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METODA EWALUACJI ODDZIAŁYWANIA INFORMACYJNEGO I PSYCHOLOGICZNEGO

Streszczenie: W artykule omówiono teorię konfrontacji informacyjnej. Opracowaną metodę można wykorzystać w dziedzinie informacji i bezpieczeństwa psychicznego, w szczególności w celu zapobiegania wpływowi informacyjnemu i psychologicznemu na jednostki i grupy społeczne oraz skutecznych środków zaradczych. Metoda oceny oddziaływań informacyjnych i psychologicznych oraz odpowiadająca jej analiza strukturalna informacji i wpływów psychologicznych, która poprzez przetwarzanie rozmytych parametrów identyfikacyjnych, pozwala ocenić niszczący wpływ oddziaływań informacyjnych i psychologicznych. Na tej podstawie można stworzyć efektywne systemy przeciwdziałania, które działają w rozmytym środowisku.

Słowa kluczowe: model, metody wpływu oddziaływania informacyjnego i psychologicznego, ewaluacja, logika rozmyta

METHOD OF EVALUATION OF INFORMATIONAL AND PSYCHOLOGICAL INFLUENCE

Abstract: There have been described the processes of information confrontation in the aspect of its psychological component. The developed method can be used in the field of information and psychological safety, in particular to prevent information and psychological influence on the individual and social group, effective implementation of countermeasures. The method of evaluation of informational and psychological influences and the corresponding structural solution of the system of evaluation of information and psychological influences, which, by processing fuzzy identifying parameters, allows us to assess the destructive effect of informational and psychological influences and create such systems that function in a fuzzy environment.

Keywords: model, informational and psychological influence, methods of informational and psychological influence, evaluation, fuzzy logic

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1. Formulation of the problem

Information has become an integral part of the activity in the modern environment. Modern external and internal policies are impossible without taking into account and using effective forms of informational and psychological confrontation. In recent years, the number of influences on the information environment of the states has been increased by non-strain methods, which is due to the high level of development of information technologies and social engineering. Information and psychological influences become extremely widespread, as evidenced by the publications of advanced countries where information security issues are discussed in the context of information and psychological influences. The main areas that become the goals of such influences are economic, military, political, and the means through which they are implemented, mainly media, social networks, global computer networks, rumors, etc. Obviously, for effective counteraction, timely identification and identification of influence is necessary. However, an equally important task is to clearly and accurately assess of the possible destructive effects, which leads to information and psychological intervention. In this regard, the actual task is to develop a system for assessing the destructive actions of information and psychological influences.

2. Analysis of recent research and publications

Researchers in many countries are working on the problem of information and psychological influence [1-2]. Nowadays, there is a large number of works in the direction of studying the manipulative influence of mass media on public opinion, including: Ivanov V., Nesteryak Yu., McQuail. D, Schiller. G., Noel-Neuman E., etc. [3-6]. Investigations of influence models were engaged: Shyian A., Sinyugin V., Yaremchuk Yu., Khatian A., Peleschyshyn A., Guminsky R., Petrik V. [7-13].

Shiyan A. analyzed the information-psychological factors necessary for constructing human and social group protection models in order to increase human security from the negative effects of information and psychological influence. The method for formation of the information space of the problem for the activity of the person and the social group is proposed in scientific works, that is, a breakdown of the complete database of the characteristics of the problem divided into eight classes of information, which is given by the tuple:

$$< DB, G, d_1, d_{1u}, d_{1d}, d_2, NC >$$

where: DB – database on the object under which the activity is carried out; G – parameters and characteristics that specify the purpose of the activity; d_1 – operator for sorting data, characteristics, parameters, etc. (first dichotomy), as a result of which every feature of the object can be assigned to one of the two sets (poles of dichotomy) or can be recognized as unclassified, that is, assigned to the NC set and removed from further consideration (for example, because this characteristic does not refer to the activities assigned to the purpose of the activity G) [7]. Dichotomy classes are called «generalizing» and «detailing»; d_{1u} – operator for sorting data, characteristics, parameters, etc. (dichotomy) for a generalizing pole of dichotomy

d_1, which continues to divide the characteristics belonging to this set into two more sets («boundary» and «structure»), or assign the characteristic under consideration to the set of NC; d_{1d} - operator of sorting data, characteristics, parameters, etc. (dichotomy) for the detailing pole of dichotomy d_1, which continues to divide the characteristics belonging to this set into two more sets («object» and «object bonds»), or attribute the characteristic under consideration to the set of NC; d_2 – operator for sorting data, characteristics, parameters, etc. (dichotomy), as a result each of the previously obtained sets of partitions of the database DB is divided into two sets ("state" and "process"), - characteristics that can not be classified, are included in the set of NC; NC – a set consisting of data, characteristics, parameters, etc. that are not related to the topic of activity G or can not be sorted by sorting operators d_1, d_{1u}, d_{1d}, d_2 [8].

Gorbulin V. considered a number of examples of modeling of multiagent models that during the constructing a model of manipulative influence has great interest:

1. Model "Artificial societies". For example, if you consider the agency model of the dynamics of the population, one of the aspects of the agent's behavior in it will be determined by a status map, and the environment model will include places of residence and work, transport infrastructure, etc.
2. Model of the preferences of a group of people. As an illustration of the use of multi-agent systems, consider another model - Axelrod and Hammond. According to this model, the benefits of groups of people were studied. At the same time, it was initially assumed that the groups differ only in ethnicity. However, the constructed model may also take into account any other types of distinction in which the individual membership in the group is visible and stable [14].

In the Axelrod-Hammond model, the agent is an individual. Each agent is "painted in colors", which can be interpreted as his ethnic identity or other sign of membership in the group. Each agent also has a two-part strategy. The first part of the strategy determines whether the agent co-operates (or not) with a neighbor having the same colors. The second part of the agent's strategy determines whether a neighbor agent works with a color different from it [6]. As with all multi-agent models, the rules of the agent's interaction are first established, and then computer simulations are used to trace the history of evolution. First of all, the aim of the project was to understand the conditions under which the population ultimately leaves in power those people who will only care about their own group members and refuse to assist members of other groups [6].

Scientists Ryabim M., Khatyan O. and Bagatsky S. in the scientific article developed a formalized model for detecting PR-effects through publications in the Internet. The term PR-scientists understand the impact of manipulative influence of the mass media. Researchers believe that the distinctive features of the implementation of influence are - the chronological length (in the timeline – $T = \{t_1, t_2, ..., t_n\}$, meaningful fragmentation aimed at the effect of the body of messages (as a rule, required by the requirement of latency), that is, the general meaning of influence differentiated and diverse in a plurality of information messages [15]. The meaning of a separate message does not necessarily coincide with the purpose of influence. At the same time, the low redundancy of a single message (due to the format

of presentation of the content in the mass media) is offset by a considerable overreaction of the general body of a thematically joined stream (in which synthetically to enhance the effect of influence can be combined with a set of key themes) [15].

3. Method of detection and identification of informational and psychological impact

During the modern warfare, the following classification can be made:

1) methods aimed at people who perceive the information critically:
   - change of opinion by persuasion;
   - psychological isolation of the object;
   - coercion;
   - propaganda.
2) methods aimed at people who perceive the information uncritically:
   - misinformation;
   - propaganda;
   - change of sights by suggestion;
   - infection;
   - manipulation;
   - reframing [16].

As we can see, there is a certain imbalance among the methods, which are directed at people who perceive information uncritically in most cases. This situation is due to the fact that it is much easier to achieve a result, to carry out an attack, if the attacker's actions are aimed at non-critical thinking, since they will bypass a certain "psychological shield" of a person.

Propaganda is attributed to both groups, because of the variety of means, it is evident that its use is equally effective for all people [17].

Concepts and classifications regarding information psychological impact analysis has shown that today there is no single classification that would cover all aspects and characteristics of its implementation during the information warfare [17].

In the course of the research, the following evaluation parameters of the informational and psychological influences were identified: CSA – «Completeness and strength of argument», CGN – «Consistency with the norms of general public opinion», PR – «Public reaction», GAF – «Growth of the anxiety factor», VD – «Velocity of distribution», NAT – «Number of affected targets».

The standard values were constructed in accordance with [18-20].

For the CSA parameter, the following linguistic estimates are: {low (L), medium (M), high (H)}. Intervals for defining reference values = {[0-20], [21-40], [41-60]} intervals of time.

After the operations we will form the following terms of the linguistic variables for this parameter:

$$L = \{0/0{,}33;\ 1/0{,}33,\ 0{,}63/0{,}75;\ 0{,}43/1;\ 0/1\},$$

$$M = \{0/0{,}33;\ 0{,}22/0{,}33;\ 1/0{,}75;\ 0{,}57/1;\ 0/1\},$$

$$H = \{0/0{,}33;\ 0{,}33/0{,}33;\ 0{,}75/0{,}75;\ 1/1;\ 0/1\}.$$

For the CGN parameter, the following linguistic estimates are typical: {unmatched (U), medium agreed (M), agreed (A)}. Intervals for determining reference values = {[0-33], [34-66], [67-100]} percent.
After the operations we will form the following terms of the linguistic variables for this parameter:

U = {0/0,33; 1/0,33; 0,92/0,66; 0,4/1; 0/1},

M= {0/0,33; 0,35/0,33; 1/0,66; 0,07/1; 0/1},

A = {0/0,33; 0,1/0,33; 0,44/0,66; 1/1; 0/1}.

For the PR parameter, the following linguistic estimates are: {small (S), medium (M), high (H)}. Intervals for determining reference values = {[0-33], [34-66], [67-100]}.
After the operations we will form the following terms of the linguistic variables for this parameter:

S = {0/0,33; 1/0,33; 0,89/0,66; 0,36/1; 0/1},

M = {0/0,33; 0,7/0,33; 1/0,66; 0,27/1; 0/1},

H = {0/0,33; 0,3/0,33, 0,56/0,66; 1/1; 0/1}.

For the GAF parameter, the following linguistic estimates are: {slow (S), medium(M), high (H)}. Intervals for determining reference values = {[0-33], [34-66], [67-100]} percent.
After the operations we will form the following terms of the linguistic variables for this parameter:

S = {0/0,33; 1/0,33, 0,78/0,66; 0,6/1; 0/1},

M = {0/0,33; 0,27/0,33; 1/0,66; 0,5/1; 0/1},

H = {0/0,33; 0,18/0,33; 0,44/0,67; 1/1, 0/1}.

For the VD parameter, the following linguistic estimates are: {slow (S), medium (M), high (H)}. Intervals for determining reference values = {[0-33], [34-66], [67-100]} percent.
After the operations we will form the following terms of the linguistic variables for this parameter:

S = {0/0,33; 1/0,33, 0,91/0,66; 0,75/1; 0/1},

M = {0/0,33; 0,54/0,33; 1/0,66; 0,33/1; 0/1},

H = {0/0,33; 0,23/0,33; 0,73/0,67; 1/1, 0/1}.

For NAT characteristic parameter such linguistic assessment {low (L), medium (M), high (H)}. Intervals for determining reference values = {[0-33], [34-66], [67-100]}.
After the operations we will form the following terms of the linguistic variables for this parameter:

L = {0/0,33; 1/0,33, 0,57/0,66; 0,33/1; 0/1},

M = {0/0,33; 0,5/0,33; 1/0,66; 0,56/1; 0/1},

H = {0/0,33; 0,17/0,33; 0,36/0,66; 1/1, 0/1}.

For the DR parameter, the following linguistic estimates are: {short-term (S), medium-term (M), long-term (L)}. Intervals for determining reference values = {[0-33], [34-66], [67-100]}.
After the operations we will form the following terms of the linguistic variables for this parameter:

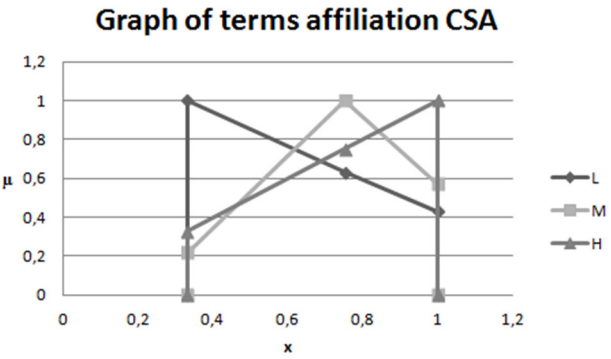
S = {0/0,33; 1/0,33, 0,95/0,66; 0,78/1; 0/1},

M = {0/0,33; 0,42/0,33; 1/0,66; 0,39/1; 0/1},

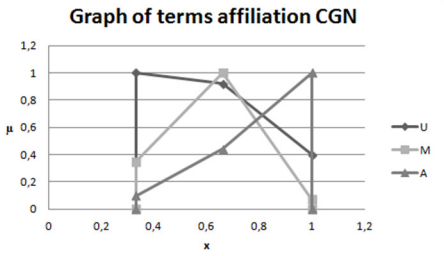
L = {0/0,33; 0,13/0,33; 0,4/0,66; 1/1, 0/1}.

Let's represent the calculated reference values in the form of graphs.

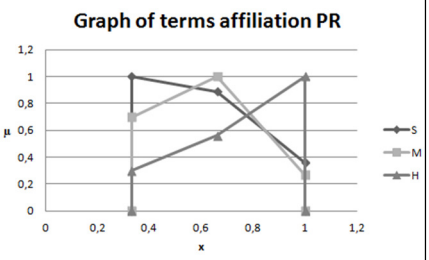
Table 1. Graphic representation of fuzzy values



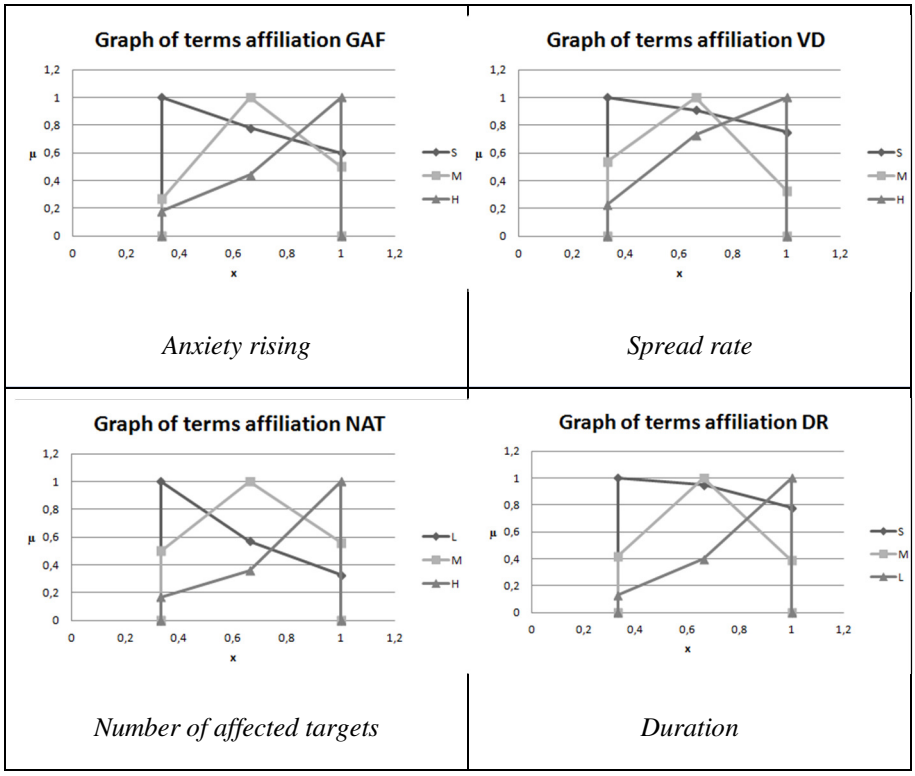
Completeness and strength of argumentation



Consistency with public opinion standards



Public response



In the further, we calculate the for each estimation parameter. At this stage, an assessment is made of the criticality of the impact of each valuation parameter and their respective ranking. We apply for this method a quantitative pair comparison with the definition of the square root, which is a kind of method of quantitative pair comparison.

Pair comparison is the procedure for setting preferences options by comparing all possible pairs and further streamline object on the basis of comparison [21]. The paired comparison method is one of the most widely used expert procedures for determining the relative weights of objects.

The basis is the comparison of each of the table parameters and the formation of the matrix of the pair comparison $A = \left\| a_{ij} \right\|$, where a_{ij} selected according to experts on a scale of relative importance: 1 - alternatives are equally important, 3 - moderate advantage of one parameter over another, 5 - significant advantage of one parameter over another, 7 - significant advantage (convincing evidence available), 9 - obvious advantage of one of the parameters; 2, 4, 6, 8 - intermediate solutions.

The expert fills the locations of the comparison table of the factor with itself gives a unit. In the first location of the first line, the expert writes a unit, in the second - the result of a comparison of the first factor with the second, in the third - the result of a comparison of the first factor with the third, etc. Moving to the second line, the expert writes in the first location the result of the comparison of the second factor with the

first, in the second - the unit, in the third - the result of comparison of the second factor with the third, etc. [22].

Next, we calculate the weight coefficients according to the expression $\omega_i = \sqrt[n]{\prod_{i=1}^{I} a_{ij}}$, where $i = \overline{1, I}$, I – number of evaluation parameters, in this case 7. After that the valuation of the obtained coefficients is carried out according to the formula: $\sigma_i = \omega_i / (\sum_{i=1}^{I} \omega_i$, so that $\sum_{i=1}^{I} \sigma_i = 1$.

Consider an example of determining the importance coefficients for the predetermined valuation parameters (Table 2). The expert evaluates the importance of each of them in comparison with the other and puts the information in the table. The coefficients of importance are calculated and their rationing is carried out. The result of a pairwise comparison of the estimated parameters of informational and psychological influences *Pi*

Table 2. The result of a pairwise comparison of the estimated parameters of the IPI Pi

i\i'	*P*1	*P*2	*P*3	*P*4	*P*5	*P*6	*P*7	*P*8	ω_i	Ω_i
*P*1	1	5	2	1/5	1/7	3	4	6	1,459	0,155
*P*2	1/5	1	¼	5	5	¼	1/3	1/2	0,690	0,073
*P*3	5	1/5	7	1	1/5	4	5	2	1,654	0,176
*P*4	7	1/5	5	5	1	5	6	3	2,737	0,292
*P*5	1/3	4	¼	¼	1/5	1	¼	5	0,616	0,065
*P*6	¼	3	2	1/5	1/6	4	1	7	1,043	0,110
*P*7	1/6	2	3	½	1/3	1/5	1/7	1	0,508	0,054
									8,488	0,925

The next step is to conduct a ranking of the estimated parameters on the calculated and normalized factors of importance. As a result of calculations, the parameter «Growth the factor of anxiety» gets the highest score, and therefore, according to the expert, is the most priority among the other parameters.

Table 3. Ranking of valuation parameters by factors of importance

Estimated parameter, Pi	Coefficient of Importance
Growth the factor of anxiety	0,29
Public reaction	0,18
Completeness and strength of argument	0,16
Number of affected targets	0,11
Associations that cause the source of information	0,08
Velocity of distribution	0,07
Duration	0,05

The problem of assessing the level of criticality of informational and psychological influence as one of the processes of providing informational and psychological influence is determined by the fact that its occurrence and development are difficult to predict (and often not even predictable), that is, we are dealing with an event in an unclearly formalized space. In addition, there are no generally accepted criteria for assessing the level of criticality, most of them have different nature (including clear and unclear) and mathematical properties, which makes it impossible to use most of the currently known estimation methods to the general set of these criteria. Therefore, the formation of parameters and the development of methods for assessing the level of criticality of informational and psychological influence and the methods for its identification is an relevant task. The method uses the following methods of fuzzy logic as a method of linguistic terms using statistical data (MLTS) - for constructing reference values of parameters and evaluation standards, linear approximation by local maxima (LALM), generalized Heming's distance (DH) - for processing fuzzy data and conducting operations of fuzzy logic. In addition, expert methods of evaluation and ranking are used: the method of average grades (AG).
The next step is to calculate the overall assessment of the criticality of the situation. Initially, taking into account the specific methods of information and psychological impact, the low frequency is formed:

$$LSC_i = \sum_{e=1}^{E} (\sigma_e \cdot L_e)$$

The current low frequency is compared with the reference standard by one of the known methods of comparison of the low frequency. For these purposes, we use the method of forming the α - level nominalization of the low frequency [23] and the method for identifying the terms [18]. The procedure is to calculate nominalized (transformed) standards and levels. The definition of the generalized Heming's distance is carried out then. The criterion for LCS compliance with one of the terms of the benchmark is the smallest Heming distance.
At the final stage, visualization of the results takes place. In addition, in order to better reflect the criticality of the IPCC, it is proposed to display the criticality parameters using the critical indicator. To do this, the appropriate L_e parameters should be pre-defused. The most expedient in this case is the application of the method of the center of gravity, by which the LF is converted into a clear by the formula:

$$L = 100 \cdot (\sum_{i=1}^{q} X_{Lq} \cdot \mu(x_{Lq}) / \sum_{i=1}^{q} \mu(x_{Lq}))$$

where q – number of LOAs. A case where the values of individual parameters are calculated directly without the use of expert methods is possible. In this case, they are displayed on the indicator by histogram. The development of the method reflects a new approach to solving the problem of assessing information and psychological influence. The method is based on fuzzy logic. During its implementation there are several stages, which are aimed at determining the reference and current values of a certain information space for the detection of information and psychological influence. A special feature is the provision of the information and psychological influence evaluation process, which will be useful in improving the effectiveness of the development and implementation of countermeasures.

4. Modeling of system

We will phase out the given parameters by fixing their current values using the mechanism of sensors. The results of the sensor data are shown in Table. 4. We will conduct 10 measurements.

Table 4. The results of the sensor data

E	Measurement of the parameter Le according to the estimated standards		
	S	M	H
1	10	0	0
2	0	10	0
3	0	10	0
4	1	9	0
5	0	2	8
6	10	0	0
7	0	10	0

We will calculate the values of the parameters for and the level of criticality (to simplify the calculations, we list the fuzzy numbers in a triangular form):

$L_1=(10\cdot T_{EL1})/10=(10\cdot S)/10=10\cdot\{0/0,33;\ 1/0,33,\ 0,63/0,75;\ 0,43/1;\ 0/1\}/10=\{0/0,33;\ 1/0,33,\ 0,63/0,75;\ 0,43/1;\ 0/1\}=\{0/33;\ 1/0,33;\ 0/1\}.$

$L_2=(10\cdot T_{EL2})/10=(10\cdot M)/10=10\cdot\{0/0,33;\ 0,35/0,33;\ 1/0,66;\ 0,07/1;\ 0/1\}/10=\{0/0,33;\ 0,35/0,33;\ 1/0,66;\ 0,07/1;\ 0/1\}=\{0/0,33;\ 1/0,66;\ 0/1\}.$

$L_3=(10\cdot T_{EL3})/10=(10\cdot M)/10=10\cdot\{0/0,33;\ 0,7/0,33;\ 1/0,66;\ 0,27/1;\ 0/1\}/10=\{0/0,33;\ 0,7/0,33;\ 1/0,66;\ 0,27/1;\ 0/1\}=\{0/0,33;\ 1/0,66;\ 0/1\}.$

$L_4=(1\cdot T_{EL4}+9\cdot T_{EL4})/10=(1\cdot S+9\cdot M)/10=(1\cdot\{0/0,33;\ 1/0,33,\ 0,78/0,66;\ 0,6/1;\ 0/1\}+9\cdot\{0/0,33;\ 0,27/0,33;\ 1/0,66;\ 0,5/1;\ 0/1\})/10=(\{0/0,33;\ 1/0,33,\ 0,78/0,66;\ 0,6/1;\ 0/1\}+\{0/2,97;\ 0,27/2,97;\ 1/5,94;\ 0,5/9;\ 0/9\})/10=(\{0/3,3;\ 0/3,3;\ 0/(5,94+0,33);\ 0/9,33;\ 0/9,33;\ 0/3,3;\ 0,27/3,3;\ 1/(5,94+0,33);\ 0,5/9,33;\ 0/9,33;\ 0/(2,97+0,66);\ 0,27/(2,97+0,66);\ 0,78/(5,94+0,66);\ 0,5/9,66;\ 0/9,66;\ 0/3,97;\ 0,27/3,97;\ 0,6/6,94;\ 0,5/10;\ 0/10;\ 0/3,97;\ 0,27/3,97;\ 0,6/6,94;\ 0,5/10;\ 0/10\})/10=(\{0/3,3;\ 0,27/3,3;\ 1/6,27;\ 0,78/6,6;\ 0,6/6,94;\ 0,5/10;\ 0/10\})/10=(\{0/0,33;\ 0,27/0,33;\ 1/0,627;\ 0,78/066;\ 0,6/0,694;\ 0,5/1;\ 0/1\}=\{0/0,33;\ 1/0,627;\ 0/1\}.$

$L_5=(2\cdot T_{EL5}+8\cdot T_{EL5})/10=(2\cdot M+8\cdot H)/10=(2\cdot\{0/0,33;\ 0,54/0,33;\ 1/0,66;\ 0,33/1;\ 0/1\}+8\cdot\{0/0,33;\ 0,17/0,33;\ 0,36/0,66;\ 1/1,\ 0/1\})/10=(\{0/0,66;\ 0,54/0,66;\ 1/1,32;\ 0,33/1;\ 0/2\}+\{0/2,64;\ 0,17/2,64;\ 0,36/5,28;\ 1/8;\ 0/8\})/10=(\{0/0,66;\ 0,54/0,66;\ 1/1,32;\ 0,33/1;\ 0/2\}+\{0/2,64;\ 0,17/2,64;\ 0,36/5,28;\ 1/8;\ 0/8\})/10=(\{0/3,3;\ 1/9;\ 0/10\})/10=\{0/0,33;\ 1/0,9;\ 0/1\}.$

$L_6=(10\cdot T_{EL6})/10=(10\cdot S)/10=10\cdot\{0/0,33;\ 1/0,33,\ 0,95/0,66;\ 0,78/1;\ 0/1\}/10=\{0/0,33;\ 1/0,33,\ 0,95/0,66;\ 0,78/1;\ 0/1\}=\{0/0,33;\ 1/0,33;\ 0/1\}.$

$L_7=(10\cdot T_{EL7})/1-=(10\cdot M)/10=10\cdot\{0/0,33;\ 0,42/0,33;\ 1/0,66;\ 0,39/1;\ 0/1\}/10=\{0/0,33;\ 0,42/0,33;\ 1/0,66;\ 0,39/1;\ 0/1\}=\{0/0,33;\ 1/0,66;\ 0/1\}$.

$LSC_i=0,29\cdot\{0/0,33;\ 1/0,627;\ 0/1\}+0,18\cdot\{0/0,33;\ 1/0,66;\ 0/1\}+0,16\cdot\{0/33;\ 1/0,33;\ 0/1\}+0,11\cdot\{0/0,33;\ 1/0,33;\ 0/1\}+0,08\cdot\{0/0,33;\ 1/0,66;\ 0/1\}+0,07\cdot\{0/0,33;\ 1/0,9;\ 0/1\}+0,05\cdot\{0/0,33;\ 1/0,66;\ 0/1\}=\{0/0,096;\ 1/0,18;\ 0/0,29\}+\{0/0,51;\ 1/0,12;\ 0/0,18\}+\{0/0,05;\ 1/0,05;\ 0/0,16\}+\{0/0,036;\ 1/0,036;\ 0/0,11\}+\{0/0,026;\ 1/0,053;\ 0/0,08\}+\{0/0,02;\ 1/0,063;\ 0/0,07\}+\{0/0,017;\ 1/0,033;\ 0/0,05\}=\{0/0,755;\ 1/0,535;\ 0/0,94\}$.

According to standard reference standard we accept PR:

T_{ELs}/ LSC^p	$\mu_{sg}^{ep}/\mu_g^p\ (g=\overline{1,3})$		
	$\mu_{ELs1}^{ep}/\mu_{LCS1}^{p}$	$\mu_{ELs2}^{ep}/\mu_{LCS2}^{p}$	$\mu_{ELs3}^{ep}/\mu_{LCS3}^{p}$
	0	1	0
M	0,33	0,33	1
C	0,33	0,66	1
B	0,33	1	1
LSC_i	0,755	0,535	0,94

We will calculate Heming's distances

$$h\ (T_{EL1}/\ LSC_i)=\sum_{G=1}^{L}|\ x_{EL1}-x_{LSC}\ |=|0,33\text{-}0,755|+|0,33\text{-}0,535|+|1\text{-}0,94|=$$
$$=0,425+0,205+0,06=0,69.$$

$$h\ (T_{EL2}/\ LSC_i)=\sum_{G=1}^{L}|\ x_{EL2}-x_{LSC}\ |=|0,33\text{-}0,755|+|0,66\text{-}0,535|+|1\text{-}0,94|=$$
$$=0,425+0,125+0,06=0,61.$$

$$h\ (T_{EL3}/\ LSC_i)=\sum_{G=1}^{L}|\ x_{EL3}-x_{LSC}\ |=|0,33\text{-}0,755|+|1\text{-}0,535|+|1\text{-}0,94|=$$
$$=0,425+0,465+0,06=0,95.$$

Consequently, the level of criticality of the current situation that has developed in the implementation of different IPI in this case, "Medium".

5. Conclusions

The system of evaluating destructive actions of informational and psychological influence was developed in the work to solve the problem of destructive effects of informational and psychological influence, which can be used in a weakly formalized environment close to real conditions. To achieve the goal were performed the following tasks:

1. There was made the analysis of the concept of informational and psychological influence, its place in the modern information environment was determined, the main methods and methods of implementation of informational and psychological influence were investigated and the existing methods of estimating informational and psychological influence were analyzed. This has made it possible to find that there is no generalized and sufficiently universal of informational and psychological influence of evaluation system, and, on the basis of existing highly specialized systems, identify the shortcomings that most need to be finalized.
2. The method of carrying out an evaluation of informational and psychological influence destructive actions is developed. All the deficiencies of existing evaluation systems identified because of the analysis are taken into account. The most universal estimation parameters are determined. This method is based on quantitative methods of expert evaluation, which gives advantages in the absence of the need to collect large amounts of statistical data and clear formalization of the current situation.
3. The structure of evaluation of destructive of informational and psychological influence actions is developed, which allows estimating the level of destructive informational and psychological influence actions in a fuzzy environment close to real conditions. The scheme of the architecture of the system is presented, which allows more detailed presentation of the modules and processes with which they interact, input and output data to each of the blocks and modules.

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