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МЕЃУНАРОДНА НАУЧНА КОНФЕРЕНЦИЈА

БЕЗБЕДНОСНИ КОНЦЕПТИ И ПОЛИТИКИ - НОВА ГЕНЕРАЦИЈА НА РИЗИЦИ И ЗАКАНИ

Hanns Seidel Stiftung

INTERNATIONAL SCIENTIFIC CONFERENCE

SECURITY CONCEPTS AND POLICIES - NEW GENERATION OF RISKS AND THREATS

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HOUSEHOLD SUPPLIES FOR NATURAL DISASTERS: FACTORS OF INFLUENCE ON THE POSSESSION OF SUPPLIES

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Purpose – The paper presents the results of the quantitative research of the impact of certain factors on household possession of supplies necessary for the survival of the consequences of natural disasters.
Design/methodology/approach – Quantitative research was conducted by using a survey strategy in households with the use of a multi-stage random sample. The first step, which was related to the primary sampling units, included selection of parts of the community for conducting research. The second step, which was related to research cores, included selection of streets or parts of streets at the level of primary sampling units, and finally a selection of households for surveying 2500 citizens in 19 local communities.
Findings – It was found that only 24.6% of the respondents have supplies, while 61.5% have no supplies for surviving natural disasters. On the other hand, 37.2% of the respondents possess supplies of food for 4 days, while only 12% have supplies of food for 1 day. It was found that 17.6% of the respondents have a transistor radio, 40% a flashlight, 40.6% a shovel, 25.8% a hack, 33.6% hoe and spade, and 13.2% a fire extinguisher. The results of the inferential statistical analyses show that there is a statistically significant influence of gender, education, marital status, parenthood, employment, income level, level of religiosity, completed military service on having supplies to survive the consequences of natural disasters. On the other hand, there was no influence of previous experiences on having supplies.
Originality/value – research results allow the design of strategies aimed at raising the level of preparedness of households for natural disasters with regard to their supplies.

Keywords – security, natural disasters, disaster supplies, factors of impact, Serbia.

INTRODUCTION

Mitigation of effects of natural disasters is possible only through improving the level of preparedness of communities and citizens (Cvetković, 2015, 2016c, 2016d; Cvetković & Andrejević, 2016; Cvetković, Dragićević, et al., 2015; Cvetković, Gaćić, & Petrović, 2015). Preparedness for disasters is generally defined by the American Red Cross in terms of five key steps that need to be taken at the individual level, the household level and the community level: development and testing plans for protection and rescue; ensuring supplies of food and water in households; training; volunteering and blood donation(Cross, 2006).Disaster preparedness experts broadly agree that citizen

preparedness requires households to have an emergency plan, to stockpile supplies such as water and prescription medications, and to stay informed of community plans (Uscher-Pines et al., 2012). Starting from the consequences of natural disasters, an essential precondition for the survival of people is to have a stock of food, water and other necessities. In the study of the preparedness of the citizens of the United States, 57% of the population own stocks in their home, 34% in cars and 45% in office at workplace (FEMA, 2009). When it comes to men, according to the results of the existing research, they more often focus on supplies that are needed to survive natural disasters(Able & Nelson, 1990), including technical means of protection of the household from upcoming natural disasters. Research in the USA (FEMA, 2009: 8) indicates that the supplies most frequently mentioned included a supply of packaged food (74%) and bottled water (71%), with many fewer individuals mentioning other essential supplies such as a flashlight (42%), a first aid kit (39%) or a portable radio (20%). Less than half of the respondents (44%) reported updating their supplies once a year, while 3 percent reported never updating their supplies. When asked directly, 71 percent of the respondents reported having copies of important financial documents in a safe place, yet only 1 percent specifically mentioned the documents unaided as part of their household disaster supplies.

LITERARY REVIEW

Becker et. al. (2012) found that the reason for undertaking sustained preparedness was that people desired to keep their supplies fresh and/or in working order in case they had to use them. They found that people wanted to ensure they had safe drinking water and food, and this desire for safety encouraged people to replenish these items as part of sustained preparedness. Light (2016) emphasizes that the lack of essential items such as food, water and medication reduces the length of time that people could stay at home and increases the urgency with which the government and other agencies would need to deliver supplies. Page et al. (2008) found that 48% people had gathered 4 or more relevant supplies in case of emergency. They found that close to half (43.7%) of the respondents did not possess a battery radio at either time point, while 32.2% did not have toiletries, sanitary supplies, and medications gathered at home. Kapucu (2008) found that 8 percent of all respondents have a disaster supplies kit that contains enough food, water, and medication for a family to shelter in a place for three days. Besides that, he found that the most common emergency items in the respondent households were smoke detectors and a fire extinguisher, while the least common items were storm shutters, a fire sprinkler system, and a carbon monoxide detector. Eisenman et al. (2006) found that 28.0% of the respondents purchased or maintained additional emergency supplies of food, water, or clothing and 35.0% responded "yes" to either developing an emergency plan or maintaining emergency supplies. Mori et al., (2007) highlighted the need for continued medication supplies for the chronically ill during and after a disaster. Bether et al., (2011) found that vulnerable populations were generally less likely to have household preparedness items, but more likely to have medication supplies than their counterparts. Miceli et al., (2008) found that the behavior that is more likely to be adopted by respondents is ''Keep a working flashlight and a battery operated radio in a convenient location'' (77%).

RESEARCH METHODOLOGY

Quantitative research was conducted by using a strategy of surveying households with the use of a multi-stage random sample. The first step, which is related to the primary sampling units, included selection of parts of the community for conducting the research. This process was accompanied by a creation of a map and determination of the percentage share of each such segment in the total sample. The second step, which was related to research cores, included selection of certain streets or parts of streets at the level of the primary sampling units. Each core of the research was determined as a path with specified start and end points of movement. The next step included a selection of households for conducting the research. The number of households covered by the sample was determined in relation to their total number in the municipality. The final step was related to the procedure for the selection of respondents within the predefined household. The selection of respondents was conducted following the procedure of the next birthdays of the adult members of the household. The process of interviewing in municipalities was performed three days during the week (including weekends) at different times of the day. The study covered a total of 2,500 citizens (face to face - a personal interview) in the following local communities Obrenovac (178), Šabac (140), Kruševac (180), Kragujevac (191), Sremska Mitrovica (174), Priboj (122), Batočina (80), Svilajnac (115), Lapovo (39), Paraćin (147), Smederevska Palanka (205), Sečanj (97), Loznica (149), Bajina Bašta (50), Smederevo (145), Novi Sad (150), Kraljevo (141), Rekovac (50) and Užice (147). The presented methodological framework is a part of a wider study conducted on preparedness of citizens to respond to a natural disaster (Cvetković, 2016a, 2016b; Cvetković, 2015). The analysis of the sample structure indicates that the sample includes more women (50.2%) than men (49.8%). The largest portion of surveyed people, 41.3%, have completed secondary education. There is the smallest number of people with master 2.9% and doctoral studies 0.4%. In the sample, the married make 54.6%, widows/widowers 3%, singles 18.8%, the engaged 2.7% and respondents in a relationship make 16.9%. Statistical analysis of collected data was performed in the statistical program for social sciences (*Statistical Package for the Social Sciences*). h2 test for independent sampl, and one-way analysis of variance were used to test the connection between subjective and objective knowledge and security culture of behavior regarding the epidemics.

RESULTS AND DISCUSSION

The impossibility of leaving home, destroyed critical infrastructure, contaminated foods at supermarkets and pharmacies or gas stations with no usable fuel condition the preparation of supplies. When talking about supplies for natural disasters, we primarily refer to food, water, certain medications, fuel, etc. Based on the survey results, only 24.6% of the respondents noted that they maintain supplies for natural disasters caused by floods. On the other hand, a large percentage of respondents does not maintain supplies (61.9%) (Figure 1). The possession of supplies is an important indicator of the current preparedness of the citizens to respond to such situations. In the survey of preparedness of US citizens for natural disasters, 57% of the citizens maintain supplies in their homes, 34% in vehicles and 45% in the office at the workplace (FEMA, 2009).

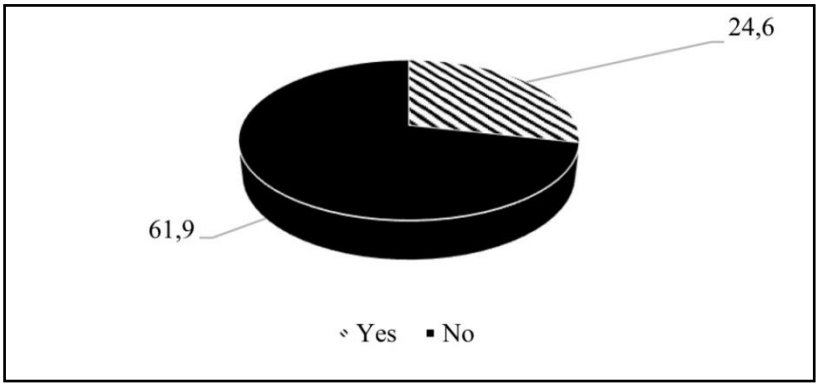

Figure 1. Percentage distribution of the possession of supplies

Of the total of 1502 respondents who answered the question "What do you maintain as food supplies", 37.2% said they have supplies of food for four days, while only 12% of citizens have supplies of food for one day (Figure 2). The results of the research conducted in the US indicate that 74% of the respondents have food supplies, 71% water supplies, 42% a flashlight, 20% a radio-transistor, 2% cash, 1% copies of important documents (FEMA, 2009). Tomio et al (Tomio et al., 2014) in the research results indicate that 27% of the respondents have supplies of food and water. Horney et al (Horney et al, 2008) suggest that 207 households (82%) out of 251 included in the study stated that they are very responsible in taking care of the possession of supplies of food and water. However, only 109 households (44%) have supplies of food and water for three days.

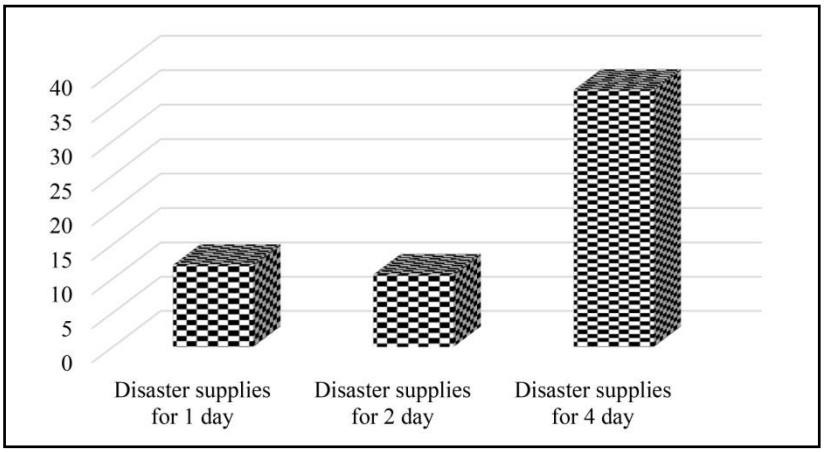

Figure 2. Percentage distribution of the duration of supplies

The results indicate that 17.6% of the respondents have a transistor radio, 40% a flashlight, 40.6% a shovel, 25.8% a hack, 33.6% hoe and spade and 13.2% a fire extinguisher (Figure 1). The results of the research in the United States in 2009 indicate that 42% of the citizens have a flashlight, 20% a transistor radio, 11% other medicaments, 2% cash, 1% financial documents. Baker (Baker, 2011) in the paper indicates that more than 80% of the citizens of Florida have a flashlight, non-perishable food and a transistor radio. In a study conducted in Italy, Miceli et al (Miceli et al., 2008) indicate in the research results that 77% of the respondents keep a flashlight and a radio transistor in an easily accessible and

open place, 59% have a list of phone numbers of the most important services, 28% keep essential items in safe places protected against floods, 20% own supply of water and food.

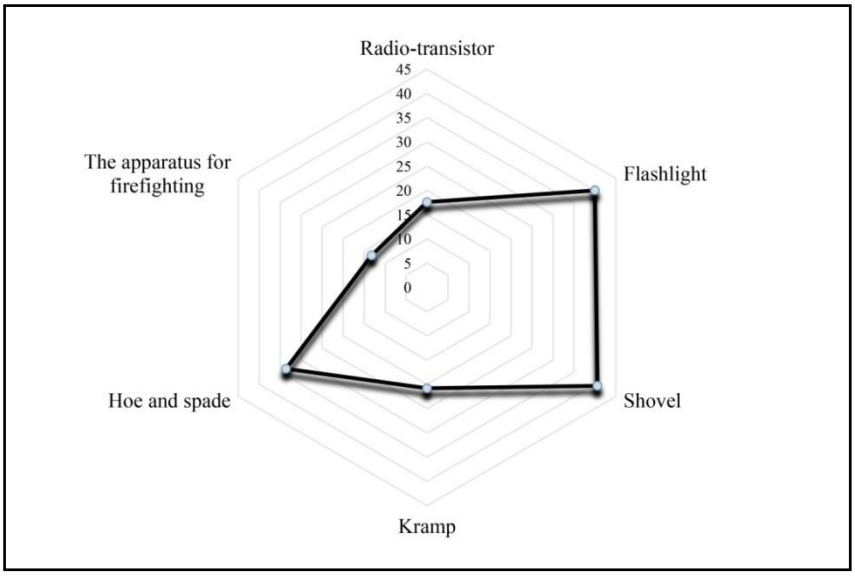

Figure 3. Percentage distribution of the possession of specific supplies

Chi-square test results show that there is a statistically significant influence of gender ($p = 0.002$) on the possession of supplies for natural disasters (Table 1). A higher percentage of male respondents have supplies for natural disasters compared to women.

In addition to gender, the findings indicate a statistically significant influence of education ($p = 0.005$) on the possession of supplies for natural disasters. The results were as follows: 25.6% of the respondents with primary education maintain supplies, 21.3% of the respondents with secondary three-year education, 26.1% of the respondents with secondary four-year education, 20.3% of the respondents with higher education, 24.7% of the respondents with a university degree and 38.7% of therespondents with post-graduate studies. The respondents with postgraduate studies have supplies for natural disasters in the highest percentage as opposed to the respondents with higher education (Table 1).

Marital status is statistically significantly associated ($p = 0.000$) with the possession of supplies for natural disasters. Of the total number of respondents, 25.3% of the respondents who are single keep supplies for natural disasters, 26.6% of the respondents who are in a relationship, 34.3% of the engaged, 24.6% of the married, 27.8% of the divorced and 24.3% of the widows/widowers. Based on the results, the respondents who are engaged have supplies in the highest percentage, while widows/widowers have supplies in the lowest percentage (Table 1).

When it comes to parenthood ($p = 0.000$), the findings indicate a statistically significant correlation between parenthood and the possession of supplies for natural disasters. Of the total number of respondents, 24.7% of the parents keep supplies as opposed to 26.6% of those who are not parents. Hence, in a slightly higher percentage, the respondents who are not parents have supplies for natural disasters compared to those who are parents (Table 1).

The possession of supplies for natural disasters is statistically significantly influenced by the status of employment of the citizens ($p = 0.015$). Survey results indicate that

employed citizens (25.7%) have supplies for natural disasters in a higher percentage compared to the unemployed citizens (23.5%) (Table 1).

In addition to the employment status, the possession of supplies for natural disasters is statistically significantly influenced by the income level ($p = 0.008$). The respondents with income above RSD 76.000 have supplies for natural disasters in the highest percentage (36%), then up to 25.000 (27.2%), 50.000 (23.1%) and finally, up to RSD 75.000 (22.9%) (Table 1).

The level of religiosity also statistically significantly ($p = 0.000$) affects the possession of supplies for natural disasters. Believers in certain sense have supplies in the highest percentage (35.3%), followed by those who are believers in the absolute sense (25.9%) and those who are neither believers nor non-believers (23.8%), non-believers in the absolute sense (26.3%) and non-believers in certain sense (9.9%) (Table 1). On the other hand, previous experience does not statistically significantly affect the possession of supplies for natural disasters. However, the results of the descriptive statistical analysis indicate that 22.5% of the citizens who have previous experience and 25.6% of citizens who have no previous experience keep supplies for natural disasters (Table 1). Finally, it was found that military conscription is statistically significantly associated ($p = 0.003$) with the possession of supplies for natural disasters. The respondents who have completed their military conscription service have supplies in a higher percentage (27.7%) compared to those who have not completed their conscription (24.3%) (Table 1).

Table 1. The influence of independent variables on the possession of supplies for natural disasters

		Keeping supplies	Not keeping supplies	Results of statistical analyses
Gender	Male	27.4	72.6	$X^2 = 7.22$ df – 2 Sig. – .002* V – 0.055
	Female	23.5	76.5	
Education	Elementary	25.6	74.4	$X^2 =$ – 28.18 df – 6 Sig. – .005* V – 0.355
	Secondary (3 years)	21.3	78.7	
	Secondary (4 years	26.1	73.9	
	Higher	20.3	79.7	
	University	24.7	75.3	
	Postgraduate	38.7	61.3	
Marital status	Single	25.3	74.7	$X^2 =$ – 48.82 df – 6 Sig. – .000* V – 0.355
	In a relationship	26.6	73.4	
	Engaged	34.3	65.7	
	Married	24.6	75.4	
	Divorced	27.8	72.2	
	Widow/widower	24.3	75.7	
Parenthood	Parent	24.7	75.3	$X^2 =$ – 19.43 df – 2 Sig. – .000* V – 0.09
	Non-parent	26.6	73.4	
Employment	Employed	25.7	74.3	$X^2 =$ – 8.37 df – 2 Sig. – .015* V – 0.060
	Unemployed	23.5	76.5	
Income level	Up to 25.000	27.2	72.8	$X^2 =$ – 17.51 df – 6 Sig. – .008* V – 0.08
	Up to 50.000	23.1	76.9	
	Up to 75.000	22.9	77.1	
	Above 76.000	36	64	
Level of religiosity	Non-believer in absolute sense	26.3	73.7	$X^2 =$ – 62.26 df – 8 Sig. – .000* V – 0.164
	Non-believer in certain sense	9.9	90.1	
	Neither believer nor non-believer	23.8	76.2	
	Believer in certain sense	35.3	64.7	
	Believer in absolute sense	25.9	74.1	
Previous experience	Yes	22.5	77,5	$X^2 =$ – 3.15 df – 2 Sig. – .206 V – 0.037
	No	25.6	74.4	
Military conscription service	Completed	27.7	72.3	$X^2 =$ – 11.96 df – 2 Sig. – .003* V – 0.075
	Not completed	24.3	75.7	

When it comes to the possession of specific supplies to survive the consequences of natural disasters, there is no statistically significant difference between men and women in regard to the possession of fire extinguishers ($p = 0.648$) and a flashlight ($p = 0.17$). Of all respondents, 14.3% of men and 13.4% of women have a fire extinguisher. 41% of men and 37.3% of women have flashlights. On the other hand, there is a statistically significant correlation between gender and the possession of a transistor radio ($p = 0.03$). Also, men have a transistor radio in a higher percentage (19.5%) than women (15%) (Table 2).

Education is statistically significantly associated with the possession of transistor radios ($p = 0.001$), flashlights ($p = 0.004$) and fire extinguishers ($p = 0.000$). The people who have completed post graduate studies have a transistor radio in the highest percentage (34.1%), then the citizens with three-year secondary education (22.3%), elementary education (21.9%), university degree (19%), higher education (15.6%) and four-year secondary education (12.8%). Also, the people who completed post graduate studies have a flashlight in the highest percentage (60%), followed by those with a three-year secondary school (46.9%), university degree (37.2%), higher education (36.2%), four-year secondary school (35%) and elementary education (32.4%). Finally, the citizens who have completed post graduate studies have fire extinguishers in the highest percentage (43.2%), then the citizens with a university degree (17.1%), three-year secondary education (16.8%), higher education (12.7 %), four-year secondary school (10.6%) and with elementary education (5.7%) (Table 1).

On the other hand, the marital status is statistically significantly associated with the possession of transistor radios ($p = 0.004$), but it is not associated with keeping a flashlight ($p = 0.069$) and a fire extinguisher ($p = 0.243$). The divorced people have a transistor radio in the highest percentage (34.1%), then the people who are single (20.2%), married (17.1%), in a relationship (15.6%), widows/widower (5.6%) and lastly the engaged (5.4%). When it comes to possession of a flashlight, the results of the descriptive statistical analysis are as follows: single (40.2%), in a relationship (39.5%), engaged (37.2%), married (37.1%), divorced (60.5%), widow/widower (48.7%). The distribution of the possession of a fire extinguisher according to the marital status is as follows: single (13.7%), in a relationship (11.5%), engaged (21.6%), married (14%), divorced (24.2%), widow/widower (8.3%) (Table 2).

The status of parenthood is not statistically significantly associated with the possession of a transistor radio ($p = 0.909$), a flashlight ($p = 0.308$) and a fire extinguisher ($p = 0.243$). The results of the descriptive statistical analysis indicate that 17.2% of the parents have a transistor radio and 17.5% of the citizens who are not parents. 39% of the citizens who are parents possess a flashlight and 39.4% of the citizens who are not parents. Finally, 14.8% of the citizens who are parents have a fire extinguisher and 12.7% of the citizens who are not parents (Table 2).

The employment status is statistically significantly associated only to the possession of a fire extinguisher ($p = 0.000$), while it is not associated with the possession of a transistor radio ($p = 0.141$) and a flashlight ($p = 0.672$). The results indicate that the employed have a fire extinguisher in a higher percentage (16.9%) compared to the unemployed (7.1%). The distribution of the possession of transistor radios is as follows: the employed (16%), the unemployed (19.3%). 13% of the employed and 14% of the unemployed respondents have flashlights (Table 1).

The Income level is statistically significantly associated with the possession ofa transistor radio ($p = 0.000$), a flashlight ($p = 0.020$) and a fire extinguisher. The respondents with an income level over RSD 76.000 have a transistor radio in the highest

percentage (33.3%), then the respondents with an income up to RSD 50.000, up to RSD 25.000 (15.9%), and lastly, up to RSD 75.000 (11.5%). The respondents with an income over RSD 76.000 have flashlight in the highest percentage (50.5%), then up to RSD 75.000 (43.8%), up to RSD 50.000 (37.2%), and lastly, with an income up to RSD 25.000 (36.1%). The citizens with an income over RSD 76.000 have a fire extinguisher in the highest percentage (27.3%), then up to 75.000 (15.9%), up to RSD 50.000 (14.3%), and lastly, up to RSD 25.000 (11. 3%) (Table 2).

Additionally, the level of religiosity is statistically significantly associated with the possession of a transistor radio (p = 0.005), a flashlight (p = 0.007) and a fire extinguisher (p = 0.028). The citizens who characterize themselves as neither believers nor non-believers have a transistor radio in the highest percentage (19.7%) compared to the citizens who are believers in the absolute sense (2.3%). On the other hand, the believers in certain sense have a flashlight in the highest percentage (41.8%) in relation to the citizens who are non-believers in certain sense (24.2%). And finally, it was found that the citizens who are neither believers nor non-believers have fire extinguishers in the highest percentage (15.9%) in relation to the citizens who are not believers in the absolute sense (2.6%) (Table 2).

The completed military conscription service is statistically significantly associated only to the possession of fire extinguishers (p = 0.000), whereas there is no such correlation with the possession of a transistor radio (p = 0.386) and a flashlight (p = 0.131). The citizens who completed their military conscription service have a fire extinguisher in the highest percentage (48.2%) in relation to the citizens who have not completed their conscription (32.4%). 18% of the respondents who have completed their military conscription service have a transistor radio and 16.1% with no conscription. On the other hand, 41% of the respondents who have completed military conscription service have a flashlight and 36.7% who those without a conscription (Table 2).

Table 2. The influence of independent variables on the possession of specific supplies for natural disaster

		Radio-transistor	Statistic	Flashlight	Statistic	Fire fighting apparatus	Statistic
Gender	Male	Yes – 19.5 No – 80.5	$X^2 = 4.35$ df – 2 Sig. – .037* V – 0.05	Yes – 41 No – 49	$X^2 = 1.83$ df – 1 Sig. – .17 V – 0.05	Yes – 14,3 No – 85.7	$X^2 =$ 0.208 df – 1 Sig. – 0.648
	Female	Yes – 15 No – 85		Yes – 37.3 No – 62.7		Yes – 13.4 No – 86.6	
Education	Elementary	Yes – 21,9 No – 78.1	$X^2 = 22,49$ df – 4 Sig. – ,001* V – 0,135	Yes – 32.4 No – 67.6	$X^2 =$ 18,96 df – 6 Sig. –	Yes – 5.7 No – 94.3	$X^2 =$ 39.06 df – 6 Sig. –
	Secondary (3 year)	Yes – 22.3 No –		Yes – 46.9 No – 43.1		Yes – 16.8 No – 83.2	

		77.7			,004* V – 0,122		.000* V – 0.182
	Secondary (4 year)	Yes – 12.8 No – 77.2		Yes – 36.2 No – 43.8		Yes – 10.6 No – 89.4	
	Higher	Yes – 15.6 No – 74.4		Yes – 36.2 No – 63.8		Yes – 12.7 No – 87.3	
	University	Yes – 19 No – 81		Yes – 37.2 No – 62.8		Yes – 17.1 No – 82.9	
	Postgraduate	Yes – 34.1 No – 65.9		Yes – 60 No – 40		Yes – 43.2 No – 46.8	
Marital status	Single	Yes – 20.2 No – 79.8	X^2 = 17.10 df – 5 Sig. – .004* V – 0.135	Yes – 40.2 No – 59.8	X^2 = 10,22 df – 5 Sig. – ,069	Yes – 13.7 No – 66.3	X^2 = 6.71 df – 5 Sig. – .243
	In a relationship	Yes – 15.6 No – 74.4		Yes – 39.5 No – 60.5		Yes – 11.5 No – 88.5	
	Engaged	Yes – 5.4 No – 94.6		Yes – 37.2 No – 62.8		Yes – 21.6 No – 88.4	
	Married	Yes – 17.1 No – 72.9		Yes – 37.1 No – 62.9		Yes – 14 No – 86	
	Divorced	Yes – 34.1 No – 65.9		Yes – 60.5 No – 39.5		Yes – 24.2 No – 75.8	
	Widow/widower	Yes – 5.6 No – 94.4		Yes – 48.7 No – 51.3		Yes – 8.3 No – 91.7	
Parenthood	Parent	Yes – 17.2 No – 82.8	X^2 = 0.013 df – 1 Sig. – .909	Yes – 39 No – 61	X^2 = 1.03 df – 1 Sig. – .308	Yes – 14.8 No – 85.2	X^2 = 1.38 df – 1 Sig. – .239
	Non-parent	Yes – 17.5 No – 82.5		Yes – 39.4 No – 60.6		Yes – 12,7 No – 87,3	
Employment	Employed	Yes – 16 No – 84	X^2 = 2.16 df – 1 Sig. – .141	Yes – 13 No – 87	X^2 = 0.18 df – 1 Sig. – .672	Yes – 16,9 No – 73,1	X^2 = 22,68 df – 1 Sig. – .000
	Unemployed	Yes – 19.3 No –		Yes – 14 No – 86		Yes – 7.1 No – 92.9	

		80.7					
Income level	Up to 25.000	Yes – 15.9 No – 84.1	X^2 = 24.06 df – 3 Sig. – .000 V – 0.14	Yes – 36.1 No – 63.9	X^2 = 9.84 df – 3 Sig. – .020 V – 0.09	Yes – 11,3 No – 88.7	X^2 = 14.82 df – 3 Sig. – .002 V – 0.116
	Up to 50.000	Yes – 18.1 No – 81.9		Yes – 37.2 No – 62.8		Yes – 14.3 No – 85.7	
	Up to 75.000	Yes – 11.5 No – 88.5		Yes – 43.8 No – 56.2		Yes – 15.9 No – 84.1	
	Above 76.000	Yes – 33,3 No – 66,7		Yes – 50.5 No – 49.5		Yes – 27.3 No – 72.7	
Level of religiosity	Non-believer in absolute sense	Yes – 2.3 No – 97.7	X^2 = 14,89 df – 4 Sig. – ,005 V – 0,111	Yes – 24.4 No – 75.6	X^2 = 14,19 df – 4 Sig. – .007 V – 0.107	Yes – 2.6 No – 97.4	X^2 = 10.85 df – 4 Sig. – .028* V – 0.097
	Non-believer in certain sense	Yes – 11.2 No – 88.8		Yes – 24.2 No – 75.8		Yes – 5.9 No – 94.1	
	Neither believer nor non-believer	Yes – 19.7 No – 80.3		Yes – 40.6 No – 59.4		Yes – 15,9 No – 84.1	
	Believer in certain sense	Yes – 17.9 No – 82.1		Yes – 41.8 No – 58.2		Yes – 14.9 No – 85.1	
	Believer in absolute sense	Yes – 10.8 No – 89.2		Yes – 39.4 No – 60.6		Yes – 12.4 No – 87.6	
Previous experience	Yes	Yes – 22.6 No – 77.4	X^2 = 6.50 df – 1 Sig. –. 011 V – 0.075	Yes – 47.3 No – 52.7	X^2 = 10.91 df – 1 Sig. – .001 V – 0.09	Yes – 18 No – 82	X^2 = 5.52 df – 1 Sig. – .019 V – 0.07
	No	Yes – 15.8 No – 84.2		Yes – 36.2 No – 63.8		Yes – 12.1 No – 87.9	
Militar	Completed	Yes – 18 No – 82	X^2 = .753 df – 1	Yes – 41 No – 59	X^2 = 2.2 df – 1	Yes – 48.2 No – 51.8	X^2 = 29.99

y conscription service	Not completed	Yes – 16.1 No – 83.9	Sig. – .386 V – 0.026	Yes – 36.7 No – 63.3	Sig. – .131 V – 0.04	Yes – 32.4 No –67.6	df – 1 Sig. – .000 V – 0.000

CONCLUSION

In the quantitative research covering enough households for natural disasters, we have come to diverse conclusions. Of the total number of respondents, only 24.6% have supplies, which is a serious security problem. In addition, 17.6% of the respondents have a transistor radio, 40% a flashlight, 40.6% a shovel, 25.8% a hack, 33.6% hoe and spade and 13.2% a fire extinguisher. In addition, 37.2% of the respondents have food supplies for four days, while only 12% of the citizens have food supplies for one day.

The possession of supplies to survive the consequences of natural disasters is significantly influenced by gender, education level, marital status, parental status, employment, income level and level of religiosity. There is no a statistically significant influence of previous experience on the possession of supplies. In a higher percentage, supplies for natural disasters are owned by men, citizens who have completed post graduate studies, respondents who are engaged, respondents who are not parents, employees, respondents with income over RSD 76.000, believers in certain sense. On the other hand, in a smaller percentage, supplies for natural disasters are owned by female respondents, who are widows/widowers, parents, unemployed respondents, respondents with incomes up to RSD 75.000 and higher education, non-believers in certain sense.

The possession of a transistor radio is statistically significantly influenced by gender, education level, marital status, parental status, income level and level of religiosity. On the other hand, employment has no influence. The possession of a flashlight is statistically significantly influenced by the level of education, parental status, income level and level of religiosity, while it is not influenced by gender, marital status and employment. On the other hand, the level of education, parental status, employment, income level and level of religiosity significantly affect the possession of a fire extinguisher, while it is not affected by gender and marital status. Men have a transistor radio in a higher percentage compared to women. Divorced people have a transistor radio in the highest percentage, while the engaged have it in the lowest percentage. The respondents who completed post graduate studies have a transistor radio, a flashlight and a fire extinguisher in the highest percentage. The citizens who have completed their post graduate studies have fire extinguishers in the highest percentage, while the respondents with elementary school have these in the smallest percentage.

Recommendations for improvement of the possession of supplies:

Starting from the concluding remarks, it is necessary to conceive a strategy, programs and campaigns aimed at improving citizens' preparedness for natural disasters in the context of compiling supplies necessary for survival of the consequences. As part of those activities, it is necessary to focus on the female population, citizens who are widows/widowers, parents, the unemployed, those with income up to RSD 75.000, with a degree in higher education and those citizens who are non-believers in certain sense.

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