

Psycho-Semantic Analysis of Individual Structure of Adolescent's World Image

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Abstract. The article presents the results of an empirical study of the structure of the image of the older adolescent's world. When analyzing the data, the computer program of statistical analysis of texts "ADVEGO", content analysis, morphological and semantic analysis was used. Morphological analysis of empirical data has shown that the most used words belong to the category of nouns. Content analysis made it possible to identify eight semantic categories of word groups that characterize the levels of the image of the teenager's world: nature, social, subject, friendship, school, hobbies and leisure, family, mental (needs, cognitive processes, emotions, feelings, personal qualities). The most significant level in terms of the volume of semantic units and the nature of ongoing processes is the mental level. The results of the conducted research allowed drawing the following conclusions. The individual structure of an older adolescent's world image is a complex mental phenomenon that has universal, age and individual characteristics. Its universal characteristics are multi-levelness and hierarchy; age-related – dynamics, polarity, existentialism, and accentuation on the present time. The individual characteristics of an older adolescent's world image are due to individual personal characteristics of the flow of his or her mental activity.

1 Introduction

The modern social situation increasingly demonstrates instances of deviant behavior of adolescents in all its forms. News broadcasts more and more often report such cases of adolescents' behavior which Russian society has not previously encountered. When analyzing the facts presented by the media and the commentaries thereto both of the general public and of professionals working with adolescents, there is a steady sense of confusion and misunderstanding of the situation. It should also be noted that the basic research of adolescence was conducted during the Soviet period of the development of our society, when the social situation was significantly different from today's reality. The study of modern adolescents' perception of the world around them and the characteristics of the formation of their inner world allowed a closer understanding of the causes of deviations in behavior

1.1 Relevance and backgrounds

The studies of the problem of the world image in homeland psychology have been carried out by A.N. Leontiev [1], S.D. Smirnov [2], V.V. Petukhov [3], F.E. Vasilyuk [4], O.E. Baksanskiy, and E.N. Kucher [5]. The peculiarities of its structure, functions and formation were studied by O.V. Glushenkov [6], M.V. Kartavenko [7], and V.P. Serkin [8]. The main aspects of the psychosemantics of the world image are presented in the

works of A.A. Leontiev [9], E.Y. Artemyeva [10], V.V. Stolin, M. Calvino, A.N. Naminach [11, 12], and G.V. Kolshanskiy [13]. The problem of the world image of adolescents is actively and diversely developed by modern domestic psychologists. The biosocial determinants of the semantic organization of the world image of adolescents are described by the researchers A.N. Alekhin, N.N. Koroleva, I.M. Bogdanovskaya, and V.F. Lugovaya [14].

The concepts of co-evolution of the nature and society in the formation of the world image of adolescents are studied by A.V. Kiriakova, and I.A. Silkina [15]. The semantic features of the world image of adolescents are in the field of scientific interests of I.A. Burovikhina [16], E.I. Shuleva [17]. O.A. Bogpomocheva [18], M.V. Musiychuk [19] study the problems of creativity development and the peculiarities of the world image of gifted adolescents, and M.V. Miroshnichenko [20] studies the features of the world image of deviant adolescents. The world image of adolescents from incomplete families is studied by W.W. Gazizova, R.F. Habibrahmanova, and O.M. Shterz [21], M.A. Odintsova [22]. The role of the information and communication environment and the peculiarities of the system of attitudes to oneself and to the surrounding world in the formation of the world image of adolescents are analyzed by I.M. Bogdanovskaya, G.Yu. Ikonnikova, N.N. Koroleva [23], E.I. Shuleva [24]. Adolescents' subjective image of the social world is studied by I.A. Nikolaeva [25]. The idea of aggressive behavior in the

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structure of the world image of adolescents is described by O.V. Chursinova [26]. The field of scientific interests of V.V. Goryachev [27] is the image of the body in the structure of the image of the world. A generalized analysis of the main theoretical approaches to the study of the world image in adolescence is presented by K.V. Bobrovskaya [28].

The analysis of the literature showed a fairly high level of interest of scientists in the selected issue; however, the studies of the image of the world using the methods of psycholinguistics failed to be established.

The system of semantic values can be investigated by studying the products of speech activity, because: "... speech, word have a semantic, meaning content..." [29, p. 386]. Revealing the psychological nature of speech, Rubinstein stresses the existence of the correlation of speech, language, and consciousness. In the article "Psychology of the Image", Leontiev notes: "Addressing... the consciousness of man, I have to introduce another concept – the concept of the *fifth quasi-dimension*, which opens to man the objective world. This is the *semantic field, the system of values* (italics of the author) in which an objective world is opened to a person" [9, p. 253]. The study of adolescents' world image involves understanding the "system of values", which involves the use of psycholinguistic methods.

1.2 Purpose

The purpose is to study the individual structure of an older adolescent's world image.

1.3 Methods

The study applied the method of "unfinished sentences". In the analysis of the data, the computer program for statistical analysis of texts "ADVEGO", content analysis, morphological and semantic analyses were used.

2 Discussion

Table 1 presents the results of the overall statistical analysis of the entire lexical material.

Characterizing the category of "My image of the world", adolescents quite clearly differentiate and describe the individual image of the world. The statistical analysis of empirical data showed that most words used by them (90.49 %) belong to the category of nouns (Table 1).

The obtained data were subjected to content analysis, the semantic units of which were all the participants' responses written in the course of the study (Table 2).

The analysis showed that the aggregate volume of duplicated (from 25 to 3 times) semantic units is 17.53 %. Table 3 presents 20 semantic units, most frequently used by adolescents.

Table 1. The results of statistical analysis.

The object of study	No.	Indicator	My image of the world	
			the number, n	share in total volume, %
The entire volume of responses	1	The number of words	357	100.00
	2	The number of unique words	162	45.38
	3	The number of significant words	105	29.91
	4	The semantic core	323	90.49
	5	Nouns (with repetitions)	131	40.56
	6	Nouns (without repetitions)	13	3.64
	7	Adjectives	8	2.24
	8	Verbs	7	1.96
	9	Adverbs	6	1.68
	10	Pronouns	46	12.89

Table 2. The results of the content analysis of units of meaning (nouns).

No.	The number of units of meaning, n	The frequency of repetition of semantic units, n	The share of semantic units, in total volume, %	The share of semantic units in the volume of nouns, %
1	1	25	6.98	0.76
2	1	24	6.70	0.76
3	1	13	3.63	0.76
4	1	11	3.07	0.76
5	1	10	2.79	0.76
6	2	9	5.02	1.53
7	1	8	2.23	0.76
8	1	7	1.96	0.76
9	5	6	8.40	3.81
10	2	5	2.80	1.53
11	4	4	4.48	3.05
12	3	3	2.52	2.29
13	21	2	11.76	16.03
14	87	1	24.36	66.41

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Table 3. Semantic units, selected on the basis of content analysis (max. frequency).

The object of study	No.	My image of the world		
		Semantic unit	the number, n	share in total volume, %
The entire volume of responses	1	friend	25	6.98
	2	family	24	6.70
	3	school	13	3.63
	4	life	11	3.07
	5	study	10	2.79
	6	Internet	9	2.51
	7	house	9	2.51
	8	love	8	2.23
	9	training	7	1.96
	10	telephone	6	1.68
	11	sadness	6	1.68
	12	fun	6	1.68
	13	street	6	1.68
	14	book	6	1.68
	15	music	5	1.40
	16	animal	5	1.40
	17	parent	4	1.12
	18	sports	4	1.12
	19	relative	4	1.12
	20	joy	4	1.12

The results are clearly shown in figure 1.

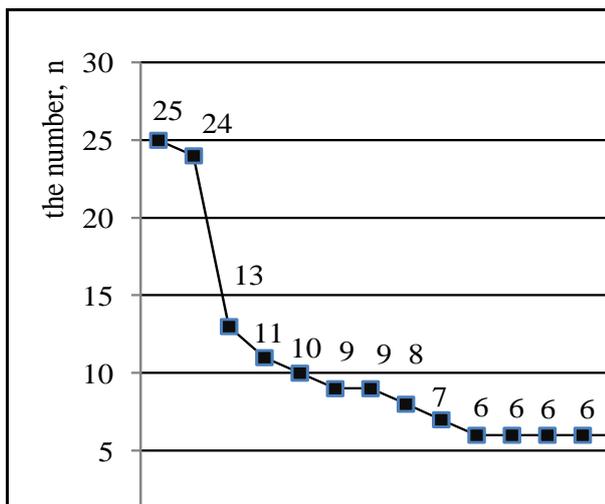


Fig. 1. Semantic units, selected on the basis of content analysis (max. frequency).

The semantic analysis of semantic units reveals the characteristics of the image of the world typical for modern adolescents. It is a life in which an adolescent is surrounded by friends, relatives, pets and is busy by socially-approved activities: communication, studies, and sports. He or she has a rest, walks outside, listens to the music, and reads books. The basic range of emotions includes fun, joy and sometimes sadness.

Content analysis allowed identifying 109 semantic units – nouns with the frequency of repetitions 1-2 times, which amounted to 67.28 % of the total volume of all semantic units and 83.21 % of the volume of nouns. They reveal the individual characteristics of an adolescent's world image. For a better understanding of the semantic meaning of the semantic units, their classification by the main types of nouns (Table 4) was carried out.

Table 4. The classification of semantic units – nouns.

Types of nouns	My image of the world	
	The frequency of repetition of semantic units, n	The share of semantic units, in total volume, %
Nouns (without repetitions)	131	40.56
Specific	52	39.69
Unrelated (abstract)	62	47.33
Collective	5	3.82
Material	3	2.29
Single (singulative)	0	0

The results show that the most frequently used are specific (39.69 %) and abstract nouns (47.33 %). Their ratio characterizes the age peculiarities of the mental development of adolescents: the gradual transition from visual-figurative to abstract-logical thinking.

The concrete nouns reveal the objective world of an adolescent, the abstract ones "... denote an action or characteristic in the derivation from an action or the carrier of the trait..." [30, p. 125]. The analysis of abstract semantic units reveals deeper levels of the image of the world. In the minds of adolescents, the semantic units are present which are ethical (happiness, freedom, goodness) and aesthetic categories (beauty). Derived abstract nouns form antonymous pairs describing the characteristics of adolescents (study – game, work – rest); their emotional life (sadness – joy, love – jealousy); the dynamics of the development of consciousness (light – darkness, life – death). The analysis of the results reveals the process of creating an individual system of values (happiness, freedom, friendship, love, work) of adolescents. The obtained data also contain semantic units characterizing modern adolescents' values: popularity, fashion, and music.

Abstract semantic units with the characteristic of action reveal the principal activities of adolescents: communication, learning, leisure, work. The peculiarities of their dynamics are also represented by antonymous pairs: calm – activity, study – games, labour – leisure, work – entertainment.

Single recurring semantic units reveal an individual world of the person gradually getting to know his or her

capabilities including drawing, music, technology, development, imagination, creativity.

The content analysis revealed 13 adjectives (3.36 % of the total share). One of them is relative, pointing to the place (home), and the rest are qualitative (personal, pure, lovely, best, interesting, interesting, vital, challenging, strange, independent) characterizing the feature of the subject. The semantic meanings of qualitative adjectives reveal intimacy, purity, beauty, mobility, inconsistency and self-sufficiency of an adolescent's world image.

The content analysis revealed in the responses of adolescents 8 verbs that made 2.24 % of the total share (Table 5).

Table 5. The results of the content analysis of semantic units – verbs.

No.	Semantic unit	The meaning of the semantic unit (verb)	The frequency of repetition of semantic units, n
1	to fool	specific action	1
2	to go	movement and transfer in space	1
3	to walk		1
4	to live	physical condition	1
5	to gobble		1
6	to sleep		1
7	to like	mental state	1
8	see	the activities of the sense organs	1

The semantic characteristic of the verb is the designation of the action or state as a process. The verbs used by the respondents have the forms the present (see, like) and the indefinite (infinitive) tense: to live, to gobble, to sleep, to walk, to go, to fool.

This amount is too little for active adolescents, which indicates the existing limitation of opportunities for activities. The adolescents describe their activities using not verbs but abstract nouns with the sign of action. This feature indicates the presence of the social derivation of adolescents. They are ready to become more active in social activities, but the analysis of lexical units indicates their absence. The infantile family-school-sports environment is insufficient for a full mental development of an older adolescent. The needs of adolescents in independent activity and bright emotions, facing the external restrictions of their implementation, can be transformed into internal contradictions, reflected in their aggressive behavior.

The content analysis allowed identifying eight semantic categories of groups of words characterizing the levels of an adolescent's world image: nature, social, subject, friendship, school, hobbies and leisure, family, mental (needs, cognitive processes, emotions, feelings, personal qualities). The most substantial in terms of the volume of semantic units and the nature of processes is the mental level. It is the "boiling point", "volcano" of an adolescent's world image.

2.1 Conclusions

The results of the conducted research allowed drawing the following conclusions:

The individual structure of an older adolescent's world image is a complex mental phenomenon that has universal, age and individual characteristics. Its universal characteristics are multi-levelness and hierarchy; age-related – dynamics, polarity, existentialism, and accentuation on the present time. The individual characteristics of an older adolescent's world image are due to individual personal characteristics of the flow of his or her mental activity.

2.2 Application

The results obtained supplement the knowledge about the individual and personal features of functioning and formation of the image of the world in adolescence. They can be used in psychological and pedagogical work with adolescents in prediction and correction of the individual trajectory of their development and creation of a psychologically safe environment. The procedure of objectifying the image of the world allows a teenager to be aware of his/her problems, contributes to the development of internal regulation of the individual perceptions of reality and correction of non-constructive ways of behavior.

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