

Assessment of the Level of Information Provision to Residents of Territorial Communities about the Activity of Local Government Bodies in the Era of Digitalization

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Abstract

The research proposes a methodology for assessing the level of informing the residents of territorial communities by local self-government bodies about their activity, which is based on the theory of fuzzy sets. It is investigated whether the residents of the community consider the methods of informing about the activity of their local self-government bodies which are most often used to be convenient.

The basis of the research was a sociological survey within the framework of the project “Information asymmetry in the interaction of local self-government bodies and the residents of rural areas: analysis of the causes of occurrence and ways to overcome them”, which was implemented with the financial support of the Konrad Adenauer Foundation (Germany, 2021-2022), where the theme of the efficiency of informing the residents of rural communities was considered. The survey was conducted using questionnaires among the residents of rural areas in eight territorial communities in the Southern, Central, and Western regions of Ukraine. The error of representativeness is $\pm 5.2\%$. The final sample consisted of 3,018 people (residents older than 14 years), the average age in the entire sample was 42.9 years, (min = 14 years; max = 84 years), and women made up 52.05%.

The results showed that the level of informing the residents of the local government with the administrative center in the village is 84% average and 16% high, and the level of informing the residents of the local government with the administrative center in the city is 100% average. Also, the results of the research showed that local self-government bodies use those methods of informing community residents about their activity that are quite convenient for the latter.

Keywords

Local self-government bodies, residents of rural areas, a theory of fuzzy sets, information support.

1. Introduction

The era of digitalization, which is characterized by the rapid development of the digital transformation of society, has contributed to the development of a wide variety of communication tools and methods of information dissemination. After all, information plays an extremely important role in the modern world, and modern means of communication make it possible to quickly convey information to a wide range of target audiences. The COVID-19 pandemic, and later the war in Ukraine, demonstrated the importance of information provision with the help of modern digital means of communication [1]. The importance of the problem has also been demonstrated for the information support of the activity of local self-government bodies. Still, today, in the conditions created by the Decentralization reform in Ukraine, the issue of informing residents of territorial communities by local self-government bodies about their activity is becoming more and more practical. After all, the transfer

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of powers from the state government to local self-government bodies implies the possibility for the latter to make critically important decisions regarding the development of the community and manage its finances. This necessitates the delivery of appropriate information to the residents of the community to remove all issues of the shadow economy, which violates the trust of the residents [2]. Yet, local self-government bodies and officials are accountable, controlled, and responsible to the residents of their territorial communities. They must periodically, but not less than twice a year, inform the population about the implementation of socio-economic and cultural development programs, the local budget, on other matters of local importance, and report to the residents of territorial communities about their activity.

In the modern information society, the practice of e-governance is rapidly spreading and is being established as a way of organizing government activity with the help of internal and external information networks, which significantly increases the quality of the information policy of the local government and contributes to better information provision to community residents. Electronic governance ensures the functioning of government bodies in real-time (online), as well as provides people with easy access to the information and services they need, regardless of physical distance and the time of day. Ideally, e-government can ensure that citizens receive administrative services 24 hours a day, seven days a week, without walking away from their personal computers.

In turn, the satisfaction of the residents of a territorial community with the quality of informing by local self-government bodies creates strong communication and stimulates the desire of residents to participate in the active life of the community [3]. In particular, if LSGBs publish important data, such as community development, health care, education, recreation, crime, and interesting stories about its citizens, this creates trust among citizens. In the course of this issue, it is necessary to emphasize the important role of information and communication technologies as tools for strengthening communication between the local self-government body and the residents of the community, because it allows reporting information to different categories of residents in different ways [4].

Close two-way communication between the residents of the territorial community and the local self-government body is an extremely important tool that makes it possible to develop rural areas in new directions with an innovative approach. Considering the fact that the objects of critical attention from the local government in the context of their information policy get more attention from the public, this information must be objective, complete, reliable, and submitted on time. The information about the activity of local self-government bodies can be obtained by mass media from these bodies directly or through their information services or be collected by mass media employees.

The problem of assessing the level of informing the residents of territorial communities by local self-government bodies on their activity is becoming more and more relevant among scientists and practitioners today, since it is in the process of assessment that the level of informing residents is determined as a reference point for making relevant decisions by local self-government bodies regarding the improvement of their information and communication policy, in particular methods and ways of informing.

The purpose of the research is to assess the level of informing the residents of territorial communities by local self-government bodies about their activity and to determine residents' satisfaction with the methods of informing them.

The main tasks for achieving the goal set in the research are:

- to propose a methodology for assessing the level of informing the residents of territorial communities by local self-government bodies about their activity;
- to assess the level of informing the residents of territorial communities by local self-government bodies about their activity and to investigate whether the level of informing the residents by local self-government bodies with an administrative center in the village and the city is the same;
- to determine whether the residents of the community consider the methods of informing that are used by local self-government bodies to be convenient.

2. Related Works

Studying the professional literature on the issues of communication between local self-government bodies and residents, in particular, determining the methods of informing and assessing their level, it should be noted that the issue is characterized by a high level of publication activity of both domestic and foreign scientists and practitioners. This indicates their growing interest in the development of theoretical and practical aspects of this research and substantiates its growing relevance for modern society. However, each of the authors directs their vector of attention to the research of various narrow issues of this theme. In particular, author [5] believes that the development of society and information technologies, and globalization require more intensive communication of the community with local authorities. The subject of such communication is the discussion of the budget, various capital projects, the drafting of municipal acts, the development of partnerships between local authorities and residents, and direct communication with residents to form trusting and constructive relations between residents and local authorities. High-quality communication affects the elimination of various barriers, shortens geographical distances, and strengthens social cohesion. The research shows that the use of various communication channels, including social networks, leads to greater inclusiveness, but on the other hand, they can be dangerous due to the possibility of hacking or misinformation. The issue of the use of digital communication tools by territorial communities and their impact on improving the quality of public services is disclosed in the publications of scientists [3, 4, 6]. In the area of this issue, the results of the research demonstrate that the use of information and communication technologies by residents of rural areas significantly affects the possibilities of community development [7]. The well-being of a rural community depends on the initiative and organization of the people who live there, and their ability to develop ideas, find resources, manage decision-making processes, and implement social innovations [8]. The residents of such communities always prefer high-quality communication and use various methods of obtaining information from local self-government bodies (LSGBs). While developing this issue, the research [9] examines the impact of the Internet in rural areas on the interaction between residents. In particular, how the Internet use by young people living in rural areas affects their community participation and social capital. The results suggest that Internet use helps rural residents to spread information about local events and maintain social relationships. At the same time, the use of the Internet by young people living in villages is an impetus to change their place of residence, giving preference to cities.

High-quality communication and timely informing the residents of different communities by the government or local authorities is especially important in crisis conditions [10], also during the COVID-19 pandemic [11]. This led to a greater spread of information technologies in society, in particular in the public sector and local self-government bodies. After all, social information technologies improve the interaction of the government and local authorities with residents, as they offer numerous opportunities for quick information provision, increase transparency and trust, create new forms of the participation of residents and involve them in solving public issues, as well as improve inter- and intra-organizational cooperation [12].

In European countries, the functions and spheres of influence of local self-government bodies differ [13], and this leads to a different approach to conducting their communication policy. Local self-government bodies should implement various forms of social dialogue, actively promoting the involvement of citizens in the fulfillment of social tasks of the community [14].

The research of practical aspects showed that the development of a communication strategy for local self-government bodies is effective. The implementation of measures within the framework of such a strategy increases the level of their interaction with citizens. A communication strategy allows for covering different segments of citizens, choosing the most appropriate communication channels, and improving communication with residents in crisis situations [15]. However, on the other hand, all these factors are limited by the size of the municipality and the financial resources allocated for communication.

3. Methods / Methods and Materials

The information base was a sociological survey as part of the project "Information asymmetry in the interaction of local self-government bodies and residents of rural areas: analysis of the causes of occurrence and ways to overcome it," which was implemented with the financial support of the Konrad Adenauer Foundation (Germany, 2021-2022). The survey conducts by using the questionnaire method among residents of rural areas in eight territorial communities in the Southern, Central, and Western regions of Ukraine. The error of representativeness is $\pm 5.2\%$. The final sample was 3018 people (residents over 14 years old).

A fuzzy set theory was used to analyze the results of questioning and find the resulting assessment. A five-level fuzzy 01-classifier built on 01-carrier was applied, which allowed describing five values of the linguistic variable.

The essence of the five-level fuzzy 01-classifier is that if nothing is known about the indicator, except that it can take any values within the 01-carrier, and it is necessary to make an association between the qualitative and quantitative evaluations of the indicator, then the proposed classifier makes this is with maximum credibility. At the same time, the sum of all membership functions for any x_i equal to one, which indicates the consistency of the classifier.

Since to assess the level of informing residents of territorial communities by local self-government bodies, a linguistic variable was used in the questionnaire, which can take five values: "Very poorly informed", "Badly informed", "Mediocre", "Well informed" and "Very well informed", then it is advisable to use the theory of fuzzy sets to find the resulting estimate.

For the convolution of the respondents' Answer Choices, we will use the five-level fuzzy 01-classifier, which is built on the 01-carrier and allows us to describe the five values of the linguistic variable given above. To describe subsets of the values of the linguistic variable "Information level of residents", we will use a system of five trapezoidal membership functions:

$$\begin{aligned}
 \mu_{i1}(x_i) &= \begin{cases} 1, & \text{if } 0 \leq x_i < 0.15 \\ 10 \cdot (0.25 - x_i), & \text{if } 0.15 \leq x_i < 0.25 \\ 0, & \text{if } 0.25 \leq x_i \leq 1 \end{cases} & \text{Very poorly informed} \\
 \mu_{i2}(x_i) &= \begin{cases} 0, & \text{if } 0 \leq x_i < 0.15 \\ 10 \cdot (x_i - 0.15), & \text{if } 0.15 \leq x_i < 0.25 \\ 1, & \text{if } 0.25 \leq x_i < 0.35 \\ 10 \cdot (0.45 - x_i), & \text{if } 0.35 \leq x_i < 0.45 \\ 0, & \text{if } 0.45 \leq x_i \leq 1 \end{cases} & \text{Badly informed} \\
 \mu_{i3}(x_i) &= \begin{cases} 0, & \text{if } 0 \leq x_i < 0.35 \\ 10 \cdot (x_i - 0.35), & \text{if } 0.35 \leq x_i < 0.45 \\ 1, & \text{if } 0.45 \leq x_i < 0.55 \\ 10 \cdot (0.65 - x_i), & \text{if } 0.55 \leq x_i < 0.65 \\ 0, & \text{if } 0.65 \leq x_i \leq 1 \end{cases} & \text{Mediocre} \\
 \mu_{i4}(x_i) &= \begin{cases} 0, & \text{if } 0 \leq x_i < 0.55 \\ 10 \cdot (x_i - 0.55), & \text{if } 0.55 \leq x_i < 0.65 \\ 1, & \text{if } 0.65 \leq x_i < 0.75 \\ 10 \cdot (0.85 - x_i), & \text{if } 0.75 \leq x_i < 0.85 \\ 0, & \text{if } 0.85 \leq x_i \leq 1 \end{cases} & \text{Well informed} \\
 \mu_{i5}(x_i) &= \begin{cases} 0, & \text{if } 0 \leq x_i < 0.75 \\ 10 \cdot (x_i - 0.75), & \text{if } 0.75 \leq x_i < 0.85 \\ 1, & \text{if } 0.85 \leq x_i \leq 1 \end{cases} & \text{Very well informed}
 \end{aligned} \tag{1}$$

In formulas (1), x_i is the 01-carrier, and the membership functions built on the basis of this system are shown in Figure 1.

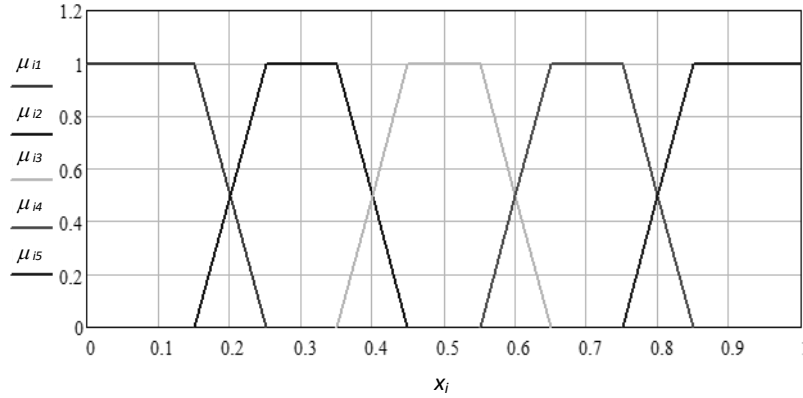


Figure 1. The standard five-level fuzzy 01-classifier is built on trapezoidal membership functions

The nodal points of the standard five-level fuzzy 01-classifier β_j are, on the one hand, the abscissas of the maxima of the corresponding membership functions on the 01-carrier, and, on the other hand, they are uniformly distant from each other on the 01-carrier and are symmetric with respect to the nodal point 0.5, and these are the points 0.1; 0.3; 0.5; 0.7; 0.9. These points act as weights when aggregating the system of indicators at the level of their quality states. Thus, nodal points reduce a set of non-standard classifiers (with their asymmetrically located nodal points) to a single classifier of a standard form, with a simultaneous transition from a set of non-standard carriers of individual factors to the standard 01 carrier.

The resulting quantitative assessment of the level of informing residents of territorial communities by local self-government bodies will be carried out according to the following convolution formula:

$$g = \sum_{j=0}^5 \beta_j \mu_{ij}(x_i) d_i, \quad (2)$$

where β_j are nodal points of a standard five-level fuzzy 01-classifier; $\mu_{ij}(x_i)$ is the value of the membership function of the j -th qualitative level relative to the current value of the i -th basic indicator; d_i is the share of respondents who gave the i -th answer option $i = \overline{1, n}$, where n is the number of surveyed respondents.

4. Experiment and Results

To determine the level of informing residents by local self-government bodies, a question was used, the answer options for which are presented on a Likert scale. The questionnaire results are shown in Table 1.

Table 1

The results of a survey of residents regarding the level of their information by local self-government bodies

Answer Choices	Number of responses	Percentage of responses
Very well informed	419	13.88%
Well informed	882	29.22%
Mediocre	1048	34.72%
Badly informs	517	17.13%
Very poorly informed	152	5.04%
Result	3018	100.00%

For the results of the survey given in the Table 1 calculations will look like this:

$$g = 0.9 \times 0.1388 + 0.7 \times 0.2922 + 0.5 \times 0.3472 + 0.3 \times 0.1713 + 0.1 \times 0.0504 = 0.559.$$

To recognize the level of informing residents of territorial communities by local self-government bodies, we will use the same standard five-level fuzzy 01 classifier. The rule for recognizing the parameter G "Level of informing residents" based on the value of the generalizing indicator g calculated according to formula (2) is presented in the Table 2.

Table 2
Classification of levels of informing residents

g values	G parameter levels	Degree of estimation confidence (property function)
$0 \leq g < 0.15$	Very low	$\mu_1 = 1$
$0.15 \leq g < 0.25$	Very low	$\mu_1 = 10 \times (0.25 - g)$
	Low	$\mu_2 = 1 - \mu_1$
$0.25 \leq g < 0.35$	Low	$\mu_2 = 1$
	Low	$\mu_2 = 10 \times (0.45 - g)$
$0.35 \leq g < 0.45$	Average	$\mu_3 = 1 - \mu_2$
$0.45 \leq g < 0.55$	Average	$\mu_3 = 1$
	Average	$\mu_3 = 10 \times (0.65 - g)$
$0.55 \leq g < 0.65$	High	$\mu_4 = 1 - \mu_3$
$0.65 \leq g < 0.75$	High	$\mu_4 = 1$
	High	$\mu_4 = 10 \times (0.85 - g)$
$0.75 \leq g < 0.85$	Very tall	$\mu_5 = 1 - \mu_4$
$0.85 \leq g \leq 1.0$	Very tall	$\mu_5 = 1$

Since the calculated value of the generalizing indicator $g = 0.559$ falls in the range of $0.55 \leq g < 0.65$, then the level of informing residents is 91% average ($\mu_3 = 10 \times (0.65 - 0.559) = 0.91$) and 9% high ($\mu_4 = 1 - 0.91 = 0.09$).

The results of a survey of residents with an administrative center in a village/ regarding the level of informing are presented in Table 3.

Table 3
The results of a survey of residents with an administrative center in a village/city

Answer Choices	Communities, with the administrative center in the village		Communities, with the administrative center in the city	
	Number of responses	Percentage of responses	Number of responses	Percentage of responses
Very well informed	254	13.31%	165	14.86%
Well informed	616	32.29%	266	23.96%
Mediocre	648	33.96%	400	36.04%
Badly informs	288	15.09%	229	20.63%
Very poorly informed	102	5.35%	50	4.50%
Result	1908	100.00%	1110	100.00%

Similarly to the methodology described above, we evaluate the level of informing residents with the administrative center in the village/city.

For the results of the survey given in the Table 3 calculations will look like this:

$$g_v = 0.9 \times 0.1331 + 0.7 \times 0.3229 + 0.5 \times 0.3396 + 0.3 \times 0.1509 + 0.1 \times 0.0535 = 0.566.$$

$$g_c = 0.9 \times 0.1486 + 0.7 \times 0.2396 + 0.5 \times 0.3604 + 0.3 \times 0.2063 + 0.1 \times 0.0450 = 0.548.$$

Since the calculated value of the generalizing indicator $g_v = 0.566$ falls in the range of $0.55 \leq g < 0.65$, then the level of informing residents with an administrative center in the village is 84% average ($\mu_3 = 10 \times (0.65 - 0.566) = 0.84$) and 16% high ($\mu_4 = 1 - 0.84 = 0.16$). The value of $g_c = 0.548$ falls in the range of $0.45 \leq g < 0.55$, and therefore, the level of informing residents with an administrative center in the city is 100% average ($\mu_3 = 1$).

The results of calculations indicate a somewhat lower level of informing residents by local self-government bodies with an administrative center in the city compared to residents of communities whose administrative center is located in a village. This is confirmed by the research that claims that the size of a settlement or its administrative status does not influence the formation of residents' relations with local authorities. However, it is proven that rural residents have stronger relationships and interactions with each other, which also affects communication and ways of informing [16].

Table 4

The results of the survey of residents who live in the administrative center of the community/settlement – not an administrative center

Answer Choices	Administrative center of the community		The settlement is not an administrative center	
	Number of responses	Percentage of responses	Number of responses	Percentage of responses
Very well informed	78	18.66%	341	13.12%
Well informed	194	46.41%	688	26.46%
Mediocre	112	26.79%	936	36.00%
Badly informs	32	7.66%	485	18.65%
Very poorly informed	2	0.48%	150	5.77%
Result	418	100.00%	2600	100.00%

For the results of the survey given in the Table 4 calculations will look like this:

$$g_a = 0.9 \times 0.1866 + 0.7 \times 0.4641 + 0.5 \times 0.2679 + 0.3 \times 0.0766 + 0.1 \times 0.0048 = 0.65.$$

$$g_{na} = 0.9 \times 0.1312 + 0.7 \times 0.2646 + 0.5 \times 0.3600 + 0.3 \times 0.1865 + 0.1 \times 0.0577 = 0.545.$$

Since the calculated value of the generalizing indicator $g_a = 0.65$ falls in the range of $0.65 \leq g < 0.75$, then the level of informing residents living in the administrative center of the community is 100% high ($\mu_4 = 1$). The value of $g_{na} = 0.545$ falls in the range of $0.45 \leq g < 0.55$, and therefore, the level of informing residents who live in the settlement – not the administrative center of the community, is 100% average ($\mu_3 = 1$).

The results of calculations indicate a higher level of informing residents by local self-government bodies, who live in the administrative center of the community, compared to residents who live in a settlement that is not an administrative center, which was to be expected. The activity of community residents to use certain methods of information, such as sites, pages in social networks, or bulletin boards, also depends on the quality and frequency of updates by local self-government bodies. So, for example, the research claims [20] that a significant part of communities in Ukraine do not update news on the website and social media pages and networks on time, in rural communities their share reaches 52%. Updating community websites depends on the human and financial resources of local self-government bodies. Also, in rural communities, a low level of digital literacy of local self-government bodies is observed.

Table 5

Ways of informing residents about the activities of territorial community authorities, which are most often used by the local self-government body/which residents consider the most convenient

Ways of informing residents about the activities of territorial community authorities (Answer Choices)	It is used by the local self-government body		Residents consider it the most convenient		Calculated data
	Number of responses	Share of responses (d_j)	Number of responses	Share of responses (d_k)	$ d_j - d_k $
Meetings/meetings of council representatives/deputies, elders /communal services with community residents	1162	0.167	1403	0.186	0.019
Bulletin boards, including electronic ones	766	0.110	794	0.105	0.005
Leaders of religious or public organizations, street committees, condominiums, youth councils, etc.	611	0.088	469	0.062	0.025
Mass media (e.g., local newspaper, online publication, radio, TV)	992	0.142	1275	0.169	0.027
The official website of the territorial community council	1227	0.176	855	0.113	0.063
Social networks (Facebook, Instagram, etc.)	1821	0.261	1569	0.208	0.053
Messenger group (Viber, Telegram, etc.)	331	0.048	832	0.110	0.063
YouTube channel	36	0.005	319	0.042	0.037
Other ways	19	0.003	21	0.003	0.000
Result	6965	1.000	7537	1.000	0.292

Note: respondents could choose no more than three Answer Choices

The coefficient of similarity (similarity) of the structures of two objects or one object according to two features is calculated according to the formula:

$$P = 1 - \frac{1}{2} \sum_{j=k=1}^m |d_j - d_k|, \quad (3)$$

where d_j, d_k – respectively, the shares of structures of two distributions of objects or features.

If the structures are the same, $P = 1$. The greater the deviations of the structures, the smaller the value of the P coefficient.

According to the results obtained during the survey (see Table 5), the coefficient of similarity of the structures of respondents' answers is equal to:

$$P = 1 - 0.5 \times 0.292 = 0.854.$$

Therefore, the structures of the answers are quite close, which indicates that local self-government bodies use methods of informing community residents about their activities, which are quite convenient for the latter. It means that local self-government bodies monitor the needs of residents, know their preferences, and try to use exactly those communication channels that are convenient for them.

5. Discussions

The research results show that current residents of territorial communities are active and want to participate in the life of their community, to join in solving local problems that affect their living in the community, for this they need reliable communication channels and quality communication. This is confirmed by the research of scientists who claim that local authorities should be open to residents and their needs; they should timely and fully inform about current activity and the transparency of their implementation, as well as receive feedback from residents. Modern residents are becoming more demanding and claim their rights. They become more aware of their needs and competencies, are self-confident, and know how to use their knowledge and experience, so they expect special communication and appropriate information provision [17].

Local governments must realize that even attractive and professionally presented information will not be accepted by residents if the services they provide do not meet their needs and expectations.

The research revealed that residents are better informed in the village than in the city. However, it is necessary to pay attention to the quality of information. After all, according to the scientists [18], rural municipalities have a more characteristic “top-down” model of communication, which is often based on power relations and is one-sided and formal. Therefore, research aimed at understanding the government, and the communication of citizens with prevailing horizontal relationships will be able to turn communication into an effective tool that will help establish trust in the government and increase the participation of citizens in decision-making.

When researching ways to inform residents about the activity of local community authorities, it was found that the most convenient for residents are communications in social networks, the meetings of community residents with the representatives of local authorities, and local media. This correlates with the research [17], where as a result of the survey it was found that personal contact is the most important for residents of rural communities, and an important source of communication is the free press – a local newspaper that contains all current information, as well as a systematically updated website of the settlement. Social networks also play a special communicative role.

The research shows that local self-government bodies are more inclined to introduce innovations in external communications, and internal communication in the community is considered less important. Insufficient feedback and an incorrectly chosen channel are invisible, but neglecting this leads to poor communication with residents [19].

In recent years, burdened by the impact of the pandemic, the active phase of the Russian war has also made adjustments to the information and communication aspect of local self-government bodies and community residents. After all various types of messengers have gained active development; in particular, various groups and communication channels (Viber, Telegram) quickly began to be created. Most of the local authorities quickly respond to today’s challenges and create or improve their official Facebook pages, community websites, and groups in various messengers. Theoretically, this has activated information and communication activity, making it possible to quickly convey information to residents about important issues or needs of the community, the feedback from community residents is also effectively provided. However, in practice, this has created new risks, in particular, the appearance of false information, and overloading with all kinds of unnecessary or oppressive information. It was the active development of various communication channels that became an effective tool for spreading fakes and provoking an information imbalance in the community, especially in wartime conditions. Among the reasons for this situation, it is the emergence of a large number of new telegram channels in localities, which, in particular, are created by the residents themselves, and, in conditions of low media literacy, are filled with information from unreliable sources, negative comments and outright fakes [20]. Therefore, the task of local authorities, local journalists, and activists is to spread media awareness, and increase the level of “informational hygiene” of residents, increase trust in reliable and official channels of communication.

Local self-government quickly responds to the challenges of martial law in the field of informing and engaging community residents, since the lives and safety of people in communities often depended on it. They created new or strengthened existing communication channels to deliver socially necessary information under martial law conditions (for example, information about humanitarian corridors, the delivery of humanitarian aid, etc.), and began to respond to disinformation and manipulation. At the

same time, the strengthened measures of information security led to the concealment by the authorities of a part of socially important information about their activity that does not concern the defense capability and does not threaten territorial integrity. Therefore, LSGBs should carefully review the policy of access to public information, taking into account the clarifications and recommendations of the Office of the Commissioner for Human Rights, and experts [21].

6. Conclusions

In today's conditions and the rapid development of information technologies, the issue of timely dissemination of information is extremely relevant, in particular for local self-government bodies in the area of their information provision to community residents. A wide range of means of communication available today makes it difficult to choose the right way of informing community residents about the activity of the local self-government body, which would be the most convenient for them. Such prerequisites created the need to assess the level of informing community residents by local self-government bodies.

The work proposes a methodology for assessing the level of informing the residents of territorial communities by local self-government bodies about their activity, which was based on the theory of fuzzy sets and was tested on the residents of rural areas in eight territorial communities in the Southern, Central, and Western regions of Ukraine. The survey was conducted by the questionnaire method. The error of representativeness is $\pm 5.2\%$. The final sample consisted of 3,018 people (residents older than 14 years), the average age in the entire sample was 42.9 years, (min = 14 years; max = 84 years), and women made up 52.05%.

The results showed that the level of informing the residents with the administrative center in the village is 84% average and 16% high, and the level of informing the residents with the administrative center in the city is 100% average.

Also, the results of the research showed that local self-government bodies use those methods of informing community residents about their activity that are quite convenient for the latter. So, the authors have achieved the goal, and the task has been completed.

This research has limitations; in particular, the remoteness of communities and their mobility are not taken into account. The researched communities are relatively compactly located. However, there are many rural communities that are geographically far from each other, including mountain communities.

The results of the research will be useful to local self-government bodies in improving the information policy of the community and to active researchers of the life of residents of rural areas.

The prospects for further research can be of different vectors. They may refer to the study of the intensity of use of various communication channels by different segments of residents; their change in the process of the development of digitalization is considered. A separate direction may lie in the application of the latest IT tools and technologies to the activity of local government.

7. References

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