

Metacognitive awareness and understanding of life meanings as a development factors of sustainable behavior

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Abstract. Continuing to search for the reasons for the alienation of students from education, we turn to the psychology of meaning by D. A. Leont'ev. It is necessary to consider education in the life of students from the point of view of its life meaning for them. In our opinion, the place and role of education in the lives of students can expand the understanding of psychological science about the reasons for their alienation from education. The sought-for relations of the life meaning of learning with metacognitive awareness will complement the view of the mechanism of formation of students' attitude to education. The results obtained indicate that there are significant direct correlations between the life meaningfulness of education for psychology students and their metacognitive awareness. In addition, according to the results of the study, it can be concluded that there is an inverse relationship between the life meaningfulness of education for psychology students and their level of alienation from education.

1 Introduction

Currently, the ideas about the life meanings of students have a moderate degree of elaboration. A certain number of studies on this problem can be found, but their data are rather generalized. Scientists make profiles of the life meanings representation and evaluate in the context of life meaning not specific objects of students' lives, but the general level of life meanings categories that students are shown by in all spheres of their lives. Our task is to concretize this area of study.

Metacognition has been studied for more than three decades from different points of view and in various fields. A.V. Karpov defines it as the leading form of reflexive regulation of cognitive activity, in contrast to cognitive and integrative mental processes included in the structure of "regulatory" reflection. Metacognition research mainly focuses on determining what people know about their cognition (knowledge of cognition), and how people control their cognition (regulation of cognition).

Our goal is to find more of determinants of students' alienation from education process. We already proved, that the alienation of educational activity is related to metacognitive awareness and its' components. This time we need to find out the correlation of life meaningfulness of the learning process and students' alienation from education process. We

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also find it significant to test the relation of life meaningfulness of learning process with metacognitive awareness and its' components.

The subject of our study is the relationship between academic alienation, metacognitive awareness, and the life meaningfulness of learning in psychology students.

The object of the study is the life meaning of learning.

The study aims to identify the relationship between the life meaningfulness of learning and academic alienation and the metacognitive awareness of students.

By the purpose, the hypotheses of our study state:

1. The life meaningfulness of learning in psychology students is positively interrelated with their metacognitive awareness.
2. The life meaningfulness of learning in psychology students is negatively correlated with their level of academic alienation.

2 Methods

The empirical object of our research is 105 psychology students of 1-4 courses of SFU and DSTU aged 18-24 years. The study was conducted using the Google Forms tool.

Among the mathematical methods of data processing, we used the Pearson correlation coefficient.

The methodological tools of the study included the following methods:

1. Subjective Alienation of Educational Activity Methodics by Kosyrev V. N. [1];
2. Metacognitive Awareness Inventory authored by G. Schraw and R. Dennison, adapted by A.V. Karpov [2];
3. Meaningfulness of Learning Process Questionary made by authors of this work.

3 Results

To test the hypothesis 1, we suggested our respondents to answer the questions of the Meaningfulness of Learning Process questionnaire and Metacognitive Awareness Inventory. The data obtained we tested with the r-Pearson correlation coefficient. The results of this analysis are shown in table 1.

Table 1. The results of the correlation analysis of data on the Meaningfulness of Learning Process Questionary and Metacognitive Awareness Inventory.

Factors		Method	Strength of relationship	Significance point	Description
Life meaningfulness of learning	Declarative knowledge	r-Pearson	,459**	$p \leq 0,01$	Weak positive
	Procedural knowledge		,460**	$p \leq 0,01$	Weak positive
	Conditional knowledge		,511**	$p \leq 0,01$	Moderate positive
	Planning		,536**	$p \leq 0,01$	Moderate positive ная
	Information management strategies		,449**	$p \leq 0,01$	Weak positive
	Comprehension monitoring		,558**	$p \leq 0,01$	Moderate positive

	Debugging strategies		,493**	$p \leq 0,01$	Weak positive
	Evaluation		,500**	$p \leq 0,01$	Moderate positive
	Metacognitive Awareness		,561**	$p \leq 0,01$	Moderate positive

The results of the correlation analysis revealed a direct correlation between the fullness of learning with life meaning and all components of metacognitive awareness at a high level of statistical significance. At the same time, the strongest correlations were found with the general level of metacognitive awareness and its components such as conditional knowledge, planning skills, monitoring and evaluation of one's cognitive activity. This confirms the first hypothesis of our study.

To test the hypothesis 2, we suggested our respondents to answer the questions of the Meaningfulness of Learning Process questionnaire and Metacognitive Awareness Inventory. The data obtained we tested with the r-Pearson correlation coefficient. The results of this analysis are shown in table 2.

Table 2. The results of the correlation analysis of data on the Meaningfulness of Learning Process Questionary and Subjective Alienation of Educational Activity Methodics.

Factors		Method	Strength of relationship	Significance point	Description
Life meaningfulness of learning	Educational activity	r-Pearson	-,529**	$p \leq 0,01$	Moderate positive
	University life		-,622**	$p \leq 0,01$	Moderate positive
	Personal relations		-,418**	$p \leq 0,01$	Weak positive
	The self-relation		-,418**	$p \leq 0,01$	Weak positive
	Weakness		-,537**	$p \leq 0,01$	Moderate positive
	Powerlessness		-,537**	$p \leq 0,01$	Moderate positive
	Nihilism		-,615**	$p \leq 0,01$	Moderate positive
	Adventurism		-,395**	$p \leq 0,01$	Weak positive
	General alienation level		-,568**	$p \leq 0,01$	Moderate positive

The results of the correlation analysis revealed an inverse relationship between the fullness of learning with life meaning and the alienation of students in all fields of study at a high level of statistical significance. At the same time, the strongest correlations were found with the general level of alienation and alienation in the field of educational activity and university life. We also received data confirming the relationship between the life meaningfulness of learning and each of the types of alienation from learning. The strongest correlations were found with such types of alienation as weakness, powerlessness, nihilism. This confirms the second hypothesis of our study.

4 Discussion

Alienation from education refers to emotional or cognitive distance from various aspects of the educational context, such as the learning process, the university atmosphere, teachers, other students, and a sense of separation from their scientific results [3]. Among the already known determinants of alienation of students from the educational process, there are the following:

- the state of unity of educational activity [4].
- the level of academic motivation of students [3].
- organizational features of the educational process [5; 6; 7; 8].
- students' metacognitive awareness level [9]

The results of the analysis of existing studies of academic alienation indicate not only the significant role of meaning in motivational processes, but also the mutual influence of factors of alienation from education [10; 11; 12].

5 Conclusion

The results of this study demonstrate that psychology students with a higher level of fullness of learning with life meaning will be less alienated from university life, the learning process itself and interaction with teachers and peers. Students with a low level of life meaningfulness of learning will be confident in their ability to control the events happening around them. They will be more active in taking any actions within the educational process, being confident in their benefits.

In addition, the results of the study showed that students for whom learning is filled with life meaning have a higher level of metacognitive awareness and, as a result, learn more effectively.

In this study, an attempt was made to operationalize the concept of "the life meaning of learning". The further perspective of this study is the validation of tools for measuring this trait and retesting of these hypotheses with its application.

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