

Innovation in Education: Tools and Technologies



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Abstract: *The article presents a summary of the analytical research into the development of individual cognitive maps among two categories of students — students of civil and military higher education institutions. The purpose of the research was to study the vision of their own career prospects after graduation from the university. The researchers focused on the behavioral reactions and self-evaluation patterns reflected in individual cognitive maps of reality, the socio-psychological analysis of which was tested with the methodology developed by G.N. Malyuchenko and V.M. Smirnova. It has been established that the “chaotic” model is dominant among students of civil higher education institutions, while the “organismic” model is more typical of military students. It has been found that individual cognitive maps are largely dependent on the self-evaluation of a particular individual, which indicates the possibility of correction of the relationship between individual world view and personal self-evaluation. Cognitive maps and mindsets can become more productive, whereas latent or potential needs for self-fulfillment are likely to transform into active aspirations for self-study and forming an image of the future.*

Keywords: *cognitive maps, individual models of the world, patterns, personal development, self-evaluation.*

I. INTRODUCTION

Inflammatory Socio-psychological nature of a personality is an excessively general term, which involves reflexive awareness of its nature as a set of both individual activities and communication patterns. This concept embraces both internal and external phenomena and processes comprising different forms of individual potential. A personality itself can be viewed as a potentiality that possesses certain natural abilities, psychophysiological characteristics, talents, social status and a set of cultural and moral elements making up individual cognitive maps.

Description of the communicative field of personality has been the purpose of many research areas that structured the personality and aimed to develop a convenient and consistent thesaurus for further work. The terms used within these studies have included the following ones: world models, cognitive maps, summary of the products of social interaction, interpretations of the reportable field of the model of reality.

In Russian psychology, the issues connected with the image of the world have been considered from the perspective of the activity-driven, creative nature of a person, the structural content of the world image has been studied along with its professional component, linguistic determinants of the world model invariants, children’s crafts, markers of cognitive maps archetypal elements, and psychophysiology of subjective reality.

II. METHODS

The methods of socio-psychological analysis of individual models of the world (developed by G.N. Malyuchenko and V.M. Smirnova [1]) identify four dominant cognitive maps of a personality: “chaotic”, “mechanical-technocratic”, “antagonistic” and “organismic” [2, pp. 250–257].

III. RESULTS

Participants of the research into developing individual cognitive maps as a reflection of self-evaluation patterns included 90 people (45 students of military colleges and 45 students of civil higher education institutions) aged from 17 to 20 years old. Judging by the results of this research, the conclusion can be made that the “chaotic” worldview (42.2%) prevails among the students of civil higher education institutions, with cognitive maps of “organismic” (26.6%) and “polytechnic” (22.2%) modalities also observed in this group. As far as the students of military colleges are concerned, the “organismic” (60%) model prevails in this group, while the “mechanical-technocratic” model is also present (22.2%).

Interestingly, the results produced by the students of military colleges within the “self-reproach” scale were much lower (2.35) than in the group of the students of civil higher education institutions (4.57), which indicates absence of this component in the personality structure of the first group and presence of the feeling of guilt in the second group [3], [4].

Although low results have been received among students in the “self-confidence” (4.21), “self-acceptance” (4.57) and “self-respect” (7.35) scales,

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such aspects as professional disorientation, poor understanding of one's own role in the society, "self-consistency" (3.32), will difficulties, poor sense of time; "self-interest" (3.42), "self-understanding" (3.32) have also been identified. Interpretation of the results of the "Who am I?" test has shown that only 24.87% of the statements fall under the "material" category and 17.73% — under the "communicative" category, which is indicative of weak accentuation of these qualities in the respondents' own self-concept. 73.52% within the "prospects" scale ("Me in the future" [5], [6]) indicate that the students of civil higher education institutions do not predominantly perceive themselves as subjects of social relationships, but at the same time consider themselves to be "established specialists".

The survey conducted among the students of military colleges suggests more positive results: "self-liking" (13.29); "expected attitude of others" — social approval (11.87), which attests to a more harmonious state of cognitive structures of a personality and absence of conflict between different components of a personality. Results of the "Who am I?" test has shown that 88% of the respondents identify themselves with the following social groups: "I am a student of a military school", "I'm a section leader", 75% characterized themselves through their activity: "I'm studying", "I'm a straight-A student".

IV. DISCUSSION

The data gathered in the course of generalized correlation analysis have allowed to identify the "chaotic" map typical of the students of civil higher education institutions (the total number of connections — 7) and the "organismic" one typical of the military students (the total number of connections — 5). Self-conception scales are the core elements of the structural composition of the students of civil higher education institutions: self-respect ($r = -0.31$), self-confidence ($r = -0.32$), self-acceptance ($r = -0.33$), self-consistency ($r = -0.41$), self-reproach ($r = 0.21$), self-interest ($r = -0.3$), self-understanding ($r = -0.29$). The key parameters for the military students: self-respect ($r = 0.32$), self-liking ($r = 0.41$), expected attitude of others ($r = 0.57$), self-reproach ($r = -0.55$), attitude of other people ($r = 0.43$). In the self-evaluation of a military student and their cognitive maps, a negative correlation has been identified: "self-perception — self-reproach", and a positive correlation of self-perception: self-respect, self-liking, expected attitude of others, attitude of others [7], [8].

The majority of the military students (60%) are representatives of "organismic" modality. Meanwhile, the students of civil higher education institutions show the opposite picture: 42.2% of the respondents construct their ideas based on the maps of "chaotic" modality.

V. CONCLUSION

Individual cognitive maps can have their own specific features depending on the self-evaluation of students of civil and military higher education institutions [9], [10]. However, it is possible that as a result of correction of the relationship between the individual world model and personal self-evaluation, cognitive maps and life views can become

more simultaneous, which will create motivational gaps in the need for self-fulfillment and active aspirations for self-study and forming of a positive image of the future among students.

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