



COMPLEX APPROACH IN SOCIAL ATTITUDE ANALYSIS

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ABSTRACT

Analyzing some complex social phenomena, sociologists use both classic formal approaches and psychological methods. Psychological methods have some useful advantages, but they are ill-adapted to respond to the needs of sociological researches. Thus, it is interesting to implement a special approach to study structure of municipal unit residents' social attitude towards their local administration. Both advantages of formal and flexible methods are used here for this purpose. The method is based on a traditional polling survey combined with statistical data processing and psycholinguistic approach which includes semantic space formation based on Russian proverbs. The article defines percentage of social attitude components, describes correlation dependence among them, states discrepancy reasons of cognitive and affective elements in social attitude to behavioral component.

Keywords: Municipal administration, social attitude structure, cognitive component, affective component, behavioral component, complex approach, traditional methods, psycholinguistic approach

1. INTRODUCTION

It is difficult to overestimate importance of such a concept as "social attitude" ("attitude") in sociological researches. Still there are a lot of discussions about its essential definition. Social attitude constantly attracts sociologists' attention as a significant theoretical concept – both in fundamental modeling and within applied researches caused by practical needs. For

historical reasons, the concept of social attitude is interpreted differently; sometimes its content definitions are contradictory: it can include both constant behavior determinants of high generalization level and one-time situation that depends on a context. For example, according to G. Summers's definition (1970), social attitude is a stable system of

views and believes preparing a person to significant actions that can be expressed in the form of reflected statements.

Nevertheless, thanks largely to vision of social attitude role in social activity explanation, interest to this scientific concept does not languish. Reflecting various social and scientific influences, exploratory activity in this sphere leads to some changes in conceptual content of attitude, i.e. creation and accumulation of new knowledge which requires analysis and systematization. In any given theoretical context, social attitude problematic was developed in works of different researchers; however, their quantity decreases significantly if to speak directly about its conceptual context explanation. Beginning of social attitude study is connected with such names as W. Thomas and F. Znaniecki (1918), who analyzing adaptation process of Polish immigrants in the USA stated that person's interactions with a social organization are regulated by means of psychical construct called "attitude". In spite of subsequent conceptual changes in the definition of "attitude", scientists revealed its main characteristics – commitment to social objects and regulation of person's interactions with social system. The following study of this phenomenon resulted in different interpretations of social

attitudes. Allport's systematization of the scientific works (1935) led the scientist to the conclusion that, in spite of different interpretations of this concept, the majority of the researches concur to each other in one main thing concerning social attitude meaning. Social attitudes characterize general commitment of a person to any given social object. The commitment precedes an action and reveals aptitude of a subject to act in a certain manner in relation to the object.

In sociology social attitude study has a long history, but its subject is so multisided and diversified that scientific interest of it does not fade away in course of time. (Allport 2002, Summers 1966, 1970, 1998, Krosnik 1988, Zanna and Rempel 1988, Hjelle and Ziegler 1992, Krosnik, Chuang, Berent and Carnot 1993, Boninger, Krosnik, Berent and Fabrigar 1995, Son Hing, Chung-Yan, Hamilton and Zanna 2008, Farr 2009, Hogg 2012).

As it was stated above, attitude characterizes a process of individual consciousness defining any real or possible individual activity in social sphere. It is a psychological process which is interpreted as an action that appears originally in relations with social world and which is connected, first of all, with a social value. As a real opportunity of a local community to cover a part of state affairs and address

local problems at its own risk satisfying its own interests and taking into account regional and national conditions historically formed within the territory, municipal administration is a modern social value. In the society where municipal administration is defined as a social value (subjective moment of objective element in cultural life – a thing or an idea becomes a social value only when it has a certain meaning for a person or a group and turns into an activity object), people's social attitudes are revealed in adequate personal actions, codes of conduct which are more or less evident. Attitudes have a crucial role in definite information search and its organization. However, there is always an attitude divergence from a real behavior caused by difference in nature of an action, its purpose, context, and time. In this light, both attitude connection with several behavioral acts and one-time reaction are important.

On the assumption of W. Thomas and F. Znaniecki's theoretical theses (1972), person's dependence on a social organization or culture and dependence of a social organization and culture on a person were defined as two fundamental problems. Consequently, there are two basic types of sociological data: objective cultural elements of social life (social values) and subjective characteristics of social group

members (personal social attitudes). Social attitude is an inner attitude of a person towards somebody or something. In this article we studied provision of the second group of sociological data - subjective characteristics of local community members – municipal units – personal attitudes towards municipal administration institution.

Social attitude is a subject of cross-disciplinary researches. Nevertheless, it is necessary to distinguish differences of theoretical problems in various scientific disciplines. Besides, there are also differences in methods. The basic method of social attitude evaluation is scaling. Among them Likert scale, Thurston scale, and Guttman scale are the most famous ones. In sociology attitude study is usually based on sampling survey where sample consists of significant number of people. Although we have representative information in this case, traditional methods provide insufficient data or distort them in some degree (Allport 1929). We faced this problem during our research "Analysis of social processes in municipal units of Zabaykalsky Krai".

2. METHOD

2.1 Social attitude structure analysis

In 2011-2014 we conduct the research "Analysis of social processes in municipal units of Zabaykalsky Krai" on the base of

sociological laboratory at the department of state and municipal management and policy of Transbaikal State University. The research had the following purposes: municipal administration efficiency evaluation and degree evaluation of local community involvement in local problem solution. According to the survey results, having a high level of understanding of community members' role and tasks in municipal unit performance provision, we observed a low level of social activity. Thus, we defined that social attitude towards municipal administration does not result in dynamic actions.

Polling method was used to collect the data. We interviewed students who had necessary theoretical base concerning polling procedure and who were briefed additionally. Moreover, we applied official statistics data concerning elections (political activism is considered as a part of citizens' community relief).

We faced the following problem: trying to receive information which was necessary for the sociological research and asking a certain person with individual consciousness, you should take into account that content and functions of individual consciousness are based on particular laws. The main law is an existence of unconscious or partially conscious phenomena in personal

mentality. As a rule, they can be verbalized and they are always charged emotionally and energetically. Highly approximately, this mentality level is fixed by affective attitudinal component in sociology. Affective level existence in respondent's consciousness is an evident well-known fact, in sociology it is taken for granted (Krosnick, Boninger, Chuang, Berent, and Carnot 1993). But attitude model implementation is a controversial issue; what is better: tree-dimensional or one-dimensional model. However, taking this level for granted, only some scientists apply methods which are adequate to its nature to study it. Back in the middle of the XX century, American scientists distinguished three attitude elements: cognitive, affective (emotional and evaluative) and behavioral components (Katz and Stotland 1959). At that time there was an opinion that cognitive component consisted of conceptualization, images, and cognitive strategies which could influence over behavioral distinctiveness. Behavioral component (motives, values, needs, etc.) galvanized a person into action. Affective one included feelings towards an attitude subject. Then it emerged that those three components were not always reflected in any attitude, each of them can have an impact on personal behavior both by itself and in combination with others (Peters and

Slovic 2007). Now the main parameter is considered to be emotional and evaluative one, and attitude is seen as a positive or negative evaluation of a subject or behavior (Zanna and Rempel 1988).

2.2 Psycho-semantic approach in research

We stated a discrepancy problem, a possible data distortion during questionnaire survey consisting of traditional questions to evaluate municipal unit residents' community relief in Zabaykalsky Krai.

This problem should be solved in the light of the fact that affective structures, being ignored by a person, do not exist in verbal form. They have psychological nature and are connected with personal meaning which is always individual in character. Language is a suprapersonal system. So, asking a person in order to get an affective component, we receive a cognitive one. Cognitive information is different in nature. It is rational and has a non-psychological character, as it describes an object, includes normative elements and depends on social environment. Cognitive component is influenced directly by events and their public interpretation. The polling itself results in significant changes on this level of personal consciousness, thus the information may be uncertain.

3. RESULTS

3.1 Study of structure attitude

Data received by means of polling and analyzed in our research demonstrate that traditional methods do not let scientists leave the sphere of respondents' normal cognitive reactions. It takes place, because asking a respondent about his feelings directly we find what he thinks about them. Affective component which is connected with behavior is displaced by cognitive component and, in fact, it is outside the analysis in majority of social researches. Significant part of information which is necessary for a sociologist is hidden in subjective feelings of a person which can be reflected in his behavior, and so they can fail to be a subject of scientific observation. A lot of information is hidden by a person from prying eyes; people do not show their thoughts even in written form. Data received by the means of the polling included in research model create a kind of distortion right at the beginning of the analysis. Hence, there are several questions concerning the fact why respondents' behavior does not correspond to their system of values. Analyzing municipal unit residents' attitude towards municipal administration in Zabaykalsky Krai, we tried to define these three attitude structure elements for the respondents: cognitive, affective, and behavioral components. Cognitive element was defined by such questions as: "How do you think whether

the solution of significant problems depends on local authority?”, “What professionalism level do municipal officials have?”, “How significant are financial problems?”, “Do you have an adequate level of knowledge and competence to become a head of a municipal unit?”, etc.

Affective element – by such questions as: “How do you rate work of local authorities?”, “Does local authority implement its mandate, in your opinion?”, etc.

Behavioral aspect was fixed by means of answers to the following questions: “Are you ready to take initiative and be responsible for problem solving in your settlement?”, “Are you ready to work in representative or executive authorities of your settlement?”, etc.

It is commonly believed that attitudes define behavior, if it is possible to minimize influence of other factors, if attitude subject corresponds to this behavior completely, and, finally, if this attitude is strong (Thomas and Znaniecki 1972). We suggest that it is quite difficult to observe all the conditions, because a lot

of variables have impact on social life development. We supposed the problem was hidden both in external factors which define attitude influence over person’s behavior and attitude structure deformation. What do we have having defined percentage of independent components of attitude towards municipal administration? Evidently, any type of education (even general secondary level) and life experience should encourage positive attitude development to provide life necessities of the place where a person lives, works, or has a rest.

The researches demonstrated that “unit weight” of various components of attitude towards municipal administration is different. This evaluation was held by means of definition of average number of answers on the five-point scale (1 – “positive”, “sure”, 5 – “negative”, “no, I will not be able”). Cognitive component takes the highest rate here. Mean value of the most frequent result of emotional and evaluative component is a little bit lower, but both of them differ from behavioral one.

Table 1: Mean value of components of municipal unit residents’ social attitude towards municipal administration in Zabaykalsky Krai

Social attitude component	Mean value
cognitive	1.819
affective	2.291
behavioral	3.751

The data show respondents’ sufficient knowledge concerning purposes of life necessities provision in their settlement,

local authorities’ tasks, level of knowledge and proficiency which are required to become a municipal unit head, a deputy, or

a municipal official. Qualitative analysis of the answers to the following questions lets us state that respondents have a comprehensive idea of attitude subject – municipal administration. Nevertheless, data concerning skills, aptitudes, and community-minded behavior evaluation turned to be unsatisfactory.

The received result gives us an opportunity to state that cognitive component even being a significant part cannot create a strong and powerful social attitude towards community relief as a whole. Perhaps, a lack of emotional and evaluative reactions in attitude does not provide a necessary motivation to take initiative, organize meetings, or participate in collective events, etc. The attitude is rather weak even if we speak about highly educated adult residents who are members of non-governmental organizations.

3.2 Correlation analysis of social attitude components

We held a correlation analysis of components of municipal unit residents' social attitude. Correlations between different social attitude components revealed in our research have different strength and direction, and this fact can be proved by the results of various researches (LaPiere 1938; Davidson and Jaccard 1979; Izhevskaya 2004).

Tables 1, 2, and 3 demonstrate data concerning correlations among cognitive, affective, and conative components of municipal unit residents' social attitude towards municipal administration and its elements.

3.2.1 Correlation between cognitive and affective components of social attitude

Table 2 covers correlations between municipal unit residents' understanding of municipal administration purposes or problems faced by local community and problem solving efficiency evaluation. The higher complexity understanding level of the problem is, the better authority performance evaluation will be. Those respondents, who understand complexity and responsibility levels of decision-making process in municipal units, evaluate the situation answering "they do their best" or "they do their utmost". And, vice versa, those respondents, who answer that local authorities do nothing, give a harsh assessment of municipal administration: "they beat the cover".

Correlation was also stated between decision-making process dependence on local authorities and evaluation of respondents' skills. Those respondents, who describe municipal administration character as complex, believe they have inadequate skills. It is proved by stated relationships between such variables as

“municipal unit head’s personal characteristics” and evaluation of respondent’s leadership skills and aptitudes.

Description of financial and economic problems and professionalism level as complex and important elements has correlation with municipal administration system efficiency evaluation. The higher complexity level is, the worse efficiency

evaluation we have. Similar correlation takes place between professionalism level variables and municipal administration efficiency evaluation. It is fair to assume that municipal officials’ professionalism level does not satisfy complexity of purposes faced by municipal units, thus, their activity does not produce the desired results and it is evaluated by residents as ineffective.

Table 2: Correlation between cognitive and affective components of social attitude towards local authority

Affective component	Does local authority cope with its mandates, in your opinion?	Municipal administration system efficiency evaluation	Do you have necessary skills to become a municipal unit head? (will power, persistence, persuasiveness, ability to command)
Cognitive component			
Dependence on local authority decisions			
Pearson correlation	.126** ¹	-.021	.141**
Significance (two-tailed)	.004	.629	.001
N	522	522	522
Financial and economic problems	.018	.147**	.029
Pearson correlation	.684	.001	.504
Significance (two-tailed)			
N	522	522	522
Municipal officials’ professionalism level			
Pearson correlation	-.095*	.326**	.012
Significance (two-tailed)	.030	.000	.793
N	522	522	522
Head’s personal characteristics			
Pearson correlation	.554	.339**	-.153**
Significance (two-tailed)	.666	.000	.000
N	522	522	522

3.2.2 Correlation between cognitive and behavioral components of social attitude

As it is shown in Table 3, correlations do not take place in respect of all elements and questions. We fixed inverse

correlation between municipal administration responsibility understanding and willingness to take the initiative, assume responsibility for problem solving within the community, or

work in local authorities. People “avoid” problems and responsibility.

Table 3: Correlation between cognitive and behavioral components of social attitude towards local authority

Behavioral component	Are you ready to work in representative or executive local authority of your settlement?	Are you ready to take the initiative and assume the responsibility for decision-making process and problem solving in your settlement?
Cognitive component		
Decision-making process dependence on local authorities		
Pearson correlation		
Significance (two-tailed)	-.171**	-.170**
N	.000	.000
	522	522
Financial and economic problems		
Pearson correlation	.038	.069
Significance (two-tailed)	.383	.115
N	522	522
Municipal officials’ professionalism level		
Pearson correlation		
Significance (two-tailed)	-.036	-.016
N	0.418	0.115
	522	522
Head’s personal characteristics		
Pearson correlation	-.079	-.140**
Significance (two-tailed)	.072	.001
N	522	520

3.2.3 Correlation between behavioral and affective components of social attitude

Table 4 demonstrates existence of a high dependence level within particular elements between affective and behavioral components of municipal unit residents’ social attitude towards local authority. The more frequent people use the answer about local government failure, the lower their willingness to work in local authorities, take the initiative or assume the

responsibility for problem solving becomes. We have also defined a high correlation significance level between evaluation of personal skills and willingness to work in representative or executive local authority and take the initiative.

Do people underestimate their skills and aptitudes? Or do they hide their real attitude towards the problems?

Table 4: Correlation between behavioral and affective components of social attitude towards local authority

Behavioral component	Are you ready to work in representative or executive local authority of your settlement?	Are you ready to take the initiative and assume the responsibility for decision-making process and problem solving in your settlement?
Affective component		
Does local authority implement its mandate, in your opinion?		
Pearson correlation	.154**	.109*
Significance (two-tailed)	.000	.013
N	522	522
Municipal administration system		

efficiency evaluation		
Pearson correlation	-.010	-.027
Significance (two-tailed)	.827	.541
N	522	522
<hr/>		
Do you have necessary skills to become a municipal unit head? (will power, persistence, persuasiveness, ability to command)		
Pearson correlation	.642**	.724**
Significance (two-tailed)	.000	.000
N	522	522

Data concerning membership of municipal unit residents in non-governmental organizations (Table 5) prove that

behavioral aspect contradicts with cognitive and affective components.

Table 5: Data concerning membership of municipal unit residents in non-governmental organizations

Answers to the question, "Are you a member of a non-governmental organization".	Frequency	Percentage	Cumulative percentage
Yes, I am	193	37,0	37,0
No, I am not	289	55,4	92,3
We have no such organizations	40	7,7	100,0
Grand total	522	100,0	

Hence, correlation analysis of components related to municipal unit residents' social attitude towards municipal administration in Zabaykalsky Krai revealed both a high correlation level between cognitive and effective components of social attitude and correlation of different significance level between these components and behavioral one. We stated that the respondents evaluated complexity of tasks and purposes faced by local authority adequately. Personal skills and their evaluation are underestimated that can be explained by people's unwillingness to participate in local problem solving, elections, meetings, and other public events.

3.3 Self-definition concept

To obtain more adequate evaluation of affective component in municipal unit residents' social attitude, we used a self-definition concept. Self-definition is a feeling of group membership, or affiliation, i.e. self-definition is to contain a strong affective component. Answering to the question, a respondent defines how he associate himself with local community, if those people who live next to him are "friends" or "foes", and if he describes the local community as "we" or "they". These data can be interpreted as an existence or absence of identification with the settlement.

The data (Table 6) show that the interaction level is low: only 33.9 % of the municipal unit residents communicate with

their neighbors constantly. Such results can be seen as an alarm situation, because we speak about rural areas and small urban

settlements mainly, which are characterized by short social distance and predominance of personal contacts.

Table 6: Data concerning interaction level among municipal unit residents

Answers to the question, “How often do you communicate with your neighbors?”	Frequency	Percentage	Cumulative percentage
Constantly	177	33.9	33.9
From time to time	214	41.0	74.9
Very seldom	99	19.0	93.9
I do not communicate with them at all	32	6.1	100
Grand total	522	100.0	

However, the results demonstrated in Table 7 are quite optimistic, as social interaction “quality” among residents can be described as high. 40.8 % of respondents define the interaction character as “home folk”, and more than a quarter of pollees characterize the interaction as close: “staff” and “family”.

In municipal units interaction reduction is caused by technical expansion (computers, tabled computers, iPhones, etc.), growth of information technologies and Internet availability. Nevertheless, personal contacts did not undergo significant changes.

Table 7: Data concerning municipal unit residents' interaction character

How do you define the interaction character in your settlement?	Frequency	Percentage	Cumulative percentage
Family	88	16.9	16.9
Staff	56	10.7	27.6
Neighbors	42	8.0	35.6
Home folks	213	40.8	76.4
Everyone defends his/her own interests	68	13.0	89.5
No answer	55	10.5	100.0
Grand total	522	100.0	

We defined a correlation between data concerning the level and character of interaction among municipal unit residents

and respondents' age, social status, and education level.

Table 8: Correlation between data concerning the level and character of interaction among municipal unit residents and respondents' age, social status, and education level

Characteristics	Age	Social status	Education level
Communication with neighbors			
Pearson correlation	-0.210**	-0.130**	0.105*
Significance (two-tailed)	0.000	0.003	0.017
N	522	522	522
Interaction character			

Pearson correlation	-0.131**	-0.078	0.054
Significance (two-tailed)	0.003	0.075	0.217
N	522	522	522

As these data (Table 8) show, interaction frequency and communication “quality” increase with age and social changes from “working man” status to “pensioner”. Vice versa, increase in education level results in communication reduction. Perhaps, it happens due to the lack of time which is spent on self-education and skill improvement.

So, self-definition level in municipal units can be described as high. Identifying themselves as “friends” or “local residents”, people must be interested in effective self-government and have active social attitude. But we have a reverse situation. Perhaps, in this case we miss the following factor. Even if to suppose that emotional component is verbalized, realized by a person, and it exists on cognitive level, there is a danger to obtain inadequate information for two reasons. Firstly, a respondent may hide his group preferences – he does not want to trust a researcher, and, possibly, sociology as a whole. And, vice versa, a respondent wants to help a researcher, trying to understand what he is asked to do, so he seeks correspondent variants of answers. It means cognitive component, and consequently affective element cannot be

indifferent to a polling situation; it is mediated by expectations of social environment.

Another important moment in cognitive level analysis is the fact that a respondent will use another concept system, unlike the researcher. Each person may have different visions on particular objects, things, and phenomena which can be defined as concepts. It states that even on cognitive (realized) psychical level of a person we can find some disadvantages of polling.

Therefore, having defined social self-definition that deals with affective level of respondents as a subject of our research, we should take into account an intersection of the following realities in individual consciousness: reflected directly in subjective emotions and feelings and indirectly – through the system of socially accepted ways of consciousness (through various language forms).

In sociological interpretation cognitive level of social attitude is supposed to be a concept used by a respondent to define his or her feelings. And affective component is a personal sense.

So, we have a problem of adequate affective component description in individual consciousness. In psychological

researches there are two of the most famous groups of methods aimed to analyze poorly realized and verbalized phenomena. These are projective and psycho-semantic methods comparability of which was proved by some works (Stolin and Kalvinio 1982, 1983).

3.4 Psycho-linguistic approach

3.4.1 Psychosemantic methods in sociological practice

However, sociological research cannot justify such a use of labor intensive projective methods, e.g. because of sample number.

It is just the other way round with psycho-semantic methods which proved to be useful in analysis of wide range of social phenomena (Shmelev 1982; Petrenko, Alieva and Shein 1982, Pipodi, Shmelev, Andreeva and Gramenickij 1993).

The methods called in Russian sociology as “psycho-semantic” methods were elaborated in American psychology in 1950s. Osgood’s semantic differential (1957, 1976) and Kelly’s repertory grid (1947, 1955) were created to analyze the meanings of different words used by a person to interpret perceived phenomena. These methods help a researcher to reconstruct a semantic space of a respondent that gives an opportunity to build an individual consciousness structure (Pohilko and Fedotova 1984, Fransella and

Bannister 1987, Tararuhina and Ionceva 1997). As a result, we receive a research model which is used to separate a system of meanings and factors implemented in personal evaluation of any phenomena or objects. Since the origin of these methods, representatives of other non-psychological scientific disciplines including sociologists have been interested in their usage. Besides the analysis of differences in respondent’s perception of various social phenomena, sociologists were attracted by an opportunity to distinguish significant sorts of people on the base of similar and close perception of the objects by means of psycho-semantic methods.

In Russian sociological practice these methods appeared through the branch of Russian psychology – psycho-semantic. Psycho-semantic as a psychology sphere studying individual meaning system forms in human consciousness was established by works of several psychologists from Moscow State University in the middle of 1970s. A group of researchers headed by Petrenko (1982, 1991, 1994, 1997) began investigation of social phenomena: ethnic stereotypes, political consciousness, and mentality of Russian society. In empirical studies concerning family, political and economic consciousness, advertisement, and culture, sociologists often use psycho-semantic methods (Petrenko, Alieva and

Shein 1982, Petrenko and Surmanidze 1994, Petrenko and Sapsoleva 2009). In our opinion, popularity of psycho-semantic methods can be explained by a modern sociology tendency connected with increased attention to a person, its mentality, values, and motives affecting his social activity. Such a situation requires reconsideration of cognitive abilities as well as implementation of different methods taken from interfacing disciplines in sociological researches. This increased attention to psycho-semantic methods and their extensive use in sociological practice are also explained by their effectiveness in achieving a goal. In its turn, the effectiveness is connected with the fact that psycho-semantic methods give us a chance to combine qualitative and quantitative approaches in sociological research. Avoiding theoretical and methodological aspect of psycho-semantic method implementation problem, sociologists understand instinctively that this way helps to overcome a range of difficulties arising during “rigid”, formalized surveys. Psycho-semantic methods give a sociologist an opportunity to “look” into a respondent’s consciousness; moreover, they make it possible to conduct a “rigid” survey so that it will be more economizing and reliable in the context of statistics.

One of the main experimental psycho-semantic methods is a method of subjective semantic space reconstruction. The semantic space is a combination of specially organized characteristics, describing and differentiating objects within an informative space. Moreover, there is a combination principle for separate features to form common clusters which are the base of the reduced language – the semantic space. Narrowly, semantic space is a combination of features where combination principles for separate descriptors are indicated by statistical procedures. The term “*subjective*” *semantic space* is to underline its formation peculiarity including psycholinguistic experiment with a respondent and his individual meaning system reconstruction that may differ from an “objective language” meaning system of the social mind.

The most famous and simplest semantic space variant is Ch. Osgood’s semantic differential method. Evaluation of definitions in different rating scales happened to correlate with each other, and the scientists were able to distinguish bunches of such highly correlated scales and group them in factors by means of a factor analysis. From the informative point of view, a factor can be seen as a semantic invariant of scale data which are a part of a

correlation bunch. As a rule, a factor is called after a name of an antonym in a scale that has a maximum value concerning this factor. A combination of such independent factors forms semantic space system. In mathematical terms, a semantic space reconstruction is a shift from the high dimension base (features, indicated by the scales) to the base with smaller dimension (categories and factors). In our opinion, during the questionnaire creation for the research it was interesting and useful to implement the method based on the psycho-linguistic approach. Unlike any of the other special procedures, the methods based on the psycho-linguistic approach can fit the questionnaire context perfectly and do not require specific and detailed instructions for the task.

3.4.2 Proverbs, as a means to identify the various aspects of group consciousness

As an original material of the sociological research, we used Russian proverbs which can help us to define different facets of a group consciousness by means of their flexibility. A proverb is a metaphorical stereotype. Compared to a direct stereotype, it is treated differently, and, as a result, the method construction on the base of proverbs drops a rate of “social desirableness” effect, as a modern institutional norm is hidden for a respondent by metaphorical material of

such a historical verbal genre. A proverb as a developed image with emotional and evaluative character is a kind of an alternative to a conceptual thinking which is a base of the majority of questions. Thus, for the respondents answering the questionnaire, this procedure performs a function of psychological relaxation providing reliability increase of our research results (Sikevich 2005).

The respondents were given 28 Russian proverbs from Vladimir Dal’s chrestomathy *The Sayings and Bywords of the Russian people* (1957). The proverbs reveal non-institutional, “soft” norms which are specific for metaphorical reflection of a social environment.

A respondent may be offered a set of proverbs and he should select those texts among them which are close to his perception of life and its evaluation (multiple choice questions). You can give him two opposite proverbs to choose the only one which corresponds to his opinion. We decided to use the variant including evaluation of several proverbs on a ten-point scale.

3.4.3 The mathematical treatment

We held a mathematical treatment of the original comparison matrix to define the universes forming its base. A mathematical treatment stage does not create a “new content”, but let us visualize original data

as a compact, well- structured form. The proverbs selected to build a semantic space were tested by means of a factor analysis (Byuyul and Cefel 2002). The factor

analysis implementation degree for the sample is characterized by high adequateness, according to Kaiser-Meyer-Olkin criterion that can be seen in Table 9.

Table 9: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.787
Bartlett's Test of Sphericity	
Approx. Chi-Square	1537.607
Df	378
Sig.	.000

The selected proverbs were grouped in 4 basic clusters (Table 10). The further semantic space construction is connected with interpretation of the clusters.

Table 10: Rotated Component Matrix²

Proverbs	Component			
	1	2	3	4
Proverb 11	.810	.068	.132	.176
Proverb 8	.780	-.072	-.064	.112
Proverb 14	.759	.229	.091	.140
Proverb 21	.754	.133	.048	.018
Proverb 18	.634	.202	.052	.060
Proverb 22	.623	.240	-.105	.003
Proverb 10	.597	.353	-.097	.247
Proverb 19	.592	.020	-.024	.507
Proverb 20	.506	.470	.229	-.234
Proverb 12	.087	.764	.082	.179
Proverb 17	.207	.719	.191	.061
Proverb 13	.344	.475	-.294	.163
Proverb 7	.364	.425	.028	.351
Proverb 27	-.016	.203	.783	-.062
Proverb 25	.253	.186	.692	.068
Proverb 26	-.066	-.124	.684	.276
Proverb 16	.415	.145	.648	.012
Proverb 4	-.218	.081	.642	-.261
Proverb 24	.309	-.169	.608	.291
Proverb 15	.322	.222	.526	.317
Proverb 9	.145	.475	.525	-.268
Proverb 28	.275	.190	.492	-.016
Proverb23	.097	.052	.037	.819
Proverb 2	-.019	.211	-.460	.795
Proverb 3	.042	.042	.032	.764
Proverb 6	.029	.249	.042	.663
Proverb 1	-.138	-.001	.042	.611
Proverb 5	.027	-.095	.204	.542

3.4.4 Interpretation of the factors

Here you can see English equivalents of the Russian proverbs we used. Interpretation of

the factors (clusters) is carried out on the base of a semantic invariant search that

integrates the objects grouped in the factor or the cluster. The data interpretation let us define the proverb groups describing:

- Attitude towards a place of residence (“you get worn and torn in the place you were born”, “East or West – home is best”, “when in Rome, do as Romans do”, etc.);
- Attitude towards a local authority ideal (“An army of hogs led by a lion is more formidable than an army of lions led by a hog”, “duty before friendship”, etc);
- Attitude towards laws and authority (“One law for the rich, and another for the poor”,

“A friend in court is better than a penny in purse”, etc.);

- Attitude towards tactical and strategic goals (“a bird in the hand is worth two in the bush”, “man proposes but God disposes”, “dogs that put up many hares kill none”, etc.).

The respondents were given these proverbs to evaluate their agreement with the statements on a ten-point scale: (1) means disagreement, (10) – absolute agreement.

The analysis was based on average determination for the used marks (Table 11).

Table 11: Average value for the marks according to a proverb group

Interpretation of a proverb group	Average value for a mark
attitude towards a place of residence	6.672
attitude towards a local authority ideal	6.284
attitude towards laws	5.916
attitude towards tactical and strategic goals	8.112

Hence, we can speak about a certain adequacy and reliability of poll data concerning attitude of municipal unit residents towards municipal authority. The semantic differential method is the most famous and popular to construct a subjective semantic space. Based on a unified coordinate system, semantic differential proved itself in diagnostics as the most adjusted method to evaluation of an average reaction which is a characteristic of a certain group of residents. So, it is wildly used in sociological and socio-psychological practice to evaluate social attitudes.

4. DISCUSSION

There are both a significant quantity of publications, describing different psycho-semantic methods, and the results of certain researches where they were used. The semantic differential method followed by a factor analysis was used to study formation of public opinion (Petrenko and Mitina 1997), individual consciousness (Kosarevskaja and Kutkina 2009), propaganda and advertising impact (Aleksandrova, 2000), social identity (Baranova 1993, 2001), political mentality (Mitina and Petrenko 1994), evaluation and understanding of movies (Alieva, Petrenko

and Shein 1982), perception of social aspects in Russian reality after 1917 (Mitina and Petrenko 1995, 2001), and family self-definition (Danilova, Klimova, Dudchenko, Mytil, Yadov, Yadova and Baranova1993).

Nevertheless, the theoretical and methodological base of psycho-semantic method implementation is considered to be underdeveloped. The most significant problems arise when one needs to get an interpretation of data received during polling or to give theoretical justification to the adequacy of the procedures used within the psycho-semantic methods. The combined use of the psycho-semantic methods and other sociological approaches is still supposed to be understudied. Also, it is necessary to elaborate the themes connected with educational value estimation of those measure procedures that are used in psycho-semantics, their research opportunities and limits. The scientists conducting an empirical research should visualize the theoretical and methodological base of psycho-semantics which let us use its methods in a sociological research. Having such visualization, a sociologist should constantly compare the model implemented in the method to his theoretical and methodological paradigm. The position of the psycho-semantic methods among other

measure procedures has not been defined yet (thus, they can be a part of projective methods, but it is not exactly). Absence of a clear boarder between the psycho-semantic and projective methods leads to their misuse and abnormal interpretation of the results. We do not know such works which include the complex analysis of a theoretical model of psycho-semantic methods and formation of theoretical and methodological base defining the logic of their implementation in sociological researches.

5. CONCLUSION

Social attitude is a hardly verbalized social phenomenon. Thus, we used both classical formalized methods and psychological approaches to study a social attitude towards municipal administration institute in municipal units of Zabaykalsky Krai. The necessity of psychological approach implementation is caused by the fact that traditional ways of data collection result in some difficulties arising during “rigid”, formalized measure procedures. The efficiency of psycho-semantic method implementation depends on the opportunity to combine quantitative and qualitative approaches in a sociological research. As a result, the data received through the traditional polling were proved by the data received by means of the method including the psycho-linguistic approach and

semantic space formation on the base of Russian proverbs. Nevertheless, the high affective level of social attitude towards municipal administration through local residents' understanding and knowledge of the goals and purposes of local authorities correlated with the cognitive element does not lead to community relief of the residents. We defined an "escape behavior" of people to avoid responsibility and initiative. We cannot speak about the fact that the reason of low community relief level of the municipal unit residents is hidden in a low social attitude. So, it is necessary to look for the reason of the problem not in the subjective data, but in the data concerning objective cultural elements of social life – social values. Perhaps, the municipal administration institute as it was formed and exists in modern conditions is not a social value for the people. The answer to this question is a task of the further research of low community relief reasons among the municipal unit residents.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

¹ * $p < .05$), ** $p < .01$

² Extraction method: Principal Component Analysis. Rotation method: Varimax with Kaiser normalization.

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