

Dorczak, Roman; Farnicka, Marzanna; Nowosad, Inetta

Article

Dilemmas in managing the COVID-19 crisis

Risks

Provided in Cooperation with:

MDPI – Multidisciplinary Digital Publishing Institute, Basel

Suggested Citation: Dorczak, Roman; Farnicka, Marzanna; Nowosad, Inetta (2021) : Dilemmas in managing the COVID-19 crisis, *Risks*, ISSN 2227-9091, MDPI, Basel, Vol. 9, Iss. 5, pp. 1-14, <https://doi.org/10.3390/risks9050080>

This Version is available at:

<https://hdl.handle.net/10419/258168>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/4.0/>

Article

Dilemmas in Managing the COVID-19 Crisis

Roman Dorczak ^{1,*}, Marzanna Farnicka ²  and Inetta Nowosad ³¹ Institute of Public Affairs, Jagiellonian University, 31-007 Kraków, Poland² Institute of Psychology, Zielona Góra University, 65-417 Zielona Góra, Poland; m.farnicka@wpsnz.uz.zgora.pl³ Institute of Pedagogy, Zielona Góra University, 65-417 Zielona Góra, Poland; i.nowosad@ipp.uz.zgora.pl

* Correspondence: roman.dorczak@interia.pl

Abstract: The aim of this article was to present the current research on coping with coronavirus disease 2019 (COVID-19) and, on this basis, to indicate the implications of risk management in the situation of adaptation to the crisis or re-adaptation after its end. This article considers the psychological significance of the socially experienced situation based on the latest research conducted in Poland during the first wave of the pandemic. It is an attempt to show both the risk and protective factors, as well as possible remedial effects against unfavorable social and health phenomena, which are related to the increase in costs incurred by individuals in the process of experiencing the crisis and adaptation to the conditions after its end. These are considered in the context of the costs of adaptations used by individuals and of re-adaptation in the period of coping with COVID-19. This study conducted a meta-analysis of 13 psychological and sociological studies conducted so far in the first period of the pandemic. The results of the research show that the most difficult issue in the risk situation of the next wave of a pandemic is the lack of definition of its timeframe but also disinformation and fatigue. The results of the conducted analysis may become useful material for risk management professionals. An additional value of the article is that it presents ways of applying the conclusions resulting from the research, not only during the second wave of the pandemic but also in the necessary processes of re-adaptation to life without COVID-19.

Keywords: adaptation and re-adaptation; health and social consequences of COVID-19; pandemic stress; re-adaptation; risk and protective factors



Citation: Dorczak, Roman, Marzanna Farnicka, and Inetta Nowosad. 2021. Dilemmas in Managing the COVID-19 Crisis. *Risks* 9: 80. <https://doi.org/10.3390/risks9050080>

Academic Editor:
Zbyslaw Dobrowolski

Received: 18 February 2021
Accepted: 29 March 2021
Published: 21 April 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The coronavirus disease 2019 (COVID-19) situation has had a significant impact on how people function from the perspective of individuals, as well as small (for example, families or workplace communities) and large groups (inhabitants of particular regions) in Poland and around the world. The spread of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and its consequences (COVID-19 disease) have become a challenge for the modern world. The pandemic caused much chaos, and as such, it triggered the need to deal with the crises of both entire societies and individuals. The global threat to the population's health has resulted in various adaptive responses and ways of coping with stress by the society, groups, or individuals experiencing it. Analysts indicate that this situation triggered a number of social and economic changes (Nicola et al. 2020) regarding in terms of the way of life, health, family, and professional functioning. During the first wave, 186 countries implemented varying degrees of restrictions on population movement to slow the spread of the disease and prevent health systems from becoming overwhelmed. According to UNICEF, these restrictions amounted to lockdowns in 82 countries (UNICEF 2020). Governments around the world faced the common challenge of easing lockdowns and restrictions while balancing various health, social, and economic concerns.

Countries have diverged in terms of the speed, scale, and intensity at which they implemented similar interventions, and differences can be observed between Asia and Europe. The analyses presented by Dickens et al. (2020) showed that many Asian countries,

except Japan, promptly carried out extensive testing, tracing, and isolating of all cases (i.e., not just severe cases) from the start of the outbreak, which was possible thanks to innovative surveillance technology. What is worth noting is that these processes were considerably delayed in most European countries (except for Germany).

All countries expected consequences in different areas. The first group (primary) concerned the agriculture and oil industries (petroleum and oil), while the second group (called tertiary) concerned production plants; educational institutions and the educational system as a whole; financial markets (finance industry); medical institutions (healthcare and pharmaceutical industry); hospitality, tourism, and aviation (hospitality, tourism, and aviation); real estate and the housing sector; sports and cultural industry; information technology; the media; the research and development sector; food sector. [Açikgöz and Günay \(2020\)](#) also indicated that the changes in these sectors and the reactions of the governments to the emerging situations, such as forced social distancing, self-isolation, and travel restrictions, have led not only to a reduction in the workforce across all economic sectors but have had a social impact too. Nicola and her team ([Nicola et al. 2020](#)) and Fitzgerald and her team ([Fitzgerald et al. 2020](#)) identified such possible social consequences, namely, changes in the dynamics of functioning in families; unfavorable phenomena such as increased fears of rising levels of domestic violence, which includes physical, emotional, and sexual abuse; increased interest in video gaming.

In both the first and the second waves, the COVID-19 pandemic prompted the governments of many countries to introduce numerous restrictions, close some sectors of the economy, and temporarily switch to remote or hybrid operations. These solutions used at the beginning of the pandemic (March–April in Europe) and during its second wave (October–November in Europe) are concerned bivalent. This is because, on the one hand, they have introduced a partial economic crisis in industries such as aviation, gastronomy, hotel, fitness, events, and culture, but they have also created the conditions for the dynamic development of industries based on Internet communication and forced the development of many companies toward increased online services in all industries ([Açikgöz and Günay 2020](#); [Chutiphimon et al. 2020](#); [Zhang et al. 2020](#)). For example, new applications have been developed and service providers have started selling their services online (e.g., fitness, training, accounting). This situation has not only changed the way many companies operate by forcing them to implement hybrid or fully online work but the methods of communication, training, and employee management (control, monitoring, and support) within companies have also changed. The processes taking place on global and local scales are very complex and discussing all their possible consequences is futurology. However, one thing is certain, modern managers have to deal not only with economic (macro and micro) and social risks, they will also have to deal with the risks associated with individual psychological processes of coping with this situation in their teams. The results of the research on the stresses present in the world indicate that the way of experiencing a pandemic may entail various reactions ranging from severe anxiety in the form of coronaphobia to neglecting the risk and being careless ([Asmundson and Taylor 2020](#); [Taylor et al. 2020](#); [Vindegaard and Benros 2020](#)). Moreover, it is noted that a long-lasting experience of difficulties has an impact on one's sense of meaning in life ([Mc Gee et al. 2018](#)). Moreover, a “parallel pandemic” of acute stress disorders is anticipated, especially among patients with pre-existing mental disorders, as well as problems with re-adaptation after recovering from it ([Mucci et al. 2020](#)).

The aim of this study was to show the psychological consequences that were triggered by the processes of coping with the spread of SARS-CoV-2 from the perspective of risk factors and factors protecting the functioning of employees, both in the current situation (adaptation to the second and possibly third waves of the disease) and adaptation to the recovery phase that will come after the end of the pandemic. The article presents some critical considerations and the results of our research on the psychological perception of a situation called “a pandemic” in March 2020 by WHO ([WHO 2020](#)). In addition, the results of 10 other studies conducted mainly in Poland during the first wave of the

pandemic were cited. On their basis and on the basis of the results obtained from the analyses, the determinants of the consequences for companies' employees and the costs of adaptation and re-adaptation borne by individuals in the period of coping with COVID-19 were identified.

The aim of the study was to identify the risks of pandemic stress in management. Therefore, we tried to identify some relevant studies based on the question: "What is important when coping with the COVID-19 experience?" In the first part of the article, we present the conceptualization of the pandemic stress phenomenon from a psychological perspective. It discusses the theories of Lazarus, Folkman, and Hobfoll. The second part is connected with a presentation of available studies on how Poles coped in the first phase of the pandemic in three dimensions: perception, important differences between people regarding coping, and the specific consequences of experiencing pandemic stress for life. The meta-analysis procedure is presented, as well as its outcome. In the last section, factors connected to coping with stress at the individual, family, and workplace levels are presented. As a recommendation, a theoretical proposal for protection against the long-term consequences of pandemic stress is presented in the end.

2. What Is the Current Situation? What Is Pandemic Stress?

The global epidemic caused by SARS-CoV-2 has brought about deprivation and a sense of danger all over the world, including Poland, and, already in its first wave (March–April), has caused the introduction of some drastic restrictions. The World Health Organization called it a pandemic. For this reason, we can use the term "pandemic stress," i.e., stress related to this particular situation. According to the definition, a pandemic is a state of threat to the health and sense of security and the related changes in the living conditions of individuals (WHO 2020). Currently, the pandemic situation has become an indispensable part of human life. It is considered an additional stressor in the environment. In this case, this stress, in line with the concept of salutogenesis by Antonovsky (1997), can be classified as a stressor. According to the discussed concept, not every stressor causes a state of stress and worsens the health level of an individual or a group. What happens next is related to the interaction of the remaining factors included in the health model. Apart from stressors, these are the generalized resources, behaviors, and lifestyles, as well as the sense of coherence. Generalized resistance resources (GRRs) are the properties of an individual (biological, psychological) and the properties of the sociocultural context (group features, features of a culture, religion, level of economic development). The ways of responding to a given situation result from the resources available to an individual. It was the different assessments by different governments in the first and second phases of the pandemic that influenced their choices for the specific coping paths that we could observe: British, Swedish, Finnish, Australian, Chinese, American, Austrian, Italian, or Polish reaction models. They differed in the number and depth of the restrictions applied, for example, in terms of social life or goals (achieving herd immunity, preventing the collapse of the healthcare system, searching for a vaccine, reducing infections as quickly as possible). Another group of health determinants involves behaviors and preferred lifestyles. To some extent, this group of factors is connected to GRRs because many behaviors are related to creating conditions that are conducive to experiences that develop resources and the sense of coherence. The most important individual group factor playing a role in the process of maintaining health is the sense of coherence (SOC), which is the general orientation attitude of an individual expressing permanent and dynamic beliefs in the predictability and rationality of the world and one's life situation.

Therefore, from the social perspective, pandemic stress, in accordance with the concept of salutogenesis, results primarily from the imbalance between the challenges faced by an individual (e.g., social isolation, remote work, home education, loss or reduction of income, lack of information, previous obligations and lifestyle, vision of the world) and resources allowing the individual to deal with them (e.g., the unpreparedness of the health service,

unclear market situation, ongoing processes of disinformation, lack of proven procedures and methods of conduct, no vision of future accidents).

In the classic concept of stress by Richard Lazarus and Susan Folkman, a new situation violating the current state of equilibrium is cognitively assessed as optimal, burdening, or exceeding the individual's abilities, and this determines its consequences and the methods of coping (Lazarus and Folkman 1984). Cognitive assessment takes place in two stages. The first one is the so-called primary appraisal, during which, an entity recognizes the nature of the transaction and its capabilities in it. The emotional process is inherent to the stress transaction and, usually, the first emotions appear as a result of the primary assessment. Emotions can be of various types: regret, sadness, fear, hope, enthusiasm, joy, relief, jealousy, guilt, and other (Terelak 2017). When an interaction is considered stressful (i.e., losses, threats, or challenges), a secondary appraisal process takes place. This stage of assessment concerns the possibility of taking actions that are aimed at removing the cause of stress or mitigating its consequences, and, in the case of a challenge, achieving benefits. The primary and secondary stages of evaluation are interrelated and interact with each other. The secondary assessment can change the primary assessment from hazard to challenge and vice versa. The subject, being aware of the disturbances in the adaptive balance and threats, as well as experiencing intense and often unpleasant emotions, will strive to change this situation. Researchers have defined the activity that is directed at change as coping with stress, the function of which is coping with the perceived problem and regulation of emotions (appeasing the unpleasant emotional states; Lazarus and Folkman 1984) and finding meaning and sense (Folkman 2008; Folkman and Moskowitz 2008). At this point, it should be pointed out that both the assessment of the situation and the adopted aim of the actions do not have to be realistic, effective, or conscious from the observer's point of view.

Stress theorists point to another useful approach. This is the conservation of resources theory (COR). Stevan Hobfoll (1989) pointed out that in the face of stress, people use their available resources to adapt successfully, which consists of acquiring resources, maintaining them, and protecting themselves against the loss of resources, which is often referred to as investing resources. Resources are objects (material resources), conditions (health, place of residence), personality traits, the energy of an individual, and its sources. They are directly or indirectly valued and needed by an individual to survive, or they are used to obtain new resources (Hobfoll 2006). Therefore, in COR, psychological stress is a reaction to the environment in which there is a threat of the loss of resources, the loss of resources has already occurred, or the expected profit has not been achieved, and resources have been invested, which also means a loss (Hobfoll 1989, p. 514). In this model, in the case of resource management, which conditions effective coping with stress, there are two cycles: profit and loss. They run in a spiral, known as the profit and loss spiral. Losses are very acute as people who do not have much to invest only try to protect their remaining scarce resources. This often leads to passive behavior and the chronic effects of stress. Moreover, scarcity of resources increases the risk of loss and entails further losses of resources. It seems particularly important to carry out research on people and groups that are short on resources and exposed to their loss, including people at risk of occupational burnout, loss of health, social exclusion, and addictions. Resource-rich people who are in the profit spiral protect and multiply their resources, and in a stressful situation, they are able to reverse the emerging spiral of losses and make a profit (Modrzyński 2018).

The presented operationalizations of the pandemic stress approaches indicate that the way in which a pandemic is experienced may reveal various reactions. It will not be a challenging situation for everyone; for some, it may cause a surge of initiative and fascination with emerging opportunities (Schäfer et al. 2019). However, what is worth emphasizing in each of the approaches is that individual and social resources are important and they are created thanks to both the efforts of and individual and their living environment, in this case, the workplace.

3. How Did Poles Cope in the First Phase of the Pandemic? Research Meta-Analysis

Methodological Section

The number of studies published in the Polish literature on coping with COVID up until September 2020 was not very high. The available studies were often heterogeneous with regard to their design, operational quality, and subjects, and addressed the research question in different ways. To present the actual results, we selected articles in Polish that were presented during the first conference that was held at that time. As the aim of the presented work is to identify the risk of pandemic stress in management, we tried identifying relevant work based on the framing questions: “What is important when coping with the COVID-19 experience?” and “How did Poles cope in the first phase of the pandemic in three aspects: perception of threat, individual factors that influence individual strategies of coping with stress, and consequences of experiencing pandemic stress?”

As mentioned above, in the preliminary research stage, it turned out that we had had only one big conference presenting a systematic observation of the first wave of coping with COVID-19 based on stress and coping concepts in the fields of psychology and sociology before the end of September. Therefore, the data sources that we were able to use in our analysis were the database of abstracts (and later selected papers) from the Polish Psychological Association Conference that focused on dealing with the COVID-19 situation (PTP, 13 September 2020).

The next step of the research was to identify the abstracts from the base of abstracts according to keywords. For the keywords, we used stress, coping, coping with COVID-19, pandemic stress perception and COVID-19, individual differences in coping with pandemic stress and COVID-19, consequences of coping with pandemic stress and COVID-19, and strategies of coping and COVID-19. The selection of studies to be used in our analysis was based on eligibility criteria that were formulated according to the Sample, Phenomenon of Interest, Design, Evaluation, and Research type (SPIDER) approach (Methley et al. 2014) and they were as follows: sample during the first wave of COVID-19, the scope of interest: consequences of coping with COVID-19, exploratory design, and quantitative methodology of the studies. The stages of the applied research procedure are presented in Table 1 below.

Table 1. Description of research procedure stages.

No.	Stages of the Research Procedure	Type of Actions (and Results)
1	Identification	Preliminary research Inclusion and exclusion criteria formulation Search strategy (SPIDER) Searching for a database of abstracts (One source—Conference of the PPA, September 2020)
2	Screening	Uploading abstracts of different research. Title screening ($n = 109$ selected)
3	Selection—step 1	Analysis of full abstracts' content Exclusion of cases that were not relevant to the aims of research ($n = 22$)
4	Selection—step 2	Analysis of full papers' content Inclusion of those that were relevant to the aims of the research ($n = 13$)
5	Analysis and meta-analysis	Deep qualitative analysis of the selected cases Synthesis of analysis

Source: Own work. SPIDER: Sample, Phenomenon of Interest, Design, Evaluation, and Research type.

After a year of experience of coping with COVID-19, a knowledge base has already been gathered. Table 2 below shows the results of the 13 studies aimed at describing coping strategies in the face of COVID-19. This knowledge is essential for developing evidence-based strategies to reduce the negative effects of pandemic stress. Most of the cited studies were presented during the National Scientific e-Conference entitled Experiencing the COVID-19 pandemic in Poland, which took place on 16 and 17 September 2020 on one of the online platforms. It was prepared by the Faculty of Psychology and Cognitive Science at the University of Adam Mickiewicz in Poznań.

Table 2. The results of the studies on experiencing the coronavirus disease 2019 (COVID-19) pandemic in Poland and throughout the world.

Study No.	Authors	Aim	Tools & Method	N	Conclusions
1.	Bakiera et al. (2020)	Knowing how to cope.	Beck Depression Scale, PSS-10 Cohen, Kamarck, Mermelstein. Assessment was done online.	Online N = 1200 from Russia, Georgia, Turkey, Germany, Serbia, Kosovo, Albania, Romania, Great Britain, and Poland.	Increased stress levels in each country.
2.	Bakiera et al. (2020)	Diagnosis of basic psychological needs, level of stress and coping strategies, and comparative analysis of the experiences of the pre-epidemic and epidemic periods.	BPNS and FS Chen et al. (2014), Cohen et al. (1983), and Carver et al. (1989). Assessment was done using a questionnaire survey and online measurement.	(n = 626, age 18 to 40) in the period immediately preceding the epidemic, which was compared with the results of the epidemic group (n = 282, aged 17 to 44).	Among women from the epidemic group, the needs of autonomy and competences were less well met and more frustrated than in the control group; men from the epidemic group differed from the control group only by a higher frustration of autonomy. Women from the epidemic group experienced a higher level of stress than in the control group.
3.	Wang et al. (2020)	To better understand the levels of psychological impact, anxiety, depression, and stress during the initial stage of the COVID-19 outbreak among the Chinese population.	Impact of Event Scale-Revised (IES-R); the Depression, Anxiety, and Stress Scale (DASS-21); demographic data. Assessment was done using an online survey.	From 31 January to 2 February 2020, N = 1210 from 194 cities in China.	A total of 53.8% of respondents rated the psychological impact of the outbreak as moderate or severe, 16.5% reported moderate-to-severe depressive symptoms, 28.8% reported moderate-to-severe anxiety symptoms, and 8.1% reported moderate-to-severe stress levels. Most respondents spent 20–24 h per day at home (84.7%), were worried about their family members contracting COVID-19 (75.2%), and were satisfied with the amount of health information available (75.1%). Female gender, student status, specific physical symptoms (e.g., myalgia, dizziness, coryza), and poor self-rated health status were significantly associated with a greater psychological impact of the outbreak and higher levels of stress, anxiety, and depression ($p < 0.05$). Specific up-to-date and accurate health information (e.g., treatment, local outbreak situation) and particular precautionary measures (e.g., hand hygiene, wearing a mask) were associated with a lower psychological impact of the outbreak and lower levels of stress, anxiety, and depression ($p < 0.05$).

Table 2. Cont.

Study No.	Authors	Aim	Tools & Method	N	Conclusions
4.	Bakiera et al. (2020)	What are the stress factors and ways of coping with the group of people subject to a mandatory quarantine?	Online unstructured interviews with people who, on the basis of the Sanepid's decision, had to be in home quarantine; demographic data and physical and mental symptoms were also analyzed.	N = 41, 22 women and 19 men	Quarantine was a stressful experience for a significant proportion of the respondents (65%); they reported, depressive symptoms, increased anxiety, and deterioration of physical well-being, among others.
5	Farnicka Farnicka (2020)	How do young adults recognize pandemic stress?	Online symptom recognition.	N = 120, 73% women, age 23.1 years (SD 3.8 years), measurement in April 2020.	Most of the respondents (82%) recognized the pandemic situation as a difficult situation. The elements of danger and overload were most often indicated.
6.	Bakiera et al. (2020)	The functioning of adults during the COVID-19 pandemic from the perspective of their stress response, positive orientation, and sense of meaning in life.	Inventory for Measuring Coping with Stress Mini-COPE (Carver et al. 1989), Positive Orientation Scale (Caprara et al. 2010), and Sense of Meaning in Life Questionnaire (Kossakowska et al. 2013) via an online survey.	N = 590, 67% women, age 29.9 years (SD 9.8 years).	Adults were most concerned about the health of their loved ones and the economic situation in the country. The highest level of stress was experienced by mothers and household owners (household was defined as at least two people).
7.	Bakiera et al. (2020)	How the everyday life of Poles changed as a result of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic and how they adapted to such changes.	Own questionnaire and photo questions.	Two stages of research conducted on nationwide, unrepresentative research samples (19–24 March 2020: N = 2500 people; 31 March–8 April 2020: N = 1300 people).	There were many fears and the state of surprise prevailed. Significant differentiating variables were sex, education, income, and place of residence. Poles took part in remedial actions: washing hands, using disinfectants, and keeping their distance.
8.	Mudło-Głagolska and Larionov (2020a)	Mental health risk factors during the COVID-19 pandemic.	Feeling of discomfort IES-R and DASS-21.	926 respondents, your feelings during last 14 days	The main risk factors that increased the level of discomfort in dealing with a pandemic were female gender, being a parent, being in a relationship, running a household of at least two people, knowledge about the increase in the number of those who were infected and the number of deaths, obtaining information from television, belief in a high probability of contracting COVID-19, low survival in the event of falling ill, and fear for relatives.

Table 2. Cont.

Study No.	Authors	Aim	Tools & Method	N	Conclusions
9.	Hornowska et al. (2020)	Ways of responding in a pandemic situation.	Scale of Perceived Stress PSS-10 by S. Cohen and own questionnaires.	<i>N</i> = 620 online.	There were four different groups of coping strategies: 1. task-oriented—high stress level; 2. reconciled—the lowest changes in the sense of stress; 3. responsible—quite high sense of threat but without a sense of loss; 4. distancing themselves—very high rates of stress and a sense of loss.
10.	Bakiera et al. (2020)	Assessment of the relationship between selected immune resources, fear of SARS-CoV-2, persistent thinking about COVID-19, and the effects of trauma.	Mental resilience, social support, fear of SARS-CoV-2.	Two studies: <i>N</i> 1 = 515, <i>N</i> 2 = 356, online survey.	Mental resilience and social support were correlated with each other and reduced the severity of anxiety about the coronavirus
11.	Bakiera et al. (2020)	How is the emergency situation manifested by anxiety attitudes toward a pandemic related to beliefs about free will, determinism, and the unpredictability of events, as well as with life aspirations, life satisfaction, and well-being at work?	Online survey, anxiety questionnaire, questionnaire of beliefs, life aspirations, life satisfaction, and well-being at work.	Professionally active people from various industries (<i>N</i> = 177).	Anxiety attitudes toward the pandemic were positively related to aspirations for power, life stabilization, and activism, along with the belief that events were unpredictable; anxiety attitudes were negatively related to the importance of faith/religion in life and having an exciting life. It was also found that the fear of a pandemic was negatively associated with life satisfaction and not significantly related to well-being at work. The mode of work (remotely vs. stationary) was not associated with anxiety attitudes toward the pandemic.

Table 2. Cont.

Study No.	Authors	Aim	Tools & Method	N	Conclusions
12.	Mudło-Głagolska and Larionov (2020b)	The role of work passion and cognitive regulation of emotions and depression symptoms in economically active people during the COVID-19 pandemic.	Passion Scale, Cognitive Emotional Regulation Questionnaire (CERQ), and Patient Health Questionnaire-9 (PHQ-9).	N = 317 employees.	<p>CRE strategies mediated the relationship between work passion and depression symptoms. Harmonious work passion was associated with adaptive CRE strategies (e.g., positive re-evaluation, creating perspective), which were associated with less depression. On the other hand, obsessive work passion was positively associated with maladaptive CRE strategies (e.g., catastrophe, rumination), which was associated with a greater intensity of depression. Conclusions: RE strategies were identified as a mediator in the relationship between passion for work and the occurrence of symptoms of depression. Along with the increase in changes in professional activity, harmonious enthusiasts were inclined to use adaptive CRE strategies, which in turn allowed them to feel less severe depression. These results support the study of the relationship between motivational and self-regulatory processes in the workplace, which in turn creates new opportunities for understanding the role of passion in crisis situations.</p>

Source: own work.

The first six studies presented in Table 2 concern the methods of responding to the situation of the declared pandemic. In Poland, Georgia, Russia, Turkey, Germany, Albania, Romania, Great Britain (Karmolińska-Jagodzik et al. 2020; Poprawa et al. 2020), and China (Wang et al. 2020), whole groups responded with increased stress levels and increased anxiety and sadness syndromes. The research also noted an increased level of frustration of needs, such as autonomy and the feeling of overload and difficulty (Farnicka 2020; Mrozowicz-Wrońska et al. 2020). These results were similar for both the general population and for those in quarantine.

The seventh (Bakiera et al. 2020) and eighth (Drozdowski et al. 2020) studies showed the fears and ways of changing the everyday life of Poles. The main concerns were connected with the health of relatives and their financial situation. The data on habits and behaviors indicate that, due to the pandemic, Poles washed their hands more often, used special disinfectants, and followed the current news in the media (Drozdowski et al. 2020).

However, the first variables differentiating the experiences of the COVID-19 pandemic appeared in this respect. They were gender, education, income, and place of residence (Bakiera et al. 2020; Mudło-Głagolska and Larionov 2020a). The results obtained in the Polish group were consistent with the previously mentioned research by Wang et al. (2020). Furthermore, in the Chinese population, female gender, student status, and health problems were associated with higher levels of stress and its symptoms in the form of symptoms of anxiety disorders or depression (Wang et al. 2020). Women were more frustrated and had a higher sense of unmet needs than men (need for competence and autonomy) (Poprawa et al. 2020).

Subsequent studies (10–13) described in more detail the psychological and social resources that favored or constituted a risk factor for adaptive coping in a pandemic situation. Hornowska et al. (2020) distinguished four groups of different people who differed in terms of their coping strategies. What is important is that a higher level of stress was displayed by highly task-oriented and highly distant people. In the latter group, high rates of a sense of loss were noted. The lowest level of stress was shown by people who saw some sense in the events that appeared (the so-called “reconciled” group).

Subsequent studies indicated that resilience and social support were correlated with each other and reduced the severity of anxiety about the coronavirus (Skalski et al. 2020). Fear attitudes toward the pandemic were also positively associated with aspirations regarding power, life stabilization, and activism, as well as belief in the unpredictability of events; they were negatively associated with the importance of faith/religion in life and having an exciting life, as well as with life satisfaction. Interestingly, there was no significant relationship between fear attitudes and well-being in work (Kondratowicz et al. 2020). The study also demonstrates that the work mode (remote vs. stationary) was not associated with anxiety attitudes toward the pandemic (Kondratowicz et al. 2020).

In a work situation, the cognitive regulation of emotions is also important. Research by Mudło-Głagolska and Larionov (2020b) showed a relationship between emotion-regulation strategies, passion at work, and the occurrence of depression symptoms. Therefore, the Cognitive Emotional Regulation Strategies (CERS) strategies were a mediator. The harmonious passion for work was associated with adaptive CRE strategies (e.g., positive re-evaluation, creating perspective), which were associated with a lower intensity of depression, and an obsessive passion for work was positively associated with maladaptive strategies of CRE (e.g., catastrophization, rumination), which was associated with greater depression severity.

4. Summary and Conclusions

This article aimed to emphasize the importance of understanding pandemic stress in risk management. Apart from personal factors, this article also discussed the concepts and resources created by organizations or societies. Such an approach to the current situation as a stressor that changes the context of work and the functioning of an organization makes it possible to undertake adequate resource management strategies in order to avoid a

spiral of losses. This can be achieved by activities that are based on strengthening and mobilizing resources at many levels of the organization: meso-level, micro-level, and self-management. The macro-level is also of fundamental importance but is under the control of governmental policies.

On the basis of the analysis of selected studies that were mainly conducted in Poland, the current state of knowledge about the factors favoring behavior for the protection and building of resources in a pandemic stress situation was reviewed. They were the sense of meaning (events and the perspective related to faith), no sense of loss, mental resistance, receiving social support, and satisfaction with life so far. The main factors associated with the feeling of greater discomfort in this situation were also distinguished. It was much more difficult for women, parents, and people running a household of at least two people. Supportive and disruptive behaviors were also distinguished. The following were not conducive to coping with stress: compulsive searching for knowledge about the increase in the number of infected and the number of deaths; constantly learning from television; belief in a high probability of getting COVID-19 and a low probability of survival in the event of falling ill; increased concerns about the health of relatives; the sense of frustration of important needs, such as autonomy, the sense of competence, the sense of control over one's own life. In terms of favorable behaviors, we found the following remedial actions: washing hands, using disinfectants, following the recommendation to stay at home, and increasing social distance.

5. Limitations of Conclusions

The presented research could be treated as a review of studies on the initial impact of the global pandemic. The conclusions were presented after the first pandemic waves. They were prepared by some prestigious teams that were involved in investigating the pandemic's reality. Some of the studies were conducted using a new methodology or a different methodology and different perspectives. The uniqueness of the presented studies lies in the mixed way of collecting the data (in person and via the Internet, phone, and letters). They examined an on-going catastrophic event through a sociopsychological research lens.

Due to the fact that, at the time of conducting the analyses, we had limited access to current Polish research conducted in the stress paradigm, we tried to apply the guidelines related to the preparation of a review study throughout the procedure. Although our research is not strictly speaking a "review study," we based it on the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) approach (Rys et al. 2009). Because of the specific situation during the selection stages of the procedure, we tapped into the SPIDER procedure (Methley et al. 2014).

6. Implications

Due to the fact that, despite the perspective of mass vaccination, we will still be dealing with the situation of the pandemic and then the post-pandemic stress related to the necessary re-adaptation to new living conditions for some time; as such, we can consider a possible model of protection and creation of resources in organizations. The undertaken actions would be aimed at minimizing the effects of the psychological costs, which may be manifested in the form of increased anxiety, depression, or frustration reactions in the form of passivity, apathy or anger, and aggressive or provocative behavior (Vansteenkiste and Ryan 2013). Some suggestions are made below that may be useful for designing interventions aimed at observing and improving mental health.

Provide consistent and clear information on safety procedures and rules, organize specialist assistance to ensure the recovery of resources (preferably anonymous and external), and institutionally provide support to those that are most at risk of losing resources (women, parents, lonely people, people at risk of falling ill, people without social support or overburdened with work or a family situation) by introducing flexible working hours for some time after the immediate threat ceases. It is also worth paying attention to the

importance of constantly building each organization's ability to develop and multiply its capital (cooperation, trust, sharing leadership) when building an ethos, which, in a crisis, determines the strength of the organization's resistance to difficult events.

Taking care of the development of their skills, providing information on the ongoing process of reaction to pandemic stress and its consequences (albeit online); balancing individual, lonely work with meetings of groups and teams (online); regarding evaluation, it is worth appreciating competences and creating a place for innovation; enable flexible approaches to tasks.

Level of Interaction or/and self-management:

- Development of a day/week plan. When planning, it is important that there are ongoing rituals in there. Everyone should also have an influence on their daily schedule; therefore, it is worth drawing up such a plan together and talking about it. The specific time frame for its implementation should always be given.
- Creating a place and time to talk about needs. Report your needs and listen.
- Creating a place and time for ongoing communication. Regular meetings that are scheduled quite often, for example, once a week, are important.
- Maintaining contact. Due to our isolation, we feel lonely; therefore, it is especially important to maintain contact at a specific time with people who speak your language and who can comfort and support you.
- Accepting reality. Reorganizing the current lifestyle to one that includes many remedial behaviors (avoiding alcohol and other drugs, watching less news, looking for information only from reliable sources (WHO, government agencies) and preferably no more than once a day, keeping your distance, taking care to eat a proper diet, playing sports, developing hobbies).

Author Contributions: M.F.: analysis of research cases and writing; I.N.: theoretical background and writing; R.D.: review and writing and editing final versions. All authors have read and agreed to the published version of the manuscript.

Funding: This research has not received external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Açikgöz, Ömer, and A. Günay. 2020. The early impact of the Covid-19 pandemic on the global and Turkish economy. *Turkish Journal of Medical Sciences* 50: 520–26. [[CrossRef](#)] [[PubMed](#)]
- Antonovsky, A. 1997. Poczucie koherencji jako determinanta zdrowia. In *Psychologia Zdrowia*. Edited by Heszen-Niejodek Irena and Helena Sęk. Warszawa: PWN, pp. 206–31.
- Asmundson, G. J. G., and S. Taylor. 2020. Coronaphobia: Fear and the 2019-nCoV Outbreak. *Journal of Anxiety Disorders* 70: 10296. [[CrossRef](#)] [[PubMed](#)]
- Bakiera, L., I. Stankowska-Mazur, and K. Janowicz. 2020. Funkcjonowanie dorosłych podczas pandemii covid-19 z perspektywy reagowania na stres, orientacji pozytywnej i poczucia sensu w życiu. Referat wygłoszony na Ogólnopolskiej e-Konferencji Naukowej pt. In *Doświadczanie Pandemii COVID-19 w Polsce*. Poznań: UAM, Adama Mickiewicza w Poznaniu.
- Caprara, Gian Vittorio, Patrizia Steca, Guido Alessandri, John R. Abela, and Chad M. McWhinnie. 2010. Positive orientation: Explorations on what is common to life satisfaction, self-esteem, and optimism. *Epidemiologia E Psichiatria Sociale* 19: 63–71. [[CrossRef](#)] [[PubMed](#)]
- Carver, Charles S., Michael F. Scheier, and Jagdish K. Weintraub. 1989. Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology* 56: 267–83. [[CrossRef](#)] [[PubMed](#)]
- Chen, Beiwen, Maarten Vansteenkiste, Wim Beyers, Liesbet Boone, Edward L. Deci, Jolene Van der Kaap-Deeder, Bart Duriez, Willy Lens, Lennia Matos, Athanasios Mouratidis, and et al. 2014. Basic psychological need satisfaction, need frustration, and need strength across four cultures. *Motivation and Emotion* 39: 216–36. [[CrossRef](#)]

- Chutipimon, H., A. Thipsunate, A. Cherdchim, B. Boonyaphak, P. Vithayasirikul, P. Choothong, S. Vichathai, P. Ngamchaliew, and P. Vichitkunakorn. 2020. Effectiveness of Innovation Media for Improving Physical Distancing Compliance during the COVID-19 Pandemic: A Quasi-Experiment in Thailand. *International Journal of Environmental Research and Public Health* 17: 8535. [CrossRef]
- Cohen, Sheldon, Tom Kamarck, and Robin Mermelstein. 1983. A global measure of perceived stress. *Journal of Health and Social Behavior* 24: 385–96. [CrossRef]
- Dickens, B. L., J. R. Koo, A. Wilder-Smith, and A. R. Cook. 2020. Institutional, not home-based, isolation could contain the COVID-19 outbreak. *Lancet* 395: 1541–42. [CrossRef]
- Drozdowski, R., M. Frackowiak, M. Krajewski, M. Kubacka, A. Modrzyk, Ł. Rogowski, P. Rura, and A. Stamm. 2020. *Życie Codzienne w Czasach Pandemii. Raport z Pierwszego Etapu Badań*. Poznań: Instytut Socjologii UAM.
- Farnicka, M. 2020. Percepcja Sytuacji Pandemii Wśród Młodych Dorosłych w Polsce w I i II fali Pandemii. in print.
- Fitzgerald, D. A., K. Nunn, and D. Isaacs. 2020. Consequences of physical distancing emanating from the COVID-19 pandemic: An Australian perspective. *Paediatric Respiratory Reviews* 35: 25–30. [CrossRef]
- Folkman, S. 2008. The case for positive emotions in the stress process. *Anxiety Stress Coping* 21: 3–14. [CrossRef] [PubMed]
- Folkman, S., and J. T. Moskowitz. 2008. Positive affect and meaning-focused coping during significant psychological stress. In *The Scope of Social Psychology. Theory and Application*. New York: Psychology Press, pp. 193–208.
- Hobfoll, S. E. 1989. Conservation of resources. A new attempt at conceptualizing stress. *American Psychologist* 44: 513–24. [CrossRef]
- Hobfoll, S. E. 2006. *Stres, Kultura i Społeczność. Psychologia i Filozofia Stresu*. Gdańsk: GWP.
- Hornowska, Elżbieta, Paluchowski Jacek, Jadczyk-Szumilo Teresa, and Szumilo Emil. 2020. Pierwsze dni Pandemii COVID-19—Jak Sobie Radziliśmy, Referat Wygłoszony na Ogólnopolskiej e-Konferencji Naukowej pt. In *Doświadczanie Pandemii COVID-19 w Polsce*. Poznań: UAM.
- Karmolińska-Jagodzik, E., A. Gulczyńska, E. Dobiąła, J. Ławicka, P. Efrenova, and I. Kirillov. 2020. Sposoby radzenia sobie ze stresem w sytuacji pandemii COVID-19, w Polsce i na świecie (Rosja, Gruzja, Turcja, Niemcy, Serbia, Kosowa, Albania, Rumunia, Wielka Brytania). Referat wygłoszony na Ogólnopolskiej e-Konferencji Naukowej pt. In *Doświadczanie Pandemii COVID-19 w Polsce*. Poznań: UAM.
- Kondratowicz, Blanka, Anna Zawadzka, and Magdalena Iwanowska. 2020. Zależności pomiędzy przekonaniami o wolnej woli i determinizmie oraz aspiracjami i satysfakcją z życia w sytuacji zagrożenia (pandemia COVID-19), Referat wygłoszony na Ogólnopolskiej e-Konferencji Naukowej pt. In *Doświadczanie Pandemii COVID-19 w Polsce*. Poznań: UAM.
- Kossakowska, Marlena, Piotr Kwiatek, and Tomasz Stefaniak. 2013. Sens w życiu. Polska wersja kwestionariusza MLQ. *Psychologia Jakości Życia* 12: 111–31.
- Lazarus, R. S., and S. Folkman. 1984. *Stress, Appraisal, and Coping*. New York: Springer, pp. 15–25.
- Mc Gee, S. L., J. Høltge, A. Maercker, and M. V. Thoma. 2018. Sense of coherence and stress-related resilience: Investigating the mediating and moderating mechanisms in the development of resilience following stress or adversity. *Frontiers in Psychology* 9: 378. [CrossRef]
- Methley, A. M., S. Campbell, C. Chew-Graham, R. McNally, and S. Cheraghi-Sohi. 2014. PICO, PICOS and SPIDER: A comparison study of specificity and sensitivity in three search tools for qualitative systematic reviews. *BMC Health Services Research* 14: 1–10. [CrossRef]
- Modrzyński, R. 2018. Conservation of Resources Theory by Stevan E. Hobfoll and prediction of alcohol dependent persons' abstinence. *Alkoholizm i Narkomania* 31: 147–70. [CrossRef]
- Mrozowicz-Wrońska, M., M. Kocurek, K. Ślosarczyk, and K. Cyranka. 2020. Zdrowie psychiczne, czynniki stresowe i sposoby radzenia sobie w grupie osób objętych obowiązkową kwarantanną—Doniesienie wstępne. Referat wygłoszony na Ogólnopolskiej e-Konferencji Naukowej pt. In *Doświadczanie pandemii COVID-19 w Polsce*. Poznań: UAM.
- Mucci, F., N. Mucci, and F. Diolaiuti. 2020. Lockdown and isolation: Psychological aspects of COVID-19 pandemic in the general population. *Clinical Neuropsychiatry* 17: 63–64.
- Mudło-Głagolska, Karolina, and Pavel Larionov. 2020a. Czynniki ryzyka dla zdrowia psychicznego podczas pandemii COVID-19 w populacji Polaków, Referat wygłoszony na Ogólnopolskiej e-Konferencji Naukowej pt. In *Doświadczanie pandemii COVID-19 w Polsce*. Poznań: UAM.
- Mudło-Głagolska, Karolina, and Pavel Larionov. 2020b. Rola pasji pracy i poznawczej regulacji emocji a symptomy depresyjne u osób aktywnych zawodowo w okresie pandemii COVID-19. In *Doświadczanie pandemii COVID-19 w Polsce*. Poznań: UAM.
- Nicola, M., Z. Alsafi, C. Sohrabi, A. Kerwan, A. Al-Jabir, C. Iosifidis, M. Agha, and R. Agha. 2020. The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery (London, England)* 78: 185–93. [CrossRef]
- Poprawa, R., B. Lewandowska, M. Rokosz, K. Tabiś, and M. Barański. 2020. Podstawowe potrzeby psychologiczne, stres i radzenie sobie—Analiza porównawcza doświadczeń okresu przedepidemicznego i epidemicznego. Referat wygłoszony na Ogólnopolskiej e-Konferencji Naukowej pt. In *Doświadczanie Pandemii COVID-19 w Polsce*. Poznań: UAM.
- Rys, P., M. Władysław, I. Skrzekowska-Baran, and M. T. Malecki. 2009. Review articles, systematic reviews and meta-analyses: Which can be trusted? *Polskie Archiwum Medycyny Wewnętrznej* 119: 148–56.
- Schäfer, S. K., N. Becker, L. King, A. Horsch, and T. Michael. 2019. The relationship between sense of coherence and post-traumatic stress: A meta-analysis. *European Journal of Psychotraumatology* 10: 1562839. [CrossRef]
- Taylor, S., C. A. Landry, M. N. Paluszek, T. A. Fergus, D. McKay, and G. J. G. Asmundson. 2020. COVID stress syndrome: Concept, structure, and correlates. *Depression and Anxiety* 37: 706–14. [CrossRef] [PubMed]

- Terelak, Jerzy. 2017. *Stres Życia [The Stress of the Life]*. Warsaw: UKSW Press.
- UNICEF. 2020. UNICEF GLOBAL COVID-19 Situation Report. Available online: <https://reliefweb.int/sites/reliefweb.int/files/resources/UNICEF%20Global%20COVID-19%20Situation%20Report%20No.%206%20-%20for%2015-28%20May%202020.pdf> (accessed on 29 November 2020).
- Skalski, Sebastian, Uram Patrycja, and Dobrakowski Paweł. 2020. Lek w koronie. Referat wygłoszony na Ogólnopolskiej e-Konferencji Naukowej pt. In *Doświadczanie Pandemii COVID-19 w Polsce*. Poznań: UAM.
- Vansteenkiste, M., and R. M. Ryan. 2013. On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration* 23: 263–80. [[CrossRef](#)]
- Vindegard, N., and Eriksen M. Benros. 2020. COVID-19 pandemic and mental health consequences: Systematic review of the current evidence. *Brain, Behavior, and Immunity* 89: 531–42. [[CrossRef](#)] [[PubMed](#)]
- Wang, C., R. Pan, X. Wan, Y. Tan, L. Xu, C. S. Ho, and R. C. Ho. 2020. Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International Journal of Environmental Research and Public Health* 17: 1729. [[CrossRef](#)] [[PubMed](#)]
- WHO. 2020. COVID-19 Timeline. Available online: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/interactive-timeline?gclid=Cj0KCQiAqo3-BRD0ARIsAE5vnaKC1rolzd9tMLymdDnijDMDuTc14c-YRlqEzELh5Qd-cxeTMWaLpR8aAlwCEALw_wcB#event-115 (accessed on 29 November 2020).
- Zhang, J., A. Zhao, Y. Ke, S. Huo, Y. Ma, Y. Zhang, Z. Ren, Z. Li, and K. Liu. 2020. Dietary Behaviors in the Post-Lockdown Period and Its Effects on Dietary Diversity: The Second Stage of a Nutrition Survey in a Longitudinal Chinese Study in the COVID-19 Era. *Nutrients* 12: 3269. [[CrossRef](#)]