strategies of professional choice, the strategies of meaning-making based on perceptions of future in terms of professional self-determination of the person at the stage of vocational training were empirically researched.

We proposed 10 concepts for the students to be analysed during the psychosemantic experiment, in accordance with the object and purpose of the research: my future, my success, my past, my study, my profession, me (Ego), my failure, my job, my career, my present. These concepts were estimated by them based on 25 points of the semantic differential, subsequently processed based on 6 factors: assessment, force, activity, ordering, structuring, comfort (Petrenko, 1988).

To determine the content of meaning-making strategies, the indicators of semantic space have been exposed to the procedure of cluster analysis separately in sub-samples of students with different strategies of professional choice. We used indicators of ideas about their Ego, their own present and the past, success and failure, as markers, in order to more clearly define the criteria and invariants of the element combinations in the semantic space.

# The meaning-making strategy - "Integration strategy"

The 2-cluster structure of semantic space (Figure 1) was selected in the subsample of students with the meaning-making strategy "Integration strategy".

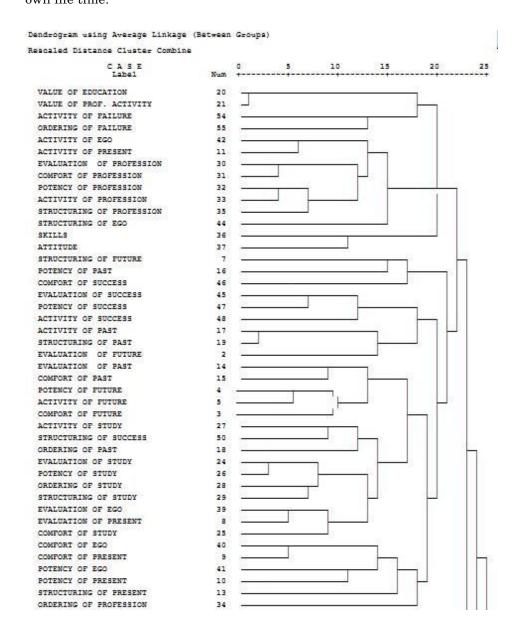
The first cluster is represented by 7 sub-clusters.

The ideas of the profession are combined with indicators of professional readiness, own Ego, activity of presence, and the values are associated with indicators of failure (1st sub-cluster). Estimates of future are combined with the indicators of study, past and success (2nd and 3rd sub-clusters).

The second cluster combines indicators of the failure with richness of life and satisfaction of self-realization on the emotional level. Apparently this is the evidence that students perceive their life as hard life full of failures.

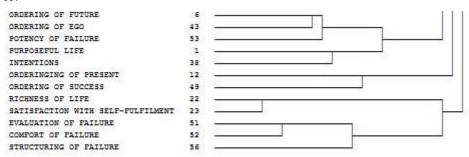
In general, the content of the meaning-making strategy "Integration strategy" shows up in the fact that the main feature of the students is the integration of ideas about education and profession in the semantic field, choice

of work in the future by the profession they study, desire to overcome failures. Their future they connect with their studies, and on the emotional level - with success. We also note clearer and more differentiated ideas of the studies and profession than in two previous groups, but higher fuzziness of ideas of their own life time.



# **OO** 7009

#### INTERNATIONAL JOURNAL OF ENVIRONMENTAL & SCIENCE EDUCATION



**Figure 1.** Subjective semantic space of indicators in the sample with the meaning-making strategy "Integration strategy"

# The meaning-making strategy - "Uncertainty strategy"

Graphical display of the results in the sample of students with the uncertainty strategy is presented in Figure 2. The dendrogram shows that the indicators were united in 2 clusters.

The first cluster contains 7 sub-clusters.

Ideas of the study at the emotional level were combined with focus and richness of life, at the cognitive level - with the ideas of the profession, Ego and own life time. On the emotional level, the satisfaction with self-fulfilment is connected with the ideas of success, life time and own Ego. It is interesting that the ideas of the profession are formed, apparently based on the importance of education and professional activity

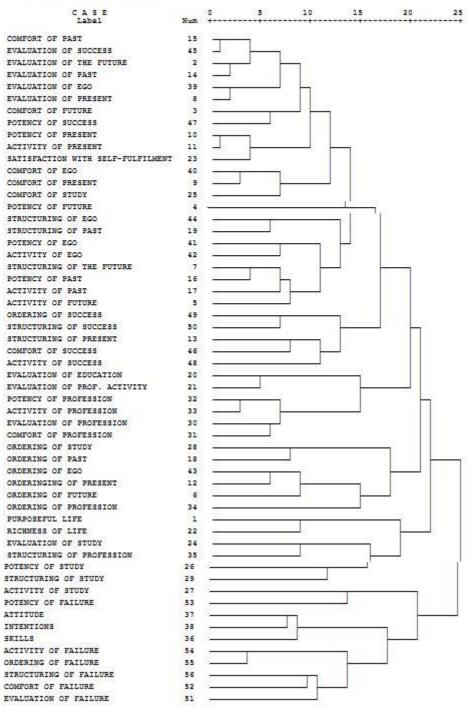
The second cluster combines the indicators of professional readiness with failure and activity of study.

Based on this, we can conclude that, in general, the meaning-making strategy "Uncertainty strategy" can be characterized as follows. Students have not decided yet, whether they will work in the speciality and delay professional choice for the indefinite period. They are satisfied with their present, their private activity is associated with the past or the future, but not with the present. The study makes their life rich and focused, but at the same time, the attempts to acquire professional skills are associated with the failure for them, they study, most likely because it is important for them to get higher education.

Thus, the uncertainty strategy is characterized by syncreticity of the semantic space of the future in the context of professional self-determination, is accompanied by the contextuality of the attitude to life. The future for them is not important (the indicator of the future force showed up in a separate cluster).

Dendrogram using Average Linkage (Between Groups)

Rescaled Distance Cluster Combine



**Figure 2.** Subjective semantic space of indicators in the sample with the meaning-making strategy "Uncertainty strategy"



# The meaning-making strategy - "Disintegration strategy"

The 3-cluster structure of semantic space (Figure 3) was observed in the group of students with the meaning-making strategy "Desintegration strategy".

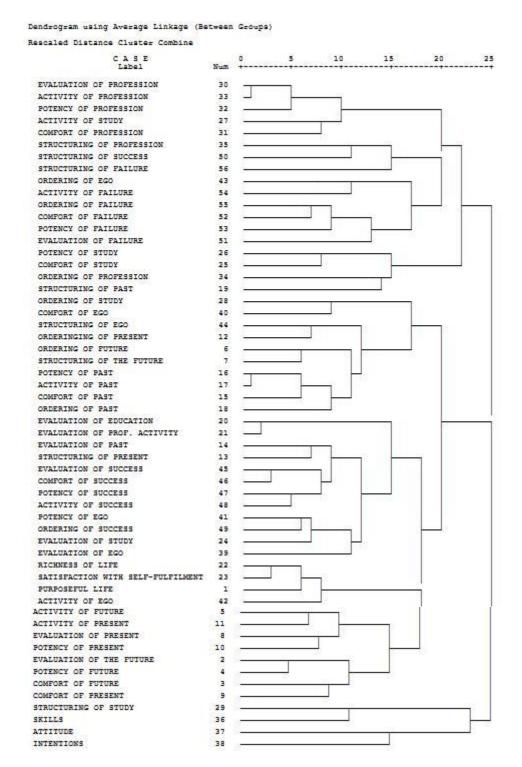
The first cluster combined the ideas of the study and profession with the failure.

The third cluster contains the indicators of professional readiness and profession structuring.

The second cluster is divided into 3 sub-clusters.

At the cognitive level, the ideas about the future are related to the concepts of himself or herself and the past estimates (1st sub-cluster), and the ideas of success - with the values, force and estimation of Ego (2nd sub-cluster). At the emotional level, the future is combined with the estimates of the present, activity of Ego, richness and purposeful of life and satisfaction with self-fulfilment (3rd sub-cluster).

In general, it can be concluded that students realize that study gives them professional skills, but they are associated with failure. Semantic space is sufficiently differentiated, it indicates that the students with the strategy of denial of the profession know exactly what they do not want. However, this may be a display of ostentation, since the ideas of own Ego are also unclear, they may have difficulties in setting goals.



**Figure 3.** Subjective semantic space of indicators in the sample with the strategy "Desintegration strategy"



#### **Discussions**

Analysis of researches has shown that the study of meaning-making strategies based on the ideas of the future in the semantic sphere of the personality and in relation with professional self-determination has not been conducted. Basically, the ideas of time are studied from the point of time transspective (Golovakha & Kronik, 2008; Nuttin, 2004). Application of psychosemantic method in our research allowed us to get new results on the specific of concepts of time. An interesting result is that the ideas of time of own life vary from the integrity and indivisibility to clear differentiation of the past, present and future in the semantic space of personality. The results we obtained regarding representation of the future in the semantic sphere of life of the personality comply with the theory of cultural and historical development, according to which the mental formations develop from syncreticity to differentiation (Vygotskiy, 2005), as well as with the research of N. Werner (2004). This confirms our assumptions about the difference between semantic and time aspects of functioning of psychological time of the personality. As the research of the time aspects of the future in terms of event-driven approach in the works of Russian authors indicates that the integral perception of time of the own life path is characterized for more mature personality (Golovakha & Kronik, 2008; Kurus, 2016).

Research of the strategies of professional choice also has not been performed earlier at the stage of education. 3 detected strategies of choice: acceptance of profession, denial of profession and delay of professional choices were used by us as a basis of typology of meaning-making strategies. The previous researches in the field of meaning-making strategies were based not on psychosemantic experiment, but on the use of standardized questionnaires for diagnosis of semantic sphere (Abakumova, 2003; Yegorov, 2007; Schreiber, 2005). Types of meaning-making as a special state of readiness for the search for meanings, accompanied by the experience of the meaningfulness of life, personal interpretation by the person of his position towards formation of the life line, his or her place in society and the way of life, were proposed by T.V. Schreiber (2005), and the indicators of the meaning-making types of schoolchildren and students were identified. Styles of meaning-making on the basis of selfactualization phenomenon were studied by D.V. Yegorov (2007). Specific of meaning-making in the education process are presented in the works of I.V. Abakumova (2003). However, the identification and comparison of subjective semantic spaces in the field of ideas of students about the future, profession and education have not been conducted before.

Thus, in the process of our research, 3 types of strategies of meaningmaking based on perceptions of future in terms of professional selfdetermination of the person at the stage of vocational training were found: strategy of integration, strategy of disintegration and strategy of uncertainty

The integration strategy shows up in the planning of work by profession, ideas about education and profession are combined with the ideas of the future and success.

Disintegration strategy shows up in the reluctance to work in the future by the profession chosen, the structure of semantic space is sufficiently differentiated, which may indicate both the decision taken and the ostentation. The indicators of professional readiness are combined with indicators of failure, ideas about education and profession of psychologist are almost not related to the future.

Uncertainty strategy shows up in delay of professional choice, semantic space structure is syncretic, the emotional evaluation of concepts is the basis of combining of semantic space indicators. Indicators of ideas about the profession are associated with the indicators of failure, professional readiness component is isolated from the others.

#### Conclusion

The results of the research showed the difficulties of self-determination of the personality, at the stage of vocational training, therefore, the development of the technologies of psychological support of students is important during study at the educational institution, when the competence and professional identity is built up. On the basis of the data obtained regarding the meaning-making strategies, we develop the techniques of meaning-making activation and building of prospects for the future professional activity. Their introduction will allow to optimize the training process, activating meaning-generating function of education.

The research has discovered some new theoretical and practical issues and problems and showed the prospects of the further study of the meaning-making strategies of the students of different specialities and levels of education.

#### Implications and Recommendations

The results of research can be useful for the psychologists-practitioners, teachers and students of higher and professional educational institutions, as well as psychological services of educational institutions to develop programs of psychological support of students.

# Disclosure statement

No potential conflict of interest was reported by the authors.

#### Notes on contributors

**Dina Ye. Shchipanova** is PhD of Psychology, associate Professor of Department of Psychology of Education and Professional Development, coordinator of research projects of the Institute of Psychological and Pedagogical Education of the Russian State Vocational Pedagogical University, Ekaterinburg, Russia.

**Ekaterina V. Lebedeva** is PhD, associate professor of Russian State Vocational Pedagogical University, Ekaterinburg, Russia.

Valentin P. Sukhinin is Associate Professor of Samara State Technical University, Samara, Russia.

Elizaveta N. Valieva is PhD, professor of Samara State University of Economics, Samara, Russia.

#### References

Abakumova, I. V. (2003). Education and meaning: smysloobrazovanie in the learning process. Psychological and didactic approach. Rostov-on-Don: Rostov State University Publisher, 480 p. Abulkhanova-Slavskaya, K. A. (1991). Life Strategy. Moscow: Mysl, 230 p.

Artemyeva, Ye. Yu. (1999). Principles of the subjective semantic psychology. Moscow: Smysl, 352 p.

#### INTERNATIONAL JOURNAL OF ENVIRONMENTAL & SCIENCE EDUCATION

- **OO** 7015
- Ashmarina, S.I., Streltsov, A.V., Dorozhkin, E.M., Vochozka, M. & Izmailov, A.M. (2016). Organizational and Economic Directions of Competitive Recovery of Russian Pharmaceutical Enterprises. *IEJME-Mathematics Education*, 11(7), 2581-2591.
- Belova, D. Ye. (2004). Semantic future in the context of professional self-determination: PhD Thesis. Ural State University, Ekaterinburg, Russia, 205 p.
- Dorozhkin, E.M., Zaitseva, E.V. & Tatarskikh, B.Y. (2016). Impact of Student Government Bodies on Students' Professional Development. *IEJME Mathematics Education*, 11(7), 2666-2677.
- Ginsburg, M. R. (1994). Psychological content of the personal self-determination. Psychology Issues, 3, 43-52.
- Golovakha, Ye. I. & Kronik, A. A. (2008). Causometry. Moscow: Smysl, 272 p.
- Kurus, I. A. (2016) Correlation of crises, crisis experiences and orientation of time perspective at the initial stage of training in higher education institution. The Education and science journal, 2, 68-79.
- Leontiev, A. N. (1977). Activity. Conscience. Personality. Moscow: Politizdat, 304 p.
- Leontiev, D. A. (2003). Meaning psychology. Moscow: Smysl, 488 p.
- Nuttin, J. (2004). Motivation, action and perspective of the future. Moscow: Smysl, 608 p.
- Obukhovskiy, K. (1981). Psychological theory of structure and development of personality. Psychology of personality building and development: collection of research papers; Publishing Editor L. I. Antsyferova. Moscow: Nauka, 45-67.
- Osgood, C. E., Suci, G. & Tannenbaum, P. (1957). *The Measurement of Meaning*. University of Illinois Press, 342 p.
- Osgood, C. E. (1964). Semantic differential technique in the comparative study of cultures. *American Anthropologist*, 66(3), 171-200.
- Osgood, C. E. (1962). Studies on the generality of affective meaning systems. *American Psychologist*, 17, 10-28.
- Petrenko, V. F. (1983). Introduction in experimental psychosemantic: research of the representation forms in the everyday consciousness. Moscow: Edition of the Moscow State University, 175 p.
- Petrenko, V. F. (1988). Consciousness psychosemantic. Moscow: Edition of the Moscow State University, 208 p.
- Pryazhnikov, N. S. (2015). Importance of work and dedication to work. *Occupational Psychology*, 5(1), 111-119.
- Rubinstein, S. L. (1957). Existence and consciousness. Moscow: Prosvescheniye, 348 p.
- Schreiber, T. V. (2005). Problem of regulation of the meaning-making activity in the early juvenile age. Fundamentals and perspectives of the psychological science and practice in the Russian society: materials of the Russian scientific and practical conference. Naberezhniye Chelny: Edition of the Management Institute, 80-83.
- Shchipanova, D. Ye. (2013). Professional self-determination in the context of study of psychological time. Scientific Works SWorld, 24(4), 47-50.
- Shmelyov, A. G. (1983). *Introduction in experimental psychosemantic*. Moscow: Edition of the Moscow State University, 158 p.
- Vygotskiy, L. S. (2005). Person development psychology. Moscow: Edition Smysl, Edition Eksmo, 1136 p.
- Werner, N. (2004). Comparative psychology of mental development. New York: Percheron Press, 564
- Yegorov, D. V. (2007). Psychological components of semantic self-fulfilment of the psychology students in the context of different professional perspectives. Russian Psychological Magazine, 4(1), 38-40.