

THE PHENOMENON PROFILE AND OF RESCUE VOLUNTEERISM

JACOB RUB, PhD

Department of "Security and Safety",
VFU "Chernorizets Hrabar"

Abstract: *The basic purpose of this article is to formulate the concept and origin of organizational rescue volunteerism, to explain the nature of rescue volunteerism phenomenon, as well as the contribution nature of this phenomenon of altruism in disaster and emergency situations. Yet this subject is relatively neglected from a perspective of national security research. The subject of organizational rescue volunteerism, especially in emergencies, is rarely researched due to nature of national security authorities investigating the macro level of military organizational behavior in disasters in cases of war and terrorism attacks for example. Thus, organizational rescue volunteerism is relatively neglected from a perspective of national security research.*

Key words: *rescue volunteerism phenomenon ;organizational rescue volunteerism; altruism; emergency situations; security authorities; National Security; resilience of a society; optimal risk behavior; "rescue personality"; common denominator factors of socio-psychological-philosophic-political-legal phenomenon.*

Introduction

Local volunteering is the bridge for strong National Security of communities. The State of World's Volunteerism Report 2018 is a research across five continents in order to understand how communities view volunteering. Focus

groups and policy discussions regarding the report organized in many a country such as China, Egypt, Greece, and Guatemala, Philippines, Russia and more.

More than one billion people volunteer globally. Their contribution is equivalent to over 109 million full-time employees (p. 1). This global volunteer workforce exceeds the number of people employed in six of the 10 most populated countries worldwide. Only 30 percent volunteer through formal organizations. The United Nations Volunteers (UNV) program is active in around 130 countries each year (United Nations Volunteers, 2018).

Definition of the national security problem: Israel is isolated and surrounded by about 400 million Muslims in close and distant circles, security events occur frequently, and earthquake scenario is a factual determination that will occur, the only question is when will it occur?

National security of Israel in particular, as well as in general, focuses on number of areas: external space, internal space, socio-economic space, failures and opportunities and secure spaces. The security forces are supposed to protect the borders of the State, with involvement of the security forces in warfare, terrorism, etc., and internal security incidents such as police force, internal terrorism and internal and/or external events of natural disasters such as earthquakes, nuclear accidents and accidents in general and multiple other types of disasters.

Analyze

In Israel, the government is responsible for determining of national security of the State and the IDF will implement the national security level according to Governmental guidelines. The IDF through the Home Front Command coordinates its operational efforts and response for protection of residents of Israel.

The CAF World Giving Index 2018 is based on data collected over a period of five years (2013-2017). Volunteering time results show that Israel is ranked 54th with score of 23%, while Bulgaria is ranked 144th (it includes results from 146

countries collected throughout 2017) with score of 5% (CAF World Giving Index, 2018, p. 39-40)

Final Report submitted by GHK (2010), shows the level of volunteering in the EU, while an analysis of national surveys and reports indicates around 92-94 million adults involved in European voluntary activities in Europe (around 22-23%) (Directorate General Education and Culture, 2018, p. 57).

The Bulgarian Red Cross is a member in the International Red Crescent and Red Cross Movement; however, volunteering is not a developed subject due to a low priority on the political agenda, and lack of national strategy (Study on Volunteering in the European Union. Country Report Bulgaria, Bulgaria National Report, a study on the voluntary sector in Bulgaria (2002) reports that approximately 6% of Bulgarian citizens take part in voluntary activities (GHK, 2006, p. 2). Volonteurop organization maintained in 2018 that the impact of volunteering should be measured. In many European countries, measuring of economic value of volunteering is a common practice (e.g. Bulgaria and UK). In Bulgaria, for example, volunteering rates have increased; however, it is not a widespread phenomenon. As stated, since the fall of Communism in early 1990's and onward, only 5% volunteer regularly. Volunteering is not regulated so there are no official statistics of volunteering. Bulgaria is at the bottom of the CAF World Giving Index 2018. Emergency situation is caused by a disaster or a catastrophe and constitutes a threat to life, property, health or the environment. Disasters can be natural or artificial (caused as a result of man-made actions) and they require special preparation by a country or an organization following or preparing for war, attacks, disasters, severe weather, tsunamis, floods, etc., which require "medical emergency.

In accordance with our viewpoint, emergency is a threat to a vital interest in an extreme case, and the shorter is time of emergency assessment, the greater the

sense of emergency. Psychologically, a state of emergency is a crisis situation that could harm an individual, a family, an organization and a community. The state of emergency is an external or internal factor. Implementation of emergency situations is within the authority of the Government or a Minister authorized to do so, and Governmental decisions are made for a certain area or the entire country for a certain period of time.

Proper conduct of volunteers in rescue organizations increases the chances of saving lives. Based on cases in Israel and around the world, it is clear that there will be a great need for a large number of professional personnel to assist civilians in unexpected disasters and emergency organizations that will function in emergency situations hinterland country's local authorities, as well as local and national evacuation and absorption centers.

Volunteers have undergone training in preparation for emergency events and occasionally even have experience in dealing with such events, so they are well trained and know what their role in the field is upon an order given. Organized volunteers, especially those who belong to security and rescue organizations, are accustomed to operating in a stressful environment and therefore have high mental ability to cope with situations of risk and are aware that they are exposed to mental and physical risks. Due to that fact, they as well usually exhibit a high level of discipline. The official volunteering system should serve as a framework for institutionalized and organized bodies in emergency and crisis situations (from the researcher's knowledge as a researcher in National Security Center in Haifa University and as captain in the IDF, with duty of Population Behavior Officer in the Home Front Command).

Initially, volunteerism was identified as a sociological phenomenon. Most of the volunteerism theories are from social sciences, due to volunteerism being a social phenomenon. From reinforcing the theoretical perspectives that are in the

base of our volunteer research, we focused on the main issues of the sociological perspective, psychological perspective and more. In this context, sociologists focused on study of demographic characteristics of volunteers and found that people who were financially wealthy, were as well more willing to volunteer, and related to altruistic values.

The definition of rescue organizations voluntarism has been a longstanding problem for national security researchers and one that is not easily resolved. Currently, there are two approaches to understand what rescue organizations volunteerism is and what it is not: a narrow approach and a wide approach. In fact, while emergency or disaster activities are considered to be altruism (social phenomenon) events, by taking risk to act, we prefer the large approach (as volunteerism is not only a social phenomenon, as the narrow approach maintains). The large approach includes features of volunteerism as psychological-social-philosophic-genetically-economical, connected to national security phenomenon which means survival. There are as well demographic characteristics that could explain tendency to volunteering: the more religious an individual is, the greater is the tendency to volunteer.

Undoubtedly, volunteerism activities are an integral part of the resilience of a society. A study of Social Impact of Volunteerism by Huiting (2011, p. 3), presents existing impact and relevance, including an internationally literature review from United Nations Volunteers (UNV), and maintains that volunteering makes a significant contribution to the global economy, structures the bridges for governments, enterprises and helps structuring a more cohesive, safe and strong community. This report emphasizes as well, evidence available with volunteering impacts on social inclusion as the positive impact of volunteering.

A review of voluntarism studies (Hustinx, Cnaan and Handy, 2010, p. 410, 428, 429) indicates that the real way to achieve good theory leads not with the

differences in literature about volunteering, but rather through an engagement and learning the problems in the world of volunteers in organizations of volunteers. While volunteering has been granted systematic and wide-ranging scholarly attention, no integrated theory has emerged. First, the problem of definition, with clear boundaries. Second, the problem of disciplinary heterogeneity, or the different meanings and functions various disciplines attach to the phenomenon. They argue that the theory has to be multidimensional, with "Hybrid" theoretical strategy, which include multiple theories together.

Atsumi and Goltz, (2014, p. 234-236) study work by disaster volunteers. The volunteering Japanese society can change individualism and return to its traditional collectivism, while contact and dialogue will contribute to ideals and ideology as a motivation core. It is perhaps the starting point for establishing a new social norm.

Undoubtedly, a formula must be found that ensures good correlation between the multi organization rescue volunteer candidates' level and the requirements from them in disaster activities, while training those volunteers according to risk type's assignments in emergency situations. Pells (2009, p. 1-2) describes a dilemma that face emergency service organizations using volunteers. He maintains that on one hand, rescue volunteers' skill needs to be high, according to the frequently demanding roles undertaken, while on the other hand, training strategies need to be pragmatic, appealing to the underlying motivations of volunteering in order to result in a successful engagement of volunteers as rescue people.

In fact, we accept the wide concept regarding organizational rescue volunteers' personality, that emergency services volunteers are often engaged in more than one emergency service activity. Meaning, there is a need for training for each voluntary activity in each type of volunteering they are involved in.

Demographic profile of emergency services volunteers is different due to the fact that it includes homogenous groups, like in fire fighters is similar to that of paid colleagues (e.g. males), and in ambulance service volunteers is similar to that of volunteers in general (predominantly female, in the middle age bands, and in paid employment) (Pells, 2009, in NZIER, 2008).

In fact, we accept the different activities of rescue volunteering types, while in our opinion the difference is not significant according to altruism motivation for emergency services of some type of rescue volunteers. Meaning that the level of taking risks under disasters situations has big differences between volunteers in emergency services and volunteers in other sectors or situations, however, the professionalism required from rescue volunteers, the dangers they face and the emotionally challenging incidents they attend – all make a rescue fighter a unique voluntary role. They have common denominators in their activities under risk in emergency situations, from the core reason of danger.

Current study discusses the most important classifying characteristics of rescue volunteer types and assumes which types were mainly covered in earlier studies, and other types that are still under-researched. Out of this discussion we represent an approach for a new study, practical recommendations regarding organizational mutually exclusive rescue volunteers which serve in more than one organizational rescue volunteering.

Comprehensive concept of the nature of "rescue personality" of organizational volunteers must be based upon fundamental criteria. Wilson (2000) found basic explanations concerning the general concept of volunteerism. In simple terms, he suggested that volunteering entails more commitment than spontaneous assistance less activity than the care provided to family and friends.

Conceptual and empirical considerations were described by Handy et al. (1996) showing in this article that the authors attempt to delineate the boundaries

of the term of volunteer. They first reviewed 11 widely used definitions of a volunteer. Using a content analysis, they identified four key dimensions commonly found in most definitions of volunteer. Their findings support the dimensions and their continuum as well as the importance of net cost as a basis for public perceptions of what makes a volunteer. Dekker and Halman (2018, p. 1) suggested that the definition of volunteerism is voluntary, non-obligatory work, for the benefit of others and unpaid. The terminology and connotations of volunteering differ between countries. In Germany, volunteering definition can be as "honorary work" or "civic engagement" while voluntary activity is important to political community, for self-help groups. It is an unpaid work in services.

Another definition for volunteerism was created by Snyder, M and Omoto, A.M. (2009), who defines volunteerism as “freely chosen helping activities that extend over time and that are often performed through organizations and on behalf of receptive causes or individuals ”

In current study context, the common denominator of last definitions above is the explanation that volunteerism is a socio-psychological-philosophic-political-legal phenomenon, meaning a totality of altruistic traits, with commitment in field of emergency events or situations, under risk conditions, which has harmful effect by inflicting harm or by threatening any society. Volunteerism activities are a non-obligatory conceptual perception, between a rescue volunteer and the helped people, with no coercion; undertaken for the benefit of others, society as a whole, or a specific organization; unpaid; and undertaken in organized context.

Taking into account our new scientific attitude that organizational rescue volunteerism is defined in a context of national security, the NIPP (2013) Partnering for Critical Infrastructure Security and Resilience defines national security context as Critical Infrastructure which is vital to any country, with Emergency Preparedness to Natural Disaster (any hurricane, tornado, storm, flood, high water,

wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, drought, fire, etc.) for minimizing the effects of a hazard upon civilian population, by outcomes of immediate emergency conditions created by the hazard.

In field of current study, an emergency perception can be a problem while unorganized volunteers who can cause damage to the resources of saving people in an exceptional situation like war: comprehensive war, regional war, firing, missiles launching, terrorist attacks, hostile terrorist activities, natural disasters, earthquakes, floods and more, as described by Whittaker, McLennan and Handmer (2015). They maintained that these situations influenced by the mental, cognitive and emotional state of rescue organization volunteers who deal with the practical aspects. Big risks associated with spontaneous volunteers while they are not organized, can cause damage to resources of saving people. For example, following the 1999 Golcuk earthquake in Turkey, which killed 17,000 people, emergency services could not arrive to the disaster area due to the fact that multiple spontaneous volunteers blocked all the roads for help throughout 30 km (Whittaker, McLennan & Handmer, 2015, p. 361-364).

In field of current study, we decided to analyze the most significant activity in rescue volunteering, which means the concept of high tendency and optimal risk-taking. The concept of risk-taking tendency has important implications for practical insights regarding the motives underlying individual level choices of engaging in risky behavior and risk management programs. According to the interpretation of prospect theory (Kahneman & Tversky, 1979) in current study, risk-taking is asymmetric regarding a reference point, and rescue volunteers will be risk-averse when they perceive themselves to be in the domain of saving lives, and risk-seeking in the domain of loss. The most important issue is: will multi rescue organizations volunteers (who serve in more than one organization of rescue volunteers) be

relatively inconsistent in risk situations in emergencies – and at the same time will they really take risk in some circumstances, and avoid risk in other circumstances? Is risk-taking to save people (altruism) an irrational (intuitive decision) or rational decision?

In current study, we propose the thesis that multi rescue organizations volunteers, who are very religious people, and who serve in more than one organization of rescue volunteers, based upon irrational decisions (intuitive decision) in disasters and emergencies situations. We maintain that the fact that rescue volunteers who served in the military for few years would take higher level of risk as compare to people who did not serve in the military.

Risk behavior is a pattern. Some rescue volunteers are likely to be consistently risk-takers, other rescue volunteers will be consistently risk-averse, and a third group has domain-specific patterns of risk behavior. Personality and risk-taking showed that personality profiles can be used to predict risk-taking in each domain, measured as a factor by the "Big Five" tests in psychology (McCrae & Costa, 1987).

In accordance with our viewpoint, there is a risk-taking personality. Risk is a statistical concept that defines the degree of ‘product of probability and consequence’. Risk can be with positive consequences, benefits and opportunities as well as negative outcomes. Rescue volunteers are taking risk in disasters and emergency situations while the uncertainty surrounding events in operational performance, achievement of aims and objectives or meeting expectations of rescue organizations. The perception of risk for rescue volunteers is focused on preventing threat of something that goes awry, deviation from what the volunteer expects and potentially damaging outcomes. Organizational rescue volunteers are more in risk situations than regular volunteers.

Evaluation of risks consists of losses and gains. In other words, should rescue volunteers stop taking risks due to danger situations, what will people lose in life, for example? However, should rescue volunteers carry on taking risks in emergency situations, and saving people, everyone wins. The mere presence of risk is not the issue. How rescue volunteers do manage risk is the issue. In majority of cases, volunteers perform their work with the highest standard. Most are dedicated, committed, conscientious and trustworthy. Risk is a vital part of a volunteer and volunteer-involving organizations are natural risk-takers. Risk-taking provides challenge which contributes to personal growth, health and fitness (Gaskin, 2013 p.7-8).

Continuing our detailed analysis, we have to bring into consideration the core subject of risk gaps between the level of risky behavior recommended for others and the kind we engage in personally. For researchers it is important to observe how we make decisions about risks. Vitelli (2014) suggests that one of the central paradoxes of risky behavior is the existence of "risk gaps" between the levels of risky behavior we would recommend for others as opposed to the kind we would engage in personally. A research regarding decision-making found that people are more impartial when asked to evaluate risk for other people than they are considering these behaviors themselves. People are as well prone to cognitive biases that can lead to doing things that they might not ordinarily consider. Amongst the most important of these biases knows that others engage in same risky behavior. Comparison between costs and benefits (economic model) might be the explanation .

In the field of this examination, a sample of 400 participants were recruited and "risk gap" between willingness to take personal risks as opposed to recommending same risk to others was generally examined. As expected, the results revealed that people still weigh risks differently depending on whether they will

take that risk personally or whether they advise others. The researchers as well found a strong evidence for the fact that other people who have taken a risk will make people more willing to take that same risk. Even when they recognize the risks involved and agree that the behavior is potentially harmful, they are still more likely to engage in it when they know someone else has done it (Vitelli, 2014).

Regarding all aforementioned, science is not familiar with the exact interaction regarding rescue volunteers' stress affecting their decision-making. Rescue volunteers' decision-making behaviors in emergency situations and personal threats of the volunteers, were analyzed by Kowalski-Trakofler and Vaught (2003). They discuss decision-making behaviors in emergency situations, when Rescue volunteers take multitude of risks in emergency situations. Decision-making under stress stems from high-risk occasions in emergency situations. Successes and failures of rescue volunteers are a part of risk activities. Failures result from decisions that can be ascribed to one or more errors in their judgment.

According to knowledge of the researcher, during emergencies, organizational rescue volunteers are usually under stress. In a fire outbreak, for example, decision-making of rescue volunteers is under stress. Wrong decisions could lead to loss to many lives and property. Additionally, rescue volunteers need to point out to the evacuees the possible location of everyone; this could be done through announcements equipment or through volunteers stationed at every emergency exit. Rescue volunteers face risk of death. Rescue volunteers who actively participate in fairly high level of violence or in combat, tend to be more violent due to stress and might find it difficult to blend in a civil population.

A survey of 2,500 volunteers (Pells, 2009, p. 17, in NZIER, 2008), in Australia and New Zealand is an interesting example of organizational rescue volunteer data and other characteristics regarding ambulance volunteers, which is perhaps more than in other emergency services, as follows: 1) Women are over-

represented (55%); the middle age bands (30-54 years) are over-represented; 2)The highest qualifications are: high school (36%), HSC (16%) 3)trade certificate (17%), a diploma/degree (23%), postgraduate study (6%) ; 4)Many volunteers involved in other voluntary work – 33% volunteer in a second emergency service, and 7% volunteer in a third emergency service; The average length of time as ambulance services was 6.9 years. 2.5 to 5 years was the most frequent length of stay, with a decline after 5 years.

Generalized risk-taking was related to scales for impulsive sensation seeking, aggression, and sociability, but not to scales for neuroticism or activity where found. Important subject of our research theory is contributed to risk-taking as a kind of built-in genetic evolutionary instinct that guarantees ability, to defend ourselves at times of danger and fear (Zuckerman & Kuhlman, 2001, p. 1, 26). The motivations for risk-taking taking (as a desire to feel free, etc.) varies from one person to another as well as situation, personality, etc. According to the prominent theory of Kogan and Wallach (1964), risk is defined as a choice or decision made under various levels of uncertainty or perceived as safe or dangerous, with risk-taking outcomes unknown or not predetermined.

According to the second prominent theory of Zuckerman (2007), Risky behavior can be an expression of a normal, genetically influenced personality trait of sensation-seeking. Walach maintains that the term "risk-taking" describes uncertainty behavior when they do not know the results of their actions, expressed in their psychomotor behavior. The higher the level of risk perceived, the higher is excitement and results (Aharoni & Aharoni, 2012).

Conclusions

We have found that volunteering for rescuing people is an umbrella concept, in National security in general, while including, however not limited to, focus on terrorism, and internal and/or external events / Emergency Preparedness like natural

disasters - any hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, drought, fire, etc., Which constitutes a threat to life and require "medical emergency" situations. Proper conduct of volunteers in rescue organizations increases the chances of saving lives. Undoubtedly, volunteerism activities are an integral part of the resilience of a society.

Our basic research question following the presentation of a unique phenomenon of rescue volunteers and the research problem: How can organizational rescue volunteering improve the implementation level and quality of multi rescue organizations volunteers in emergency risky events? The study focused on the practical and effective question concerning the influence of behavior of rescue volunteers upon suitability to serve as rescue volunteers in emergency events. The suitability depends on personality traits (psychology); motive traits (sociology); genetics (biology); religion (philosophy); decision-making economic psychology. Due to the fact that rescue organizations save lives, we maintain that we are led to examine the question of whether a set of selective processes exists in rescue organizations which examine psychological suitability to serve as organizational rescue volunteers in emergency events. This can be presented in two levels: a) **Macro aspect** – to identify the potential of "rescue personality" before working and during the pre-employment casting by tests; b) **Micro aspect** – to upgrade the abilities of these "rescue personality" organizational volunteers according to current thesis new Hybrid model.

We have found the common denominator between multi rescue organizations volunteers to build a "rescue personality". In our opinion the difference is not significant according to altruism motivation for emergency services of some type of rescue volunteers. The dangers they face and the emotionally challenging incidents they attend – all make a rescue fighter a unique

voluntary role. They have common denominators in their activities under risk in emergency situations, from the core reason of danger. We represent an approach for a new study, practical recommendations regarding multi rescue organizations volunteers who serve in more than one rescue volunteering organization.

Multi rescue organizations volunteers serve in more than one organization of rescue volunteers, based upon irrational decisions (intuitive decision) in disasters and emergencies situations. We maintain that the fact that rescue volunteers who served in the military for few years would take higher level of risk as compared to people who did not serve in the military. In other words, volunteers' activity is homogeneous, however a decision-making process for saving people in emergency situations such as war, terrorist attacks, earthquakes, etc., is completely different. This issue was not examined in national security studies and in general.

Rescue volunteers take risk in disasters and emergency situations while an uncertainty surrounding events in operational performance, achievement of aims and objectives or meeting expectations of rescue organizations. The perception of risk for rescue volunteers is focused on preventing threat of something that goes awry, deviation from what a volunteer expects and potentially damaging outcomes. Organizational rescue volunteers are in risk situations more than regular volunteers.

REFERENCES

Aharoni, H., Aharoni, R. (2012). *Why do people take a risk? Physical activity and extreme sports as educational and therapeutic tools*. Hebrew psychology articles. <https://www.hebpsy.net/articles.asp?id=2891> (retrieved: 18/4/2019)

Atsumi, T., Goltz, J.D. (2014). Fifteen years of disaster volunteers in Japan: a longitudinal fieldwork assessment of a disaster non-profit organization.

California Emergency Management Agency and the California Institute of Technology *International Journal of Mass Emergencies and Disasters* vol. 32(1), p.220–240

https://www.researchgate.net/publication/282556010_A_review_of_informal_volunteerism_in_emergencies_and_disasters_Definition_opportunities_and_challenges (retrieved: 9/6/2020)

CAF World Giving Index (2018). A global view of giving trends. <https://www.cafonline.org/about-us/publications/2018-publications/caf-world-giving-index-2018> (retrieved: 15/4/2019)

Directorate General Education and Culture (DG EAC) (2018). Volunteering in the European Union, Educational, Audiovisual & Culture Executive Agency (EAC-EA). Directorate General Education and Culture (DG EAC). Final Report submitted by GHK, p. 57. Country Report Bulgaria. http://ec.europa.eu/citizenship/pdf/national_report_bg_en.pdf (retrieved: 4/5/2019)

GHK (2006). Study on Volunteering in the European Union Country Report Bulgaria NATIONAL REPORT – BULGARIA https://ec.europa.eu/citizenship/pdf/national_report_bg_en.pdf72. (Retrieved: 8/7/2021)

Dekker, P., Halman, L. (2018). *Volunteering and values*. Springer Nature Switzerland AG. https://link.springer.com/chapter/10.1007%2F978-1-4615-0145-9_1 (retrieved: 16/4/2019)

GHK (2010). Volunteering in the European Union. Educational, Audiovisual & Culture Executive Agency (EAC-EA), Directorate General Education and Culture (DG EAC), Country Report Bulgaria. https://ec.europa.eu/citizenship/pdf/doc1018_en.pdf (retrieved: 1/1/2021)

Handy, F., Cnaan, R., Wadsworth, M. (1996). Defining Who Is a Volunteer: Conceptual and Empirical Considerations. *Nonprofit and Voluntary*

Sector Quarterly 25(3), 364-383.

https://www.researchgate.net/publication/249676933_Defining_Who_Is_a_Volunteer_Conceptual_and_Empirical_Considerations (retrieved :9/7/2021)

Huiting, W. (2011). *Social impact of volunteers*. Points of Light Institute. http://www.pointsoflight.org/sites/default/files/site-content/files/social_impact_of_volunteerism_pdf.pdf (retrieved: 16/4/19)

Hustinx, L. Cnaan, R.A., Handy, F. (2010). Navigating theories of volunteering: a Hybrid map for a complex phenomenon. *Journal for the Theory of Social Behavior*, 40(4), 410-434. <https://www.kuleuven.be/emeritiforum/em/Forumgesprekken/forumgesprekken2017-2018/26102017/navigating-theories-of-volunteering-a-Hybrid-map.pdf> (retrieved: 5/4/2019)

Gaskin, K. (2013). *Risk toolkit how to take care of risk in volunteering. A guide for organizations*. The Institute for Volunteering Research and Volunteering England. <http://smallcharityweek.com/wp-content/uploads/2013/03/Risk-Toolkit-Volunteers.pdf> (retrieved: 18/4/2019)

Kahneman, D., Tversky, A. (1979). Prospect theory: an analysis of decision under risk. *Econometrica*, 47, 263-292

Kowalski-Trakofler, K.M., Vaught, C. (2003). Mining Publication: Judgment and decision making under stress: an overview for emergency managers. National Institute for Occupational Safety and Health, Pittsburgh Research Laboratory. *Journal of Emergency Management*, 1(3), 278-289. [https://www.google.com/search?q=49.+Kowalski-Trakofler%2C+K.M.+%26+Vaught%2C+C.+\(2018\).+Judgment+and+decision+making+under+stress%3A+an+overview+for+emergency+managers&oq=49.+Kowalski-Trakofler%2C+K.M.+%26+Vaught%2C+C.+\(2018\).+Judgment+and+decision+m](https://www.google.com/search?q=49.+Kowalski-Trakofler%2C+K.M.+%26+Vaught%2C+C.+(2018).+Judgment+and+decision+making+under+stress%3A+an+overview+for+emergency+managers&oq=49.+Kowalski-Trakofler%2C+K.M.+%26+Vaught%2C+C.+(2018).+Judgment+and+decision+m)

aking+under+stress%3A+an+overview+for+emergency+managers&aqs=chrome.69i57.1207j0j8&sourceid=chrome&ie=UTF-8 (retrieved: 24/4/2019)

Kogan, N., Wallach, M.A. (1964). H.C.A. Dale (1965), a review of “Risk taking - a study in cognition and personality. *Ergonomics*, 8(2), 1-278.

McCrae, R.R., Costa P.T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52, 81-90. <https://psycnet.apa.org/record/1987-15614-001> (retrieved: 11/4/2019)

NIPP (2013) Partnering for Critical Infrastructure Security and Resilience <https://www.cisa.gov/sites/default/files/publications/national-infrastructure-protection-plan-2013-508.pdf> (retrieved: 8/7/2021)

NZIER (2008). *Volunteer-related training in emergency services, findings from a literature review.*

https://nzier.org.nz/static/media/filer_public/67/e7/67e750aa-cb67-430d-92f5-5d7ba76a616a/0807_frsito_literature_review.pdf (retrieved: 18/4/2019)

Pells, S. (2009). Independent, authoritative analysis insight, something for nothing. https://nzier.org.nz/static/media/filer_public/bc/26/bc2680e3-bf2d-49c1-bc13-eb2c10662e4c/nzier_insight_9_-_volunteer_motivations.pdf (retrieved: 16/4/2019)

Snyder, M. & Omoto, A.M. (2008). Volunteerism: social issues perspectives and social policy implications. *Social Issues and Policy Review*, 2(1). p. 1-36. <https://spssi.onlinelibrary.wiley.com/doi/abs/10.1111/j.1751-2409.2008.00009.x> (retrieved: 6/4/2019)

United Nations Volunteers (UNV) (2018). *State of the World's Volunteerism Report 2018 :the thread that binds volunteerism and community resilience.* CAF World Giving Index 2018, 1-144.
<https://www.unv.org/sites/default/files/2018%20The%20thread%20that%20binds>

%20final.pdf https://www.cafonline.org/docs/default-source/about-us-publications/caf_wgi2018_report_webnopw_2379a_261018.pdf
http://ec.europa.eu/citizenship/pdf/doc1018_en.pdf (retrieved: 15/4/2019)

Vitelli, R. (2014). Why we take risks and how our risks affect our loved ones. *Psychology Today*. <https://www.psychologytoday.com/us/blog/media-spotlight/201412/why-we-take-risks> (retrieved: 18/4/2019)

Whittaker, J., Mclennan, B.J., Handmer, J. (2015). A review of informal volunteerism in emergencies and disasters: definition, opportunities and challenges. *International Journal of Disaster Risk Reduction* 13, 358-368.
<https://www.sciencedirect.com/science/article/pii/S2212420915300388> (retrieved 17/4/2019)

Zuckerman, M., Kuhlman, DM. (2001). Personality and risk-taking: common bisocial factors. *Journal of Personality*, 68(6), 1-31
https://www.researchgate.net/publication/12197683_Personality_and_Risk-Taking_Common_Bisocial_Factors (retrieved: 18/4/2019)

Date : JULY 9, 2021