

Short Communication**Crises, natural disasters, and pandemics: insights from Positive Psychology****Crises, desastres naturais e pandemias: contribuições da Psicologia Positiva****Crisis, desastres naturales y pandemias: contribuciones de Psicología Positiva***Tatiana de Cassia Nakano, ORCID 0000-0002-5720-8940**Programa de Pós-Graduação em Psicologia da PUC – Campinas. Brasil*

Abstract: In the wake of crises, pandemics, and natural disasters, several devastating consequences concerning the population's mental health can be observed. For this reason, it is important to understand how psychology can help individuals and communities that experience a traumatic event. This paper will focus on insights from positive psychology in this context, given the topicality of the topic in the face of the global pandemic caused by COVID-19. The paper was organized to point out positive psychology applications, considering three phases: disaster preparedness, crisis response, and recovery phase. The literature review demonstrated that positive psychology could enable individuals to grow, even after experiencing a traumatic event, helping them reformulate their negative experiences, reflect on their priorities, and reassess their values.

Keywords: Crisis Intervention; Positive Psychology; COVID 19; Mental Health

Resumo: Dado o caráter imprevisível das crises, pandemias e desastres, diversas consequências devastadoras em relação a saúde mental da população podem ser notadas após sua ocorrência. Por tal motivo, é importante compreender como a psicologia pode ajudar indivíduos e comunidades que experimentam um evento traumático. O presente texto irá focar as contribuições da psicologia positiva nesse contexto, dada a atualidade da temática perante a pandemia global provocada pelo COVID-19. Nesse sentido, o texto foi organizado de modo apontar como a aplicação dos construtos da psicologia positiva pode ser feita, considerando-se três fases: preparação para desastres, resposta a crises e fase de recuperação. A revisão da literatura demonstrou que a psicologia positiva pode possibilitar crescimento aos indivíduos, mesmo após a vivência de evento traumático, auxiliando-os a reformularem suas experiências negativas, refletirem sobre suas prioridades e reavaliarem seus valores.

Palavras-chave: Intervenção em Crises; Psicologia Positiva; COVID 19; Saúde Mental



Resumen: Dada la naturaleza impredecible de las crisis, pandemias y desastres, se pueden ver varias consecuencias devastadoras en relación con la salud mental de la población después de su ocurrencia. Por esta razón, es importante comprender cómo la psicología puede ayudar a las personas y comunidades que experimentan un evento traumático. Este texto se centrará en los aportes de la psicología positiva en este contexto, dada la actualidad del tema frente a la pandemia global causada por la COVID-19. En este sentido, el texto se organizó con el fin de señalar cómo la aplicación de los constructos de la psicología positiva se puede realizar, considerando tres fases: preparación ante desastres, respuesta a crisis y fase de recuperación. La revisión de la literatura mostró que la psicología positiva puede permitir que las personas crezcan, incluso después de experimentar un evento traumático, ayudándolas a reformular sus experiencias negativas, reflexionar sobre sus prioridades y reevaluar sus valores.

Palabras clave: Intervención en crisis; Psicología positiva; COVID 19; Salud mental

How to cite:

Nakano, T.C. (2020). Crises, natural disasters, and pandemics: insights from Positive Psychology. *Ciencias Psicológicas*, 14(2), e-2161. doi: <https://doi.org/10.22235/cp.v14i2.2161>

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Most natural disasters, pandemics, wars, and terror attacks occur on a large scale and affect entire communities. Because of their unpredictable nature, such events can lead to devastating mental health consequences. These are potentially traumatic, sudden, and collectively experienced events, with the potential to disrupt the lives of individuals, families, and communities at various levels, both in the short and long term. (Gil-Rivas & Kilmer, 2016). For this reason, it is important to understand how mental health professionals can help individuals and communities that have experienced a traumatic event (Jacobs, Gray, Erickson, Gonzalez, & Quevillon, 2016).

During a crisis, emergency efforts from different fields are required to help the population's mental health (Faro et al., 2020). This text will focus on insights from positive psychology on response to the pandemic caused by COVID-19, which is considered to be one of the biggest international public health problems in recent decades (World Health Organization, 2020).

During an epidemic, the number of people whose mental health is affected tends to be greater than the number of people affected by the disease. Likewise, the effects on mental health may last longer than the epidemic itself (Ornell, Schuch, Sordi, & Kessler, 2020). In the short term, exposure to a crisis can cause psychological distress, somatic complaints, strained social relationships, sleep disorders, and psychosocial and behavioral problems (Kaniasty, 2020). In the long run, it can cause the development of post-traumatic stress, anxiety, depression, alcohol abuse, panic disorder, and other conditions of impairment to mental health (Gil-Rivas & Kilmer, 2016; Park, 2016). Approximately 30% of affected individuals will need intervention, with the vast majority of ailments gradually decreasing in the first months after the end of the event, suggesting a natural recovery (Gil-Rivas & Kilmer, 2016).

Considering this wide diversity of damage to the physical and mental health of individuals affected by this type of situation, a psychologist's intervention can be helpful at different times (before, during, and after a crisis), not only with the general population, but also

with emergency and health workers, and volunteers working on the front lines (Quevillon, Gray, Erickson, Gonzalez, & Jacobs, 2016). It is important to consider situational factors and individual differences that can impact behavior during a disaster (Robinson, 2018), such as time of exposure, type of disaster, level of exposure, and perceived social support. These factors influence how people react to the event (Lowe et al., 2019; Quevillon et al., 2016).

Within this context, health promotion can be viewed as an essential element of maintaining mental health, by encouraging positive subjective experience (Durgante, Mezejewski, Navarine and Sá, & Dell’Aglío, 2019). However, studies on the long-term consequences of these adaptive functioning mechanisms are still scarce (Morgado, 2018). Therefore, it should be a research goal to discover and promote psychological coping mechanisms in individuals who go through disaster situations (Cherry et al., 2018). Understanding how people recover from these situations can help to plan subsequent interventions and implement programs focused on preventing damage from disasters (Park, 2016).

According to Paranhos and Werlang (2015), Positive Psychology can provide a look at the human potential for recovery, helping to activate the healthy and preserved characteristics of people. Even in complex situations such as disasters and crises, Positive Psychology can help to understand the potentials, capacities, and motivations that individuals have (Machado, Gurgel, & Reppold, 2017).

This movement is based on the study of the resources that people can use to function optimally and flourish psychologically in daily life situations and in those marked by adversities (Fernández-Ríos & Vásquez, 2018). According to Venberg, Hambrick, Cho and Hendrickson (2016), action can take place in three major phases: disaster preparedness, crisis response (during and shortly after a disaster occurs), and recovery (after the crisis response has dissipated). This text was organized to point out how the scientific literature has highlighted the possibility of applying positive psychology constructs, considering these three phases.

Crisis and disaster preparedness phase

The preparation phase involves actions by governments, organizations, communities, and individuals to anticipate and predict the impacts of probable disasters, to try to reduce their risk and increase their response capacity (Paton, 2019). This first phase is the moment when the general population is informed about the existence of the public health problem, including possible consequences related to the event (Faro et al., 2020).

The initial impact of crises and disasters is marked by a sudden, unexpected change, usually involving a loss of resources (material, social, and emotional) (Shing, Jayawickreme, & Waugh, 2016). In this preparation phase, some positive psychology constructs have been identified as important to be stimulated (Figure 1).

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- (1) promoting a psychological sense of security: develop clear and defined crisis response plans, communicated sensitively to the population; attention to emotional and behavioral reactions, especially of children and young people

 - (2) promoting calmness: learning basic relaxation strategies, controlled breathing, muscle relaxation, and exercises with positive images

 - (3) promoting a sense of personal and collective self-efficacy: guidelines that, although disasters cannot be controlled, individuals can engage in behaviors to maximize their own safety or that of others

 - (4) promoting connection: developing a connection between people, making them aware of its importance as a source of support to the community

 - (5) fostering hope: guidance on how to stay safe, recognizing that others are prepared and knowing what kind of help is available; help people focus on the here and now and trust their ability to deal with future stressors

 - (6) resilience: strengthening attachments, bonds with community support organizations, fostering a sense of preparedness to deal with adversity

 - (7) self-care: decisions related to financial planning, appropriate measures to care for yourself and others concerning daily life

 - (8) coping mechanisms: improving perceptions of self-efficacy, autonomy, empathy and positive emotions

 - (9) creativity: daily and constant embrace of the new, adaptation to changes, search for solutions to challenges

Figure 1. Actions during the disaster preparedness phase. Prepared by the author based on Quevillon et al. (2016), Park (2016); Raley, Weber, Lemon, and Schulenberg, (2020); Shing et al. (2016), Southwick, Satodiya, and Pietrzak (2016); Venberg et al. (2016).

Response phase

The intra-crisis period, also called the acute phase, is when the problem sets in, and entails the realization of the severity of the crisis, vulnerability to illness, and recognition of eventual risks (Faro et al., 2020). In this phase, the aim is to alleviate concerns, offer comfort, activate the social network, and satisfy basic needs (Schmidt, Crepaldi, Bolze, Neiva-Silva, & Demenech, 2020). In this period, which involves the response phase, other actions related to Positive Psychology constructs can be listed (Figure 2).

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- (1) psychological sense of security: in addition to ensuring immediate physical security, this includes access to accurate information through media and social media
 - (2) promoting calm: accepting and realizing individuals whose emotional responses involving distress can appear as responses to traumatic stress and should be viewed as normal and expected reactions
 - (3) promoting a sense of personal and collective self-efficacy: encouraging the development of coping tools (self-regulation, emotional control, and regulation)
 - (4) promoting connection: help with practical primary support, assessment of the needs and current concerns of families, and referral to relevant resources (if necessary)
 - (5) fostering hope: understanding that it is common to experience a feeling of helplessness in the face of adversity and doubt about the meaning of life, then aim to return to the level of hope before the crisis
 - (6) resilience: strengthening the capacity to maintain mental health, while experiencing periods of adversity and stress
 - (7) self-care: stressing the importance of asking for help, helping people to maintain their previous routines as much as possible
 - (8) coping: encouraging playful or leisure activities (positive distraction), as well as the development of varied and flexible coping strategies
 - (9) hope: opportunities to develop new paths when the existing ones are no longer possible, creating viable alternatives to reach pre-established goals
 - (10) creativity: allows individuals to generate ideas, adapt new ones, and solve problems during uncertain circumstances, allowing difficulties to be transformed into opportunities
 - (11) proactivity: allows individuals to identify opportunities, act on them, show initiatives, and persevere until a significant change in the situation occurs
 - (12) optimism: it allows the individual to perceive the current situation as a moment of learning in which a change of habits was necessary
 - (13) self-compassion: cushioning the impact of negative events, assuming a position of self-care
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Figure 2. Actions during the disaster response phase. Prepared by the author based on Ambrose (2016), Gong, Cheung, Wang and Huang (2012), Liberto, Johnson and Schulenberg (2020), Runco (2016), Quevillon et al. (2016), Shing et al. (2016), Venberg et al. (2016), Zanon, Dellazzana-Zanon, Wechsler, Fabretti, and Rocha (2020)

In this phase, the ability to maintain a healthy psychological adjustment state is challenged, due to the burden of negative experiences and emotions that may arise, resulting from the daily experience. It is necessary to implement strategies and alert the population to the risks, avoiding misleading information, which can increase insecurity, stress, anxiety, and depressive symptoms.

Recovery phase

The third moment of the crisis can be understood as a phase of social reconstruction. People start to resume their usual activities, returning gradually to the functioning of institutions and a lower level of demand for protection (Faro et al., 2020). Other aspects related to Positive Psychology can be encouraged in this period, to minimize the impact of the crisis (Figure 3).

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- (1) psychological sense of security: as recovery progresses, the resumption of family routines and activities helps signal that immediate concerns about post-disaster security have subsided. A time to address thoughts and feelings about the crisis
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- (2) promotion of calm: stressing/explaining that emotions and negative thoughts often occur, which can be triggered by memories of trauma and loss, decreasing, progressively, over time, naturally or with the help of psychological interventions
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- (3) promoting a sense of personal and collective self-efficacy: stimulating a sense of independence and autonomy, and realistic expectations about the recovery process
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- (4) promoting connection: helping others to access social support on a continuous basis; it is important to identify individuals with limited social support, directing them to more formal support
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- (5) fostering hope: helping people to shift focus from negative feelings to thoughts about daily tasks, developing new skills, remembering that new growth is possible, despite the disaster experienced
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- (6) resilience: reducing reactivity to stress and promoting positive experiences
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- (7) self-care: for those cases in which difficulties are noticed, an individual assessment must be conducted to identify individuals who need further monitoring; encouraging the resumption of routines, involvement in leisure activities, or some time alone is important
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- (8) coping: seeking emotional closeness in an attempt to restore normalcy, combined with the experience of reflecting on life's priorities, reevaluating values and reinterpreting the traumatic event, giving it a new meaning
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- (9) creativity: it can transform people's experience, increasing the belief that they can overcome the present challenges and solve remaining difficulties in creative ways
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Figure 3. Actions during the recovery phase. Prepared by the author based on Quevillon et al. (2016), Sattler and Smith (2020), Razulzada and Dackert (2009), Shing et al. (2016), Venberg et al. (2016).

In this phase, the actions focus on the attempt to avoid, mainly, the development of post-traumatic stress, and the triggering, aggravation, or relapse related to mental disorders. It is important to offer adequate assistance to the population's mental health to minimize the suffering resulting from the crisis. It seeks to help individuals develop a more positive expectation of themselves and their life, enabling them to deal better with people and situations and reduce their suffering through the establishment of balance and mental health (Zanon et al., 2020).

Final considerations

Several studies have suggested the possibility of growth in response to a traumatic event. In this context, psychology can bring important contributions to face the pandemic caused by Covid-19, aiming mainly to reduce the negative effects on the mental health of the population, immediately and after the event.

Positive psychology can help individuals reshape their negative experiences, leading them to reflect on their life priorities, reassess their values, and give new meaning to the event experienced (Sattler & Smith, 2020). The constructs of positive psychology can act to protect mental health and can be applied in different phases of the crisis, pandemic, or disasters, to minimize negative impacts.

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Acknowledgement: Fundação de Amparo a Pesquisa for its support in the form of a research grant abroad.

Scientific editor in charge: Dra. Cecilia Cracco