The Psychosocial Aspect of Large-Scale Crises: Building Resilient Communities

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Abstract: *In large-scale crises such as the COVID-19 pandemic, it often happens that various accompanying crises occur in addition to the initial crisis. One of the most frequent ones is the so-called psychosocial crisis. The purpose of this paper is to draw out proposals towards more efficient management of large-scale crises by creating resilient communities. Based on the analysis it was concluded that psychological and social aspects are closely intertwined and interdependent. Main conclusions on how the psychosocial effects of large-scale crises could better be directed towards more resilient communities are by normalizing seeking psychosocial support and systematizing the processes of providing it, working towards healthier social environment through social innovations and by encouraging global cooperation. If more extensive changes are made towards listed proposals, further research could address whether these changes have affected community levels of resilience and better preparedness for coping with the psychosocial effects of future large-scale crises.*

Keywords: *large-scale crises; psychosocial crisis; resilience; mental health; social environment*

JEL Classification: H12, O35

Introduction

A crisis is described as an unforeseen and potentially threatening event of severe difficulty or danger that can lead to disruption of normal functioning, often requires new strategies of dealing with the situation and fast decision-making process, and often brings negative feelings such as stress, tension and anxiety (Bundy, Pfarrer,

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Short and Coombs, 2016; Bundy and Pfarrer, 2015; Callahan, 1994; D'Erman and Verdun, 2018).

Specific type of crises, large-scale crises, are usually sudden, very difficult to predict or completely unpredictable, often cannot be limited in time or in place, have a devastating impact on the wider environment (people, material damage, …), usually require a quick response and need to adapt to new conditions, and most often cannot be resolved by daily routine activities or with the existing resources (Ajduković, Bakić and Ajduković, 2017; Larsson, Hagstorm and Olsson, 2009). What is important to point out in the case of large-scale crises is that the initial crisis is often followed by more accompanying crises. When the security of the current environment is ensured and the basic needs are met (accommodation, food, water, clothing, blankets, protection from the weather…), consequential psychosocial needs of the society come to light, as the most common accompanying needs in the event of large-scale crises (Ajduković et al., 2017; Karić, 2019).

One of the concepts through which management of accompanying psychosocial crisis could be improved is the concept of *resilience*. Simply put, resilience is an individual's ability to continue functioning normally after stressful or traumatic events but does not necessarily mean the complete absence of a mental disorders or their symptoms (Goldmann and Galea, 2014; Greinacher et al., 2019.). Resilience of the community is the ability of a community to absorb crisis shock and swiftly recover, establishing a normal way of functioning as soon as possible (Bruneau et al., 2003 in Carslon et al., 2012). Resilience is contextually influenced (by psychological, social, cultural and other factors) dynamic process and individual or community levels of resilience can be strengthened over time (Dulmus and Hilarski, 2003; Greinacher et al., 2019.).

The purpose of this paper is to draw proposals towards more efficient management of large-scale crises by creating resilient communities, analysed through the psychosocial aspect of such crises. The author's graduate thesis served as the basis for this paper.

Psychosocial aspect of large-scale crises

The World Health Organization (WHO) describes general well-being as a reflection of physical, social and mental health (Stanković, Komadina, Bosnić and Juzbašić, 2020). Thus, it can be said that general health is defined through interrelation of physical, psychological and social factors, or simply put, physical and psychosocial health. In the following section the effects of accompanying psychosocial crises are observed separately, through psychological and social point of view.

Psychological aspect

The accompanying psychosocial crisis can be difficult to perceive, so it may fall into the background or not be recognized as a priority at all. Thus, psychosocial needs of community can remain neglected, partly due to the lack of adequate solutions to psychosocial crises, but also partly because sometimes it is difficult for people to talk about such needs.

Most frequent terms related to psychosocial disorders in the context of crises are *stress* and *trauma*. Stress can be described as body's reaction to the possible danger or risk through which we try to adapt and minimise possible damage, while traumatic experiences are usually above ordinary human experience as they are most often life-threatening (death / death threat / severe injury) and emotionally challenging (Dulmus and Hilarski, 2003; Karić, 2019). One of the most frequent consequences of facing traumatic experiences is PTSD (post-traumatic stress disorder), described as re-experiencing of trauma including various emotional, social and occupational disabilities, whose prevalence after natural disasters (pandemics, earthquakes, floods…) can go from 5% to 60% dependent on the exposure to traumatic experience, and is often caused by resource loss (psychosocial, material, residential…) (Cohen et al., 2019; Goldmann and Galea, 2014; Georgieva et al., 2021). Other mental health disorders that can occur during and post different crises are major depressive disorder, anxiety and panic disorders, psychosomatic disorders (sleep disorders, headaches, fatigue, shortness of breath…) and various addiction disorders (smoking, alcohol and drug abuse, gambling, Internet addiction…) with possible suicidality (Goldmann and Galea, 2014).

One of the possible ways in which harmful outputs of large-scale crises on individual and collective mental health could be reduced is by acting on the level of their resilience to such experiences, as high levels of resilience are in most cases associated with a lower incidence of mental disorders and can also lead to better coping with stress and changes in everyday life (Georgieva et al., 2021; Goldmann and Galea, 2014).

As it was found in Dückers et al. (2018), there is a positive correlation between the existence of pre-defined and regular planning and delivery systems of psychosocial support with better implementation of necessary interventions, as they would ideally support temporary measures taken to accommodate current disaster-driven needs and problems (Dückers et al., 2018). Thus, one of the possible ways to systematically act on increasing individual and collective levels of resilience in the context of large-scale crises, could be by implementing "*psychological first aid*" in regular activities to help the injured/affected. Psychological first aid (PFA) includes help and support immediately after a crisis, in order to reduce the initial shock and potential risks and dangers, and to encourage people to return to normal functioning as quickly and independently as possible, while reducing the possibility of forming negative consequences of experienced trauma in the future (Sijbrandij et al., 2020). With appropriate training, PFA could be provided not only by health and mental health professionals,

but also by professionals and volunteers from a variety of fields, which in the context of large-scale crisis is important (Ajduković et al., 2017). Ideally, PFA should be flexible because the needs of the affected will change and evolve over time or in the context of different crises (Dückers et al., 2018). Through learning and conducting the process of PFA, the ability of professional workers (police, firefighters, emergency and paramedical teams, search and rescue personnel, translators…) to do their job more efficiently could be strengthened, as they would be better prepared for unexpected and various challenges in their working environment and to cope with adverse consequences of such work, equipping them with knowledge and skills needed to alleviate psychological stress (to understand, control and recognize stress reactions) that can be applied to victims, but also to their colleagues, families and themselves (Atkins and Burnett, 2016; Birksihead and Vermeulen, 2018; Greinacher et al., 2019; Sijbrandij et al., 2020). This could increase their levels of *professional resilience*, which is important because professional helpers are often found in unpredictable, stressful and emotionally demanding situations, which can lead to the accumulation of high levels of professional stress and potential changes in their mental health (Greinacher et al., 2019). Most common consequences of working in such aggravating circumstances are *burnout* (physical, mental and emotional exhaustion) and *compassion fatigue / vicarious traumatization* (transfer of trauma from the traumatized person to the helper) (Atkins and Burnett, 2016; Ajduković et al., 2017).

The concept of resilience within the psychological aspect is presented through its possible effects on mitigating negative effects of stressful and traumatic experiences due to large-scale crises on the individual and collective mental health of those affected, including professional workers and helpers. Looking at the big picture, it is significant not only to take psychological aspect of large-scale crises into account, but to also consider coping with these situations as a social process as well (Alcover et al., 2020). In the following section it is observed how closely the psychological and social aspects are intertwined and interdependent, pointing out the importance of encouraging higher levels of resilience.

Social aspect

In the analysis of the social aspect, it is shown how social environment can influence individual and collective levels of resilience during and after large-scale crises (or other collective traumatic events) and how modern *Information and Communication Technologies* (ICT) changed crisis communication and redefined the meaning of public participation.

Ganster and Victor (1988) describe social support as a supportive presence of other people, before, during and after a crisis or a stressful/traumatic event. Some authors describe it as a system of formal and informal relationships (mutual care, sense of belonging, honest communication…) through which people perceive that

they belong to a particular social network (family, close partners, colleagues, friends, neighbours…) and information/experiences shared through it are amongst the fundamental determinants of how people react and behave during crises (Alcover et al., 2020; Silva et al, 2021; Nilsson et al., 2012). Informal relationships through social support networks are one of the key aspects in dealing with all kinds of crises (personal, work, large-scale…) but also with challenges of everyday life (Adelman, 1988). Through healthy social environment and support from social networks negative psychosocial consequences of traumatic experiences of those affected could be mitigated (gradually acting on higher levels of community resilience) due to social aspects that play a curative role in general psychosocial health (Alcover et al., 2020; Cohen et al., 2019; Li, Liang, Yuan and Zeng, 2020; Ganster and Victor, 1988). One possible way towards healthier social environment and higher levels of resilience is by implementing various *social innovations*. Social innovations most often occur in response to unmet social needs (usually triggered by some kind of crisis) and the main goal of social innovations is to address global challenges in terms of forming sustainable systems that create and maintain socio-economic-environmentally resilient communities, with them being adaptable and flexible to various twists and turns (Bežovan, 2016; Brandsen, Evers, Cattacin and Zimmer, 2016; Horgan and Dimitrijević, 2018).

As it was stated, social networks and information/experiences shared through them are some of the fundamental determinants of how people react and behave during crises. With rapid development of ICT, ways of how people connect and communicate with each other (during crises but also in everyday life) changed accordingly. Social media has proven to be a crisis communication tool that has fundamentally redefined the meaning of public participation, as traditional forms of media (television, radio, newspapers…) that for a long time had the greatest impact on how the public communicates with each other, have lately been replaced by modern ICT (smartphones, digital platforms, social media…) (Collins, Neville, Hynes and Madden, 2016; Liu, Jin and Austin, 2013.). Ideally, social media should only act as a complement to traditional forms of communication since they are not media in traditional sense as they only serve as a platform for publishing and exchanging information (Nenadić, 2017, Nilsson et al., 2012). Social media should ideally be used as an opportunity for maintaining an active and responsive dialogue with the public to better listen what concerns them and to carry out preventive activities as a part of warning and educating the public through lessons learned from past crises (Eriksson, 2018; Nilsson et al., 2012). People should be aware that popular and modern forms of alternative media are not subject to as many regulations and are not as transparent as traditional media (Zaman, Islam, Zaki and Hossain, 2020). In addition to the quality and credibility of information on social media, the number of sources we use is also important because too much information can lead to information overload or media traumatization (Lee, Malcein and Kim, 2021; Mihalinčić, 2018). Seeking the necessary information, instructions and guidelines can have a positive effect on the feeling

of control over the situation, but too much information can create the opposite effect of losing control, as access to such content can arouse feelings of discomfort, restlessness and fear associated with previous trauma (even if the current content is not closely related to previous traumatic experience) and lead to higher levels of anxiety and uncertainty about the future (Ajduković et al., 2017; Lee et al., 2021).

Looking through the concept of resilience, it can be concluded that the psychological and social aspects are interdependent and closely intertwined. The concept of resilience within the psychological aspect is analysed through its possible impact on mitigating negative effects of traumatic experiences on individual and community mental health, and mitigation of these negative consequences is possible through establishment of healthy social environment and by implementation of social innovations towards higher levels of resilience, and consequently better dealing with various crises and challenges in everyday life.

Covid-19 pandemic as a psychosocial large-scale crisis

In order to further evaluate all previously mentioned statements, this section provides an overview of the most recent large-scale crisis; "*COVID-19 pandemic*".

Covid-19 as a public mental health crisis

This is not the first time the world had faced the spread of infectious disease, SARS 2000-2003, H1N1 2009, Ebola 2013-2016, HIV / AIDS or various forms of influenza are just to name some of them, whereas dealing with infectious diseases can lead to serious psychosocial consequences (mostly due to measures such as quarantine and isolation) and it was noticed that there is a need to control infectious diseases due to the possibility of their abuse (Alcover et al., 2020; DUZS, 2013).

A new infectious disease, COVID-19, has rapidly spread on every continent except Antarctica, caused extensive global damage (public health and economic crisis) and imposed many challenges since the virus first appeared in China at the end of 2019, including deep consequences of the accompanying psychosocial crisis on the global mental health (Lin, 2020; Genereux et al., 2020; Georgieva et al., 2021; Nakao et al., 2021). Some authors described it as a "*public mental health crisis*", "*the next mental pandemic*" or even "*humanity's worst crisis since World War II*" (Jung, Kneer and Kruger, 2020; Georgieva et al., 2021). Globally, the number of people with mental disorders has increased, all because of adverse challenges and fears in the new pandemic (possibility of infection, restrictions in everyday life, social isolation, constant uncertainty, adaptation to new measures, job instability, salary reductions…) (Genereux et al., 2020; Georgieva et al., 2021; Sanchez-Recio, Garcia Ael

and Topa, 2021; Nakao et al., 2021). Governments around the world have issued some level of measures to restrict movement, all in an attempt to reduce further spreading of the virus (Lin, 2020). Measures and their intensity varied from country to country, but they were all similar and citizens continue to be exposed to constant stress and uncertainty.

ICT and social innovation towards healthier social environment

Rapid global expansion of the virus, alongside with measures against the spread of the infection, have set limitations to numerous daily activities. People all over the world have experienced unprecedented disturbances in their daily routines and as a global collective we have been forced to change our ways of functioning.

Measures imposed against the spread of the infection have led to a lack of social interactions, which with consistent challenges of dealing with the pandemic (stress, fear of getting infected, uncertainty, misinformation, discrimination, worry, grief, confusion…) has consequently led to higher collective levels of mental health diffi-culties and an increased incidence of various addictive behaviours (such as alcohol abuse, video games, television, social media, gambling, surfing the Internet…) during large-scale crises (Genereux et al.,2020; Georgieva et al., 2021; Lin, 2020). Lack of social interactions can lead to accumulation of negative emotions (loneliness, fear, worry, uncertainty…) which than can lead to various psychological disorders (mood disorders, depression, anxiety, sleep disorders, dysfunctional behaviours…) (Elovai-nio et al., 2017; Jung et al., 2020; Genereux et al., 2020; Nakao et al., 2021). Also, fast and uncontrolled information exchange through traditional and digital media (and interpersonally between individuals) has been highlighted as an important factor which during the pandemic could provoke various psychosocial challenges (Geor-gieva et al., 2021). The assumption is, the longer we coexist with the virus (including measures of social distancing) the greater is the possibility that the number of people with psychological disorders will grow exponentially (Georgieva et al., 2021). Virus control measures are certainly needed, but there should be a balance between their effectiveness and restrictiveness because highly restrictive and permanent control measures prevent access to common forms of social support, and in the long run such measures could have a counter-effect, namely, individual and collective levels of re-sistance to COVID-19 could be reduced, which could jeopardize further preparations for possible coexistence with the virus (Georgieva et al., 2021).

Implementation of new and improvement of existing processes that were distrib-uted during the pandemic, using the possibilities of modern ICT, can be seen as part of social innovation towards healthier social environments and faster return to normal functioning. Modern ways of digital communication have become one of the most effective and popular ways to fight challenges in the context of coexistence with the virus, as they have provided us with enormous opportunities and it becomes

inevitable to use it responsibly (Ajduković, 2020; Zaman et al., 2020). As a part of social innovations caused by the emerging pandemic, it should be mentioned that education systems in non-formal settings, such as "online learning", showed a positive impact on reduction of psychosocial risks (Perea-Rodriguez, Moron-Marchena, Munoz-Diaz and Cobos-Sanchiz, 2021). Also, the fact that with current possibilities of modern technology in developed areas, more than a third of jobs can be done entirely from home without necessarily going to the place of work, was shown to be important in order to maintain acceptable levels of economic activity during pandemic (Magnavita, Tripepi and Chiorri, 2021). ICT have also accelerated access to necessary information, and the news consumption through traditional or social media has increased compared to the same period just one year before the onset of the virus (Lee et al., 2021). Stay-at-home orders have elevated the usage of digital entertainment and access to diverse virtual materials (recreation, learning, entertainment…) during the pandemic was enabled using ICT, also, there was a huge increase in the use of services such as mobile and contactless payments, online ordering and increased use of mobile phones and mobile data in general (Lin, 2020; Lee et al., 2021). WHO ensured reliable information and health alert messaging service through social media such as Facebook and WhatsApp, and China for example implemented various ICT innovations to back up medical staff, whereas USA, Canada, South Korea, India and Singapore have undertaken several ICT based innovations for fighting against COVID-19 challenges (Zaman et al., 2020). One of the projects in Croatia that should be especially emphasized, is the project of the "PROMENTZ association", called *Psychological Help.* The purpose of this project is to destigmatize the process of seeking psychological help and to create a platform which could consolidate all information and services related to mental health (City of Zagreb, 2020). The main goal is to connect providers with those who need help within an accessible online platform, while encouraging individuals to work independently on their own mental health (City of Zagreb, 2020). To conclude, various social innovations that tried to contribute to greater community resilience and better response to psychosocial needs without raising the risk of infection were mostly achieved using ICT (websites, mobile applications, robotics and drones, artificial intelligence, social media, online interactive tools and learning platforms…) (Zaman et al., 2020).

In addition to all the health threats and negative impacts on global mental health, the pandemic has also provided an opportunity (or pointed the need) for global collaborative research on mental health and redesigning current systems for lethal risk management through various possibilities of modern ICT, to monitor, research and share valid information between countries, encouraging innovative solutions and collective action towards building more resilient international communities (Comfort, Kapucu, Ko, Menoni and Siciliano, 2020). As Osmanagić Bedenik (2007) points out, depending on how we approach and manage different crises (including learning from past ones), crisis can be seen not only as a threat, but also as an opportunity for

growth. If psychosocial challenges of COVID-19 pandemic are well-directed, they could in the long run have positive influence on the individual and collective general wellbeing as well (Genereux et al., 2020).

Current COVID-19 crisis presents a unique opportunity to collect, compare, analyse and learn from its various psychosocial impacts across different socio-cultural aspects, gathering new information and guidelines that could be applied to future globally widespread large-scale crises.

Recommendations and guidelines

The following section consists of possible recommendations and guidelines towards more efficient management of large-scale crises by creating resilient communities. Recommendations and guidelines were drawn and systemized based on the analysis presented in the paper; by collecting, studying, comparing and connecting theoretical knowledge from diverse literature sources (given at the end of Table 1.), combined with main theoretical and practical implications cited and concluded in this paper. With an aim of providing structured overview towards creating resilient communities, recommendations and guidelines are presented in a form of a table (Table 1.), divided into several categories: (1) General crisis recommendations and guidelines, (2) Recommendations and guidelines in the context of large-scale crises, (3) Dealing with accompanying psychosocial crisis, (4) Crisis communication, (4.1) Media and modern ICT as a link between sources of information and the public. Table of recommendations and guidelines presented below could serve to systematize the process of responding appropriately and as quickly as possible to various needs arising from large-scale crises, highlighting areas where there is room for extra improvement of existing processes, all with an aim of creating resilient communities.

Table 1: Recommendations and guidelines towards more efficient management of large-scale crises by creating resilient communities

(1) GENERAL CRISIS RECOMMENDATIONS AND GUIDELNES
– crisis can be seen not only as a threat, but also as an opportunity for growth (Osmanagić Bedenik, 2007; Mihalinčić 2018)
– observe each crisis separately, considering all its features, specific circumstances and the context of different crises
– know how to influence the crisis with as few consequences as possible and how to get out of it with various lessons learned for future application
– encourage multidirectional communication and faster decision-making when the crisis occurs, but also during the crisis
– establish a solid information network in order to reduce the possibility of information gaps / information saturation or rumours
– periodic evaluation of current crisis plans and strategies, crisis teams and planned crisis management activities
(2) RECOMMENDATIONS AND GUIDELINES IN THE CONTEXT OF LARGE-SCALE CRISES
– existence of well-coordinated and adequately trained crisis teams, crisis plans and various templates for communication of the crisis management activities to the public (pre-prepared procedures, advice, guidelines, established crisis team role responsibilities…)
– initial damage control, carrying out activities to return to normal functioning as soon as possible, and providing emergency medical, psychological or any other form of assistance (first aid, accommodation, food, water, clothing, protection from the weather, psychological first aid, psycho education, translators…)
– encouragement of more partaking and networked way of cooperation and decision-making among various participants in the crisis (competent services, governments, companies, associations, experts, professional helpers, volunteers, general public…)
– working on higher levels of resilience by creating and maintaing *sustainable systems* (educational, health, social, economic, political…) that create and maintain *resilient communities* (mental, social, economic, environmental…) adaptable to various twists and turns, through e.g. *social innovations* (Bežovan, 2016; Brandsen et al., 2016; Horgan and Dimitrijević, 2018)
– creating and maintaining *socio-economic-environmental resilience* through for example: (1) sharing of resources, (2) cooperation and making joint conclusions and decisions based on the cooperation of experts from the various fields and across the globe, (3) environmentally more sustainable production, (4) creating and maintaining healthy and tolerant social environments, (5) viewing large-scale crisis as an opportunity for potential positive change and an opportunity for personal growth and community development…
(3) DEALING WITH ACOMPANYING PSYCHOSOCIAL CRISIS
– recognize the accompanying psychosocial needs of people facing different large-scale crises or collective traumatic events
– start providing necessary psychosocial assistance in time to minimize the negative consequences on individual and community mental health
– be aware of the impact of large-scale crises on the psychosocial health of the wider community (observers, volunteers, general public…), and not just the direct participants
– introduction of the "Psychological First Aid" (PFA) as an integral part of the response to large-scale crises in order to immediately act on the *possible reduction of negative consequences of stressful and traumatic experiences on mental health* of various participants (directly affected / injured, professional workers, volunteers…) during and after the event, in order to achieve their uniformity and thus work towards *better resilience* and readiness of the community to cope with future crises (Ajduković et al., 2017; Sijbrandij et al, 2020)
– PFA should be flexible because the needs of the affected will change and evolve over time and in the context of different crises (Dückers et al., 2018)
– building professional resilience among professional workers (police, firefighters, emergency and paramedical teams, search and rescue personnel, translators…), equipping them with knowledge and skills needed to alleviate psychological stress (understand, control and recognize stress reactions) that can be applied to victims, but also to their colleagues, families and themselves (Ajduković et al., 2017; Atkins and Burnett, 2016; Birksihead and Vermeulen, 2018; Greinacher et al., 2019; Sijbrandij et al., 2020)

- know the influence of various *psycho-socio-demographic factors* (age, gender, personality, social environment, social support, economic status…) on exposure to the negative consequences of traumatic experiences
- some of the most common factors that are *positively correlated with the possibility of developing different mental disorders* are: (1) lower age, (2) female gender, (3) low socioeconomic status, (4) poor social support systems, (5) lower level of education, (6) distrust in government, (7) excessive exposure to stressful information ... (Alcover et al., 2020; Ajduković et al., 2017; Goldmann and Galea, 2014)
- importance of *emotional intelligence* (at the individual level, at work, within society…); how to approach people, how to treat them, how to react to their problems, how to provide them with the necessary help and how to do it all without the person we are helping feeling patronized or ashamed (Goleman, 2015)
- better availability of information and services related to psychosocial assistance and mental health during and after the crises (but also in everyday life) and normalizing the process of seeking psychosocial help
- better alignment between psychosocial interventions provided immediately during the crisis with those still provided after it
- encouraging social innovation, promoting healthy social environments and continuously working towards higher levels of community resilience

(4) CRISIS COMMUNICATION

- see crisis management and crisis communication as parallel processes that complement each other (Kešetović and Toth, 2012)
- involve the public in the process of crisis communication
- the goal should be to create an informed public to reduce the possibility of rumours, dangerous misinformation or information gaps
- timely and continuously transmit only accurate and verified information from reliable sources, with a dose of compassion and understanding
- <u>guidelines to be followed during crisis communication</u>: (1) clear presentation of information, avoiding jargon or incomprehensible technical terms, (2) maintaining eye contact while avoiding nervous non-verbal cues (stepping, fidgeting…), (3) being familiar with various sources of information to be as prepared as possible to answer various questions, (4) show genuine concern and compassion for the consequences of a crisis, (5) control nonverbal cues (eye contact and vision, colour and tempo of voice, pronunciation, distance, body movements, touch, style of dress, facial expressions, body position …) and pay attention to the specific context of the situation with knowledge of basic cultural norms, (6) emphasize what measures are taken to bring situation under control, (7) avoid using the term "*no comment*", (8) using offensive (confidently going public by communicating all the necessary information to the interested public) as opposed to defensive communication strategy (slow response to the crisis with lack of necessary information and frequent non-recognition of mistakes), (9) in case of the existence of victims / potential victims, warn the public in which way they can protect themselves, (10) use denial as a crisis response strategy solely when there is the need to deal with rumours or misinformation… (Ajduković et al., 2017; Coombs, 1995; Coombs, 2014; Hess, 2016; Mihalinčić, 2011; Mihalinčić, 2018)

(4.1) MEDIA AND MODERN ICT AS A LINK BETWEEN SOURCES OF INFORMATION AND THE PUBLIC

- view media and modern "*Information and Communication Technologies*" as an integral part of social environment or as a link between information sources and general public
- be aware of the influence of the media on public opinion and community behaviour knowing it provides insight into the situation and based on this information the public makes decisions, forms opinions, attitudes and behaviours - one of the key determinants of community response to a crisis is their social network and the information and experiences shared through it
- know that there is a growing demand for "real-time reporting" due to new digital media, as traditional forms of media (television, radio, newspapers…) that for a long time had the greatest impact on how the public communicates with each other, have lately been replaced by digital media (smartphones, digital platforms, social media…), which has effected crisis communication as well (Čerina, 2011; Collins et al., 2016; Liu, Jin and Austin, 2013)
- work on restoring public confidence in institutionalized media because alternative sources of information are not subject to as many regulations and are not as transparent as official ones, but the public is increasingly turning for information to them

- encourage using digital media only as a complement to traditional forms of communication
- using digital media as a complement to traditional ones could influence on: (1) raising public awareness of the seriousness and consequences of large-scale or any other crises, (2) the possibility of geographical / temporal monitoring and real-time tracking, (3) tailoring messages to different target groups, (4) grouping information (e.g. hashtag, #), (5) providing up-to-date information and warnings, (6) improving crisis response through faster mobilization of volunteers and professional workers, (7) identifying survivors and victims, (8) fostering empathy and fundraising, (9) facilitating the crisis learning process, (10) improving domestic and international cooperation in crisis communication and crisis management, (11) with an interested public, information can also be useful for various emergency services, professional helpers and volunteers, (12) maintaining active and responsive dialogue with the public to better listen what concerns them, (13) carrying out preventive activities as a part of warning and educating the public, (15) learning through lessons learned from past crises… (Collins et al., 2016; Eriksson, 2018; Nilsson et al., 2012; Wendling, Radisch and Jacobzone, 2013)
- encouraging global cooperation e.g., through platforms for simple, accessible and networked sharing of advice, recommendations, guidelines and innovative solutions of *various crisis participants* (government, professional workers, experts, victims, witnesses, volunteers…), *traditional media* as official sources of information (complemented by digital and social media) and *the general public*

Sources: Ajduković et al., 2017; Alcover et al.,2020; Atkins and Burnett, 2016; Bežovan, 2016; Birkshead and Vermeulen, 2018; Brandsen et al., 2016; Collins et al., 2016; Coombs, 1995; Coombs, 2014; Čerina, 2011; Dückers et al., 2018; Eriksson, 2018; Goldmann and Galea, 2014; Goleman, 2015; Greinacher et al., 2019; Hess, 2016; Horgan and Dimitrijević, 2018; Kešetović and Toth, 2012; Liu, Jin and Austin, 2013; Mihalinčić, 2011; Mihalinčić, 2018; Nilsson et al., 2012; Osmanagić Bedenik, 2007; Sijbrandij et al, 2020; Wendling, Radisch and Jacobzone, 2013

Conclusion

If we look at the psychological and social aspects of large-scale crises separately, the key term linking the two aspects together is the concept of resilience. Observing them together as a psychosocial aspect, it can be concluded that the psychological and social aspects are closely intertwined and interdependent. The concept of resilience within the psychological aspect is analysed through its possible impact on mitigating negative effects of traumatic experiences on individual and community mental health, and mitigation of these negative consequences is possible through establishment of healthy social environment by implementing social innovations towards higher levels of resilience, and consequently better preparedness for coping with future crises.

The limitation of this paper is the fact that only a part of the available literature linked to the subject was considered and analysed. Based on all the above findings, statements, possible guidelines and proposals, key conclusions on how to act more effectively on directing psychosocial effects of large-scale crises towards higher individual and collective levels of resilience are:
- destigmatizing the process of seeking psychosocial help and systematizing the processes of providing it,
- creating resilient communities through healthier social environment and implementation of social innovations, and
- by encouraging global cooperation

If more extensive changes are made towards listed recommendations, guidelines and key conclusions, further research could address whether these changes have affected community levels of resilience and better preparedness for coping with the psychosocial effects of future crises and everyday challenges.

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Authors' Contributions

Davor Labaš: Conceptualization, Methodology, Writing- Reviewing and Editing, Supervision, Project administration
Tihana Leder: Conceptualization, Investigation, Writing- Original draft preparation, Visualization

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