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MODELING OF MASS MEDIA INFLUENCE ON FORMATION OF PERSONALITY IN VIRTUAL SPACE

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In the modern conditions the problem of spiritual development of personality attracts attention of increasing number of scientists. The paper represents the substantiation of the research methods of interaction between Mass Media and personality in the process of formation of its moral mindsets in virtual space, which allows revealing the main directions of their positive and negative influence. The authors suggest their own variant of application of pattern recognition technology through creation of information and sociological polygons at evaluating Mass Media influence on formation of spiritual and moral bases of personality in virtual space. In the process of research the problem of active manipulation of public opinion by Mass Media was stated, which has a negative impact on spirituality of this social system. This conclusion was approved by the expert evaluation which would allow qualitatively assessing the information stream in the entertainment and information segment of Mass Media. The way of contradicting to this tendency may be awareness-building influencing public conscience and forming spiritual and moral immunity at the aspiring of Mass Media institution to a social ideal defined as diversity of free and independent Mass Media observing the law and business ethics standard, not invocating to information manipulation of the public opinion, pursuing the objectives of enlightenment aimed at formation of spiritual and moral immunity and information hygiene in the society.

Keywords: Mass Media, information and sociological polygon, pattern recognition technology, spiritual culture of personality, virtual space, moral mindsets, spiritual and moral development of personality.

INTRODUCTION

In the modern conditions the problem of spiritual development of personality attracts attention of increasing number of scientists. Social changes gaining momentum with every passing day cause emergence of new questions connected with the search of suitable instruments for development of the principles uniting individuals, represented as values and traditions. In this regard, research of influence of Mass Media as a main social institution on formation of personality ensuring formation of its moral mindsets and spiritual culture, currently becomes more and more important.

Analysis of scientific works of sociologists allows stating that spiritual and moral development of society and each personality in constantly changing world may go quite successfully if to consider a person as an object of socialization more dependent on agents (close relatives, friends) and institutions (school, university, Mass Media) of socialization which are equally responsible for development in an

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individual of some or other values, cultural images and ideals. At the same time solving the problem of personal identity an individual increasingly follows the path of least resistance, which results in formation of his or her inner world and value orientations under the influence of the most available sources of knowledge in broad sense acting as the basis of socialization process and spiritual and moral development. Mass Media often play the role of such source. In this regard research interest is provoked by a series of the following questions:

- What is currently the level of personality's spiritual and moral development?
- What is the influence of Mass Media on spiritual and moral development of personality?
- To what extent personality is capable of resisting destructive influence of Mass Media, if this is proven?
- Do Mass Media capable of contributing to spiritual and moral development of personality?
- Is it possible to activate the mechanisms of personal self-regulation for protection from destructive mindsets translated by Mass Media?

Apparently by considering Mass Media to be an active part in affecting spiritual ideals and moral guides of personality, the necessity of search, development and adaptation of the mechanisms and tools for guiding its spiritual and moral development comes to prominence. All the multiple suppositions stated in this part of the work require to be empirically approved. In this regard, sociological research of Mass Media influence on the level of spiritual and moral development of personality seems to be the task requiring solution. The set of criteria and indicators for evaluation of this influence level varies in a wide range which provides an opportunity to use new information technologies to solve the problem of choice of various alternative methods for Mass Media influence on personality in order to form its positive moral mindsets.

The tasks of this kind containing qualitative and quantitative problems with prevailing indefinite components base on the initial data with the complicated structure and the principles of their solution are not clearly defined. In these cases, to the authors' opinion, it is reasonable to use the pattern recognition technology, which is substantiated in this paper.

METHODS

Methodology of Pattern Recognition Technology at Evaluation of the level of Mass Media Influence on Formation of Personal Moral Mindsets

Solution of semi-structured tasks requires certain ways and tools, presence of virtual space and specialized mathematic apparatus, particularly new technology of pattern

recognition (Barbakov, &, 2012; Belonozhko, Barbakov & Siteva, 2016), the methodology of which includes, first of all, formation of information and sociological polygons where setting and solution of the task of evaluating the level of Mass Media influence on personal spiritual and moral mindsets will be implemented. The basis of such polygons will be the data and knowledge bases created on the basis of empirical sociological researches (Barbakov, Siteva & Belonozhko, 2015).

At the virtual information and sociological polygons the interconnection of so called direct property – the level of Mass Media influence (positive and negative) is defined as well as the set of indirect properties revealed in the process of empirical research (spiritual and moral mindsets of personality). Formalization of the received data and the applied mathematical apparatus of new pattern recognition technology provide the basis for making management decisions in the sphere of spiritual and moral development of society and each personality.

In the authors' research spirituality is considered as virtue, when individual accepts universal human values (Belonozhko & Demerle, 2016). Virtue by itself though is considered from the perspective of presence of a person's formed position on the issues of acceptance or non-acceptance of the values shared by a certain social group or society. Scientific ideas of spiritual and moral development of personality come down to its description as a target-oriented process focused on systematization and integration of wide combination of qualities into a single structure based on the sense of duty, dignity, respect to others, moral and ethical settings etc.

Official definition of personal development can be found in the "Concepts of Spiritual and Moral Development and Education of Personality of a Russian Citizen", where spiritual and moral development of personality is considered as "implemented in the process of socialization gradual expansion and consolidation of axiological sphere of personality, formation of personal capability of evaluating and consciously building the attitude towards self, other people, society, state, motherland and the world in general on the basis on traditional moral norms and ideals" (Daniljuk, Kondakov & Tishkov, 2009).

Formation of spiritual and moral bases of personality is significantly defined by identification of the basic values of the modern Russian society (Belonozhko, Khairullina & Bakhtizin, 2016).

The President of the Russian Federation denoted the following main and most important values: justice; personal and national freedom, as well as the freedom of entrepreneurship, speech, religion, residence and occupation; human life; peace; family traditions; love and fidelity; nurturance; patriotism; belief in Russia; unity of the Russian nation (Daniljuk, Kondakov & Tishkov, 2009).

Mass Media are called upon to activate the work in formation of spiritual and moral mindsets in the mass consciousness. Information space should be filled with

the structures capable of supporting and fastening the system of basic values single for all Russians regardless of ethnos or religion compounding the fundament of the Russian nation, contributing to moral development and spiritual and cultural transformation.

Virtual information and sociological polygons are called upon to organize the information space of interaction between Mass Media and spiritual and moral mindsets of personalities. Qualitative and quantitive indicators were defined in the process of empirical study (Belonozhko, Barbakov & Siteva, 2016; Barbakov, 2012; Vlasova & Vakhidova, 2016; Vlasova, Masalimova & Alamanov, 2016; Vlasova, Kirilova & Curteva, 2016; Zheltukhina *et al.*, 2016).

RESULTS

Formation of Data and Knowledge Base of Information and Sociological Polygons

The urban population of the Tyumen Region (536 respondents) was surveyed with the purpose of revealing the role of Mass Media in the spiritual and moral development of personality.

To evaluate the current level of spiritual and moral development of personality the respondents were asked the questions which allow defining the structure of their value orientations. At the first stage they were to evaluate the subjective importance of the offered priorities, the attributes of a socialized person, for example, "Is it important for you to have a family?" The purpose of stating the question was to reveal the percentage of positive, neutral and negative responses about timeless values of the modern civilization. The responses varied within the limits of 'very important' and 'unacceptable".

It was found that among the overriding priorities of the Tyumen Region inhabitants there are amount of education (63%) and health (63%), not contradicting to the universal human norms of spirituality and morality. However the leading position is taken by prosperity (68.3%) which makes consider the obtained results in more detail. So, 40.8% of the respondents, the majority of which is over 35 y.o., consider 'prosperity at any costs' to be the highest value. There are reasons to suppose that prevailing money-making mindsets are the consequences of financial crisis of the late 20^{th} – early 21 century, as well as the indicator of disproportions in the structure of the society having the beliefs that money rules the world.

Table 1 represents the distribution of the respondents' answers to the questions together with the ranging according to the sum of positive and negative evaluations.

Basing on the respondents' comments, one may interpret some of the above stated priorities as the derivatives of material welfare which illustrates the fact that such attributes as health, education, family and children, social respect are set to

Priorities	range	Positive very important	important	Neutral not very important	not important	Negative unaccep- table	range
Prosperity	1	40.8	27.5	17.4	14.2	0.0	15
Education	2	38.6	24.4	27.5	9.5	0.0	17
Health	3	34.2	28.8	23.7	13.3	0.0	16
Children	4	15.5	36.4	31.3	3.8	13.0	14
Friends	5	13.9	37.7	15.2	33.2	0.0	8
Personal Freedom	6	20.3	29.4	25.6	24.7	0.0	11
Respect of Others	7	20.6	28.5	20.3	30.7	0.0	9
Family	8	18.7	27.8	36.7	10.8	6.0	13
Religion	9	11.7	25.9	21.2	41.1	0.0	6
Recognition	10	13.0	19.0	47.8	20.3	0.0	12
Altruism	11	6.6	22.2	31.0	32.3	7.9	7
To receive help from others if necessary	12	2.8	20.3	27.8	44.0	5.1	5
Labor	13	8.9	12.3	14.9	35.8	28.2	1
Love	14	5.1	15.5	50.3	28.2	0.9	10
Tolerance	15	7.9	10.8	29.7	28.5	23.1	3
Responsibility	16	1.6	14.2	29.4	27.5	27.2	2
Marriage	17	5.4	6.0	38.9	19.9	29.7	4

TABLE 1: DISTRIBUTION OF THE RESPONDENTS' ANSWERS TO THE QUESTION OF SUBJECTIVE EVALUATIONS OF THE PRIORITIES

be dependent on prosperity. To a certain degree it puts the conclusions about mercenariness of the modern Russian society on the back burner.

The obtained results correlate with formerly conducted researches. So, D.N. Dmitry (2008), Archbishop of Tobolskaya and Tyumenskaya Metropolia notes that, "youth shares absolutely opposite value orientations: for some of them it is rest and entertainment, for others – luxurious and comfortable life; for the third – personal well-being and carrier, for the fourth – the values of their family wellbeing, health and good (well-paid) work".

At the same time one may state that such universal human values as labor, family, mutual help, and responsibility have overcome the period of their full or partial depreciation. The institution of marriage, put by the respondents at the last place in the rating, appears to be the most depreciated: only 11.4 % of the respondents consider important and very important to be in a marriage, while for 29.7 % it is unacceptable. The leading among the negative responses is labor – 63.9 % of the respondents consider labor activities unimportant or unacceptable element of their lives.

The authors consider that there are certain reasons to consider extreme variants of the evaluations ('very important' and 'inacceptable') as radical. So, such answers of some respondents as 'respect at any cost', 'friendship at any cost' evidence rather certain personal problems of the individuals, than their deviation in spiritual

and moral development. The same can be said about the evaluations not accepting mutual help (total 13%).

So, one may conclude that the inhabitants of the Tyumen Region almost unanimously positively evaluated such values as health, children, education and prosperity. At the same time one may state certain consolidation of opinions around negative evaluations regarding labor, responsibility, tolerance and marriage. Here the respondents' opinions confirm the increasing tendency towards individualization which is often manifested in lack of desire and readiness both to receive and give help 32.3 % and 44.0 % respectively of the respondents named these parameters of spiritual and moral development of personality and society unimportant. Thus, the most interesting and noteworthy is the fact that almost a half of the population does not count on support of others and prefers to be self-confident.

According to the results of the research radicalization of three following pancultural components of personal value orientations causes concern: friendship, respect and religion – which collect minimum percentage of neutral evaluations. Subsequently, society is notionally divided into the 'protagonists' and 'opponents' of religion, friendship and respect towards others. Another two aspects – recognition and love – attract attention as counted maximum neutral evaluations.

Based on the obtained results of theoretical research defining virtue as presence in human of some system of values which he or she consistently abides, one may make a conclusion about tattered moral foundations of the modern society. It is shown by the subject-by-subject research of the respondents' evaluations. So, according to the results of the first consideration, all the respondents could be divided into 'radical', 'moderate', and 'harmonically developed'. But detailed study of the filled questionnaires shows that in the structure of value orientations of many personalities aged under 35 y.o. one may often see bright manifestations of 'uncertain moral stand': a person speaks about family as a value, but at the time has a negative attitude towards marriage, considers religion to be one of the highest values, but denies mutual help etc.

Despite the fact that the absolute majority of the society considers negative social practices unacceptable, they are quite popular, which makes us apply to the research of the origin of the embedded system of personality's value orientations. Particularly a special interest is provoked by the factors affected the formation of the dissonance observed in the society regarding evaluation of the known manifestations of spirituality. With this purpose the respondents were suggested to answer an open question – what, to their mind, is the origin of their system of value and world perception or what influenced its formation the biggest way?

Research of the respondents' answers allowed the authors to group all the named variants into several 'influencing factors'. So, for the people with positive spiritual and moral mindset such factors were denoted as 'influence of family', 'influence of religion', and 'influence of education'. Also in some cases the other

variants were observed, which could not be related to any group. Remarkably, O.R. Belova and Yu.R. Vishnevsky (2012) note the emerged duality of the Russians' value consciousness. The research results allow stating distribution of religious view of the world, which nevertheless does not significantly influence formation of the individuals' value system.

For people with negative spiritual and moral mindset the following factors were denoted: 'public opinion', 'influence of family', 'influence of the closest people', 'influence of Mass Media' and other variants entering no group (see table 2).

TABLE 2: DISTRIBUTION OF THE RESPONDENTS' ANSWERS TO THE QUESTION
ABOUT THE FACTORS THE MOST SIGNIFICANTLY INFLUENCING
THEIR SYSTEM OF VALUES

Influencing Factors	Males		Females		Total	
	persons % to males		persons % to females		persons	% to total Range
Resp	ondents with	Positive S	piritual and I	Moral Min	dset	
This is the way the things	59	11.0	50	9.3	109	20.3
are done in the family	22.3	1	18.2	2		1
Influence of education,						
"This are the universal	48	9.0	53	9.9	101	18.8
human norms of morality"	18.2	2	19.3	1		2
I live by religious canons	34	6.3	42	7.8	76	14.2
	12.9	3	15.3	3		3
Other variants	12	2.2	9	1.7	21	3.9
	4.5	4	3.3	4		4
Resp	ondents with	Negative S	Spiritual and	Moral Min	dset	
Public opinion,	25	4.7	21	3.9	46	8.6
"Everybody acts	9.5	2	7.7	2		2
this way"						
This is the way the things	15	2.8	16	3.0	31	5.8
are done in the family	5.7	4	5.8	3		3
My friends act this way	16	3.0	14	2.6	30	5.6
	6.1	3	5.1	4		4
It is imposed upon by	51	9.5	63	11.8	114	21.3
Mass Media	19.3	1	23.0	1		1
Other variants	4	0.7	6	1.1	10	1.9
	1.5	5	2.2	5		5
Total	264		274		536	-

Thus, the obtained data allows concluding that the factors influencing spiritual and moral state of the society in the most significant way are family (26.1%), Mass Media (21.3%) and school (18.8%).

Among the respondents demonstrating negative spiritual and moral mindset, the most significant factors were Mass Media (49.4%) and influence of public opinion (19.9%). The authors suggests that 'public opinion' as a factor influencing formation of the value orientations may be considered as an element of Mass Media

influence due to the fact they are the main means of distribution and translation of some or other value mindsets to the corresponding social groups.

Thus, one may state that 69.3% of the cases of negative spiritual and moral mindsets observed among the respondents are caused by direct influence of Mass Media or mediated by them. From the perspective of gender there are no significant differences as well as from the perspective of the respondents' residence – city inhabitants have currently relatively equal opportunities of access to information, which causes consistency of the Mass Media influence on spiritual and moral social development.

The above said provides the grounds to agree with the opinion of L.G. Isayeva (2005), that Mass Media "play the role of both one of the main socializing instruments and the most accessible and influential mechanism of formation of personality".

DISCUSSION

The conducted analysis of the sociological research results allowed the authors to highlight a complex of the indicators characterizing interconnection between Mass Media and spiritual and moral personal mindsets as the foundation of the information basis at the information and sociological polygons, creation of which is the initial stage of development of the automated management system – modeling in the process of formation of spiritual and moral personal mindsets under the influence of Mass Media.

First of all, the authors set the aim of modeling at the information and sociological polygon: to transfer persons with negative spiritual and moral mindsets into the social groups with positive spiritual and moral mindsets. The objects or patterns were separated and described in the space of indirect properties or indicators, one way or another characterizing these objects, i.e. the interpretation model was formed by computer. Information provision of the set tasks solution at this stage of modeling appeared to be the created computation base (mathematical apparatus, algorithms, programming language and the type of computer hardware).

The suggested interpretational model included the following: direct property (patterns) was defined at the polygon. These were the studied objects of modeling: groups of people with various spiritual and moral mindsets with revealed connection between direct and targeted property, i.e. the result characterizing the effectiveness of the modeling (desired state – positive spiritual and moral mindset), and the set of indirect attributes characterizing the values and value orientations of personality, which also defines the spiritual and moral mindset of personality.

The attributes, quantitively or qualitatively characterizing spiritual and moral mindsets of personality, so called indirect properties, were chosen at the stage of setting the task of modeling at formation of information and sociological polygon. As the most peculiar attributes (indirect properties) influencing the direct property,

the following values were chosen: prosperity, education, health, religion, family, mutual help, respect, love, friendship, labor, responsibility, freedom, recognition, the desire to have children, humanity, justice, dignity, peace, and patriotism.

Then information and sociological polygon represent the patterns according to direct property: personal spiritual and moral mindset – in the space of indirect properties – attributes. In the course of the experiment it was found that the number of patterns in the author's research depending on the set of indirect properties is equal to 6 (from 1 pattern with maximum positive personal spiritual and moral mindset, to 8 – with maximum negative mindset).

Using computer one may design the dependency of direct property both on a separate attribute, and on their combinations. At that, various combinations influence the direct property in different ways. For example, in the space of such attributes as prosperity and education various patterns of direct property are formed (the measure units are notional ranges): spiritual and moral mindsets of personality.

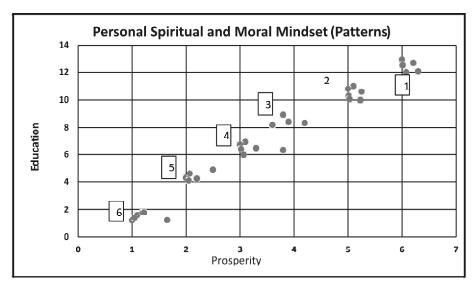


Figure 1: The Dependency Diagram of Direct Property (Personal Spiritual and Moral Mindset) and the Set of Indirect Properties (Prosperity and Education) in Two-Dimensional Space

Various combinations of attributes influence direct property in other ways, i.e. the directionality and level of personal spiritual and moral mindset may be regulated changing indirect properties. Figure 1 forms different patterns of direct property (personal spiritual and moral mindset) in the space of such attributes as personal values of prosperity and education. Changing indirect properties one may change the directivity of spiritual and moral mindset of personality from negative to positive. Naturally, in the sub-space of two indicators it is very important to separate the

objects according to direct property and it would be easier to do in the space of three, four or more attributes (education, prosperity, religion, love, family, patriotism etc.).

Thus, one may model the formation of positive personal moral mindset at applying the pattern recognition technology at the virtual polygons where the social experiments were conducted in the process of which the stages of making managerial decisions were imitated, as well as the control of their effectiveness resulted in a series of conclusions.

First, the prioritized in the system of personal value orientations are the values of prosperity, education and health. Religion, family, mutual help, and labor are considered by the respondents as unimportant, which constitutes weakening of spiritual and moral foundation of the social system.

Devaluation of the institute of marriage and radicalization of such universal cultural tenets as, for example, religion should be considered most critically. At the same time the author of the thesis research found that such axiological postulates as tolerance, marriage, labor, and responsibility in the structure of the main universal cultural tenets are mostly perceived in a negative way.

Second, there are growing tendencies of discretization of the society: this may be concluded from the obtained answers of the respondents about their readiness to give and to receive help. One cannot disagree that a spiritually developed society is more consolidated, may be characterized by unity and synergy, while the lack of unity is an attribute of spiritual degradation of a society.

Indirect signals of spiritual and moral development of society studies by the authors through the evaluation of public opinion regarding negative social practices allowed stating a series of negative facts. So, more than a half of the inhabitants of the southern Tyumen Region are friendly to the following socially censured manifestations as venial offences, extramarital affairs, blackmail, cheating, low language, egoism etc. At the same time the obtained results reveal the presence in the society of double standards such as, e.g. conceding cheating the respondents deny betrayal.

Often affected by external forces society replaces or devaluates traditional universal human values in favor of instantaneous, externally imposed tendencies and stereotypes. From the revealed positions the statements of some researchers about the civilization crisis of spirituality become rather laconically and univocal base.

Mass Media play the main role in the introduction of certain stereotypes of behavior and a new 'scale of the allowable', because their influence is comparable with the influence of the institution of family, and in many cases they have pedagogical and educating impact on the society. This conclusion may be the base of the further research of the information space parameters formed with active participation of Mass Media and directly influences formation of spiritual and moral base of the society.

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CONCLUSION

Thus, Mass Media is one of the main social institutions responsible for formation of value orientations, behavior patterns and stereotypes of thinking, which speaks about the necessity of considering this social institution as important and capable of transforming axiological bases of inner world of a person.

In comparison with other institutions of socialization Mass Media have the greatest impact on formation of the system of personal value orientations which is also confirmed by the expert survey. Among the information distribution channels the most destructive are the Internet and TV, and the latter is characterized by a high frequency of the translated negative content.

In the process of research the problem of active manipulation of public opinion by Mass Media was stated, which has a negative impact on spirituality of this social system. This conclusion was approved by the expert evaluation which would allow qualitatively assessing the information stream in the entertainment and information segment of Mass Media.

Limited capacities of revealing and contradicting to manipulation actualize the necessity of reconsidering ethic norms of professional activities in the sphere of mass communications, conduction of the corresponding researches and search of efficient mechanisms of countering.

The way of contradicting to this tendency may be awareness-building influencing public conscience and forming spiritual and moral immunity at the aspiring of Mass Media institution to a social ideal defined as diversity of free and independent Mass Media observing the law and business ethics standard, not invocating to information manipulation of the public opinion, pursuing the objectives of enlightenment aimed at formation of spiritual and moral immunity and information hygiene in the society.

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