

Reflection Article/Essay

Reflections on the actions of occupational therapists in emergencies and disasters: historical trajectory, current landscape, and future challenges

Reflexões sobre as ações de terapeutas ocupacionais nas emergências e desastres: trajetória histórica, cenário atual e desafios futuros

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Abstract

Emergencies and disasters have increased in both intensity and frequency over the past decades. Their effects impact lives, socioeconomic conditions, and the environment, and are often accompanied by ethical dilemmas, political hesitation, and scientific denialism, underscoring the need for coordinated, cross-sectoral actions. To this end, it is essential to revisit and reconsider certain misunderstandings surrounding terms, notions, and concepts, integrating them as important elements of emergency and disaster management. Accordingly, this study aimed to identify historical aspects and emerging perspectives in the field of emergencies and disasters, particularly those related to occupational therapy. In the first part, we summarize the key elements to be considered in the conceptual development of the field and its implications. In the second part, we reflect on institutional intervention frameworks that occupational therapists have employed in this field of knowledge, seeking to expand the theoretical and practical scope, in Brazil.

Keywords: Concept Formation, Disasters, Emergencies, Occupational Therapy.

Resumo

As emergências e desastres têm aumentado em intensidade e frequência ao longo das últimas décadas. Seus efeitos afetam a vida, aspectos socioeconômicos e o meio

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ambiente, além de serem acompanhados por dilemas éticos, hesitações políticas e negacionismos científicos, reafirmando a necessidade de ações coordenadas e intersetoriais. Para tanto, é essencial desfazer e reconsiderar alguns mal-entendidos sobre termos, noções e conceitos, incorporando-os como parte relevante da gestão de emergências e desastres. Dessa forma, o estudo buscou identificar aspectos históricos e perspectivas que vêm sendo desenvolvidas no campo das emergências e desastres, notadamente relacionados à terapia ocupacional. Na primeira parte, resumimos os principais aspectos a serem considerados no desenvolvimento conceitual do campo e suas implicações. Na segunda parte, refletimos sobre marcos institucionais de intervenção que terapeutas ocupacionais têm utilizado nesse campo de conhecimento, visando ampliar o seu escopo teórico-prático, no Brasil.

Palavras-chave: Conceituação, Desastres, Emergências, Terapia Ocupacional.

Introduction

This theoretical essay is part of a broader study addressing emergencies and disasters conducted by two occupational therapists. We apply a perspective inherent to the profession to interpret the sociopolitical and cultural context, aiming to enrich the academic dialogue from multiple interfaces. Still, we recognize that this perspective is only one among many possible ones. We seek to broaden the academic discussion and identify historical aspects and perspectives in the field, expanding the theoretical and practical scope in Brazil, particularly in its intersections with occupational therapy.

Between Contradictions and Ambiguities: the Conceptual Mosaic of Emergencies and Disasters

The intensification and frequency of emergencies and disasters reveal a historical weakness in the articulation between science, politics, and society, with institutional responses marked by ethical dilemmas, economic interests, hesitation, prejudice, denialism, as well as persistent structural and political shortcomings (Porto & Ponte, 2003; United Nations Office for Disaster Risk Reduction, 2024). Conceptual clarity can benefit both theoretical understanding and efficient planning and management (Quarantelli, 2005). Particularly considering the proliferation of terms, notions, and/or concepts in this field (Quarantelli, 1998), often used interchangeably despite referring to different phenomena, their paradigms, definitions, and implications for Brazil are briefly presented here.

Gilbert (1998) identifies three main historical and epistemological stages in the conceptual approaches to disasters that constitute this field of knowledge. The first, influenced by the United States, sees disasters as a duplication of war, centered on responses to external threats. The second, influenced by Quarantelli (1970), views them as expressions of social vulnerabilities resulting from internal factors. The third considers disasters as uncertainty, generated by social failure rather than an external factor, that is, stemming from the absence of risk perception and communication (Gilbert, 1998).

The first social study on disasters analyzed the Halifax explosion in 1917 (Prince, 2024). Since then, authors such as Oliver-Smith (2010) and Perry & Quarantelli (2005) have contributed to the consolidation of the field. For Quarantelli (2005), disasters are social events that suggest the interrelation and interaction of societies can transform events of natural origin into disasters with serious consequences (Organização Pan-Americana da Saúde, 2014). Carr (1932) had already indicated that if a city (or community) resists, the disaster does not occur. Thus, natural disasters do not exist (Chmutina & von Meding, 2019), as if they could occur outside human actions, omissions, and even decisions, and those of their societies (Quarantelli, 2005).

In Brazil, the heavy rains in the state of Rio Grande do Sul (Brasil, 2012; Rio Grande do Sul, 2024) exemplified how social factors, irregular land occupation, poor road infrastructure, deforestation (Dudley et al., 2015), pollutant emissions (Althor et al., 2016), the return of affected individuals¹ to the same disaster sites, and failures in alert systems, exacerbated their effects (Quarantelli, 2005).

The literature links the increase in risks to the capitalist model and neoliberalism (Smith, 2007; Moore, 2015; Isaguirre-Torres & Maso, 2023). Differences in impact between the Global North and South are not explained solely by the intensity of events but suggest structural inequalities (Oliver-Smith, 2010). Some authors emphasize the roots of disasters, highlighting that their causes stem from social, economic, and political processes (Quarantelli, 2005; International Decade for Natural Disaster Reduction, 1999; Oliver-Smith et al., 2016). Similarly, Albala-Bertrand (1993) points out that disasters expose pre-existing social problems. An example of this can be found in the 1995 song from Rio Grande do Sul, *Milonga abaixo do mau tempo*, which seems to accurately portray the current period of heavy rainfall (Rio Grande do Sul, 2024) and depicts a reality that has persisted since the 1941 floods (Torres, 2013).

Coisa esquisita a gadaria toda / Penando a dor do mango com o focinho n'água
(Strange sight, all the cattle / Suffering the sting of the whip with their snouts
in the water) (Mauro Moraes, 1995).

The recent rains then revealed Brazil in this contradiction²: despite progress (Food and Agriculture Organization., 2024), hunger, illiteracy (including digital illiteracy), precarious housing, and barriers to accessing information persist. This means that the ways of life of populations in vulnerable situations amplify the effects of disasters, revealing weaknesses in social systems (Quarantelli, 2005). Although outside the scope of this study, it is worth considering environmental racism (Bullard, 1993; Herculano, 2008) and the deterioration of environmental safety and sustainability, resulting from urban planning that prioritizes profit (Colton, 2006).

In Brazil, the concept of disaster is part of the National Policy for Civil Protection and Defense (Brasil, 1995, 2012, 2020, 2023) and refers to adverse events, a term

¹ It refers to individuals, communities, societies, or systems that have experienced, directly or indirectly, the effects of catastrophes, emergencies, and/or disasters (adapted from United Nations Office for Disaster Risk Reduction, 2017). It contrasts with the notion of victim, understood as someone vulnerable and in need of protection. Affected individuals are not considered ontologically vulnerable. In this sense, space is opened to recognize that those affected can also create, demand, elaborate and transform, being, therefore, protagonists and not just targets of care.

² Song: The face of Brazil; Celso Viáfara & Vicente Barreto (2017).

used internationally (Organização Pan-Americana da Saúde, 2010) classified as being of natural origin or induced by human action. However, the Brazilian Classification and Codification of Disasters (COBRADE), which describes such codification and classification in the country, maintains the terms *natural disaster* instead of *of natural origin* and *technological disaster* for those induced by human action (Brasil, 2012). The concept of natural disaster requires a thorough understanding (Quarantelli, 2005). Although associated with geological, hydrological, or climatological causes, the disaster involves human actions or omissions. Not every heavy rainfall, for example, results in a disaster, which reinforces the need to recognize socioeconomic causes that are often overlooked.

The distinction between disaster and catastrophe is rarely addressed with due rigor. For Quarantelli (2006), this differentiation is qualitative rather than merely a matter of scale. While a disaster affects organizational systems and can be absorbed by existing structures, a catastrophe disrupts these structures at multiple levels: community, institutional, and territorial. A catastrophe, therefore, implies a massive and widespread interruption of everyday life.

An emergency, in turn, is defined by the World Health Organization (WHO) as [...] “a situation that affects the lives and well-being of a large number of people [...] and that requires substantial multi-sectoral assistance” (World Health Organization, 2017, pp. 8, our translation). It is a process limited in time and space, declared and terminated by a competent authority (Miranda, 2010). In Brazil, Decree No. 7.616/11 (Brasil, 2011) details epidemiological, disaster-related, or assistance-lack situations that justify such a declaration.

Public health emergencies, as defined by the International Health Regulations (World Health Organization, 2005, pp. 14-15), are determined by:

- (i) a public health risk to other States due to the international spread of disease;
- and (ii) a situation potentially requiring a coordinated international response.

Hence, they involve severe outbreaks, usually zoonotic (Kilpatrick & Randolph, 2012), and are always defined by their occurrence in a specific time and place (Miranda, 2010) and by the requirement for a declaration (World Health Organization, 2005).

Finally, climate emergencies reflect the failure of global actions (United Nations Framework Convention on Climate Change, 2016; Intergovernmental Panel on Climate Change, 2023) to address the effects of greenhouse gases, sea level rise, and extreme heat (United Nations Office for Disaster Risk Reduction, 2024; Copernicus, 2024), which led to the shift in terminology from *climate change* to *climate emergency* (Intergovernmental Panel on Climate Change, 2023). Although there is still no global consensus, these also require a formal declaration.

The UN Office for Disaster Risk Reduction acknowledges the interchangeable use of the terms *emergency* and *disaster* (United Nations Office for Disaster Risk Reduction, 2017). We agree that disasters can generate emergencies, including public health emergencies, if they are declared (World Health Organization, 2005). However, as Quarantelli (2005) and Oliver-Smith (2021) caution, it is essential not to lose sight of the fact that risks and disasters are social constructions. Risk will never be eliminated; therefore, we must avoid attributing it exclusively to climate change, for example (Oliver-Smith, 2021).

A Focus on Emergency and Disaster Risk Management or on Management Itself: a Necessary and Urgent Awareness

Freire (1982, p. 138, our emphasis) defines the types of awareness: “Critical awareness is the representation of things [...] as they occur in empirical existence. [...] Naive awareness [...] believes itself superior to the facts [...]”. This teaching helps us understand that planning based solely on risks may be a naive reading: “[...] to tell the truth, the danger may sometimes exist. [...] it represents one factor, and not necessarily the most important” (Quarantelli, 2005).

As an example, the similarity and contrast between the 2010 earthquakes in Chile (8.8 on the Richter scale, 577 deaths, disaster) and Haiti (7.0 on the Richter scale, 300,000 deaths, catastrophe) revealed that the hazard itself was not one of the most relevant factors, since the earthquakes produced completely different effects (Pan-American Health Organization, 2010, 2011; Calais et al., 2022; Miranda, 2010; Quarantelli, 2006).

In this sense, a critical and courageous reading of reality is essential. In Brazil, Disaster Risk Management (DRM) is incorporated into the National Policy on Civil Protection and Defense (PNPDC) (Brasil, 2012) and into Bill No. 5.002/2023, which proposes the National Policy on Comprehensive Disaster Risk Management (PNGIRD) (Pontes, 2024).

In the country, DRM, although conceived as a social process, aims to prevent, reduce, and permanently control disaster risk factors, aligning with international and national frameworks and guidelines (Bill 5,002/2023; United Nations Office for Disaster Risk Reduction, 2016; United Nations Office for Disaster Risk Reduction, 2015) (Figure 1). It is linked to Disaster Risk Reduction (DRR), which includes prevention, preparedness, mitigation, response, and recovery (Bill 5,002/2023). It is worth asking whether the focus is shifting away from concern with the physical characteristics of risk to include social factors, which would certainly be advantageous, as we have tried to emphasize.



Figure 1. Brief overview of the main milestones in emergencies and disasters.

Quarantelli (2005) points out that a stance centered on risk logic allows for the anticipation of possible disasters and the avoidance of irreparable losses, such as human lives. However, it is necessary to consider available resources: historical, current, and even hypothetical, that is, to learn from the harmful effects of neoliberalism and to seek alternatives that resist the logic that neglects ecosystem exploitation and increases vulnerabilities (Oliver-Smith, 2015, 2021). For example, one can cite manifestos denouncing the imposition of risks, inadequate or poorly distributed assistance, lack of transparency in contingency and/or reconstruction plans, and the displacement and resettlement of *vulnerable populations*, among other forms of political engagement (Checker, 2017; Oliver-Smith, 2021).

Social transformations tend to change the frequency and type of disasters. Therefore, future planning and management must consider these changes (Quarantelli, 2005). In short, for appropriate policies to be established, programs conducted, and measures implemented at all stages of planning and management, it is necessary to recognize that disasters are inherently social phenomena. As Freire (1982) proposes, it is necessary to go beyond the *dead letter*³ of the law to ensure real safety for the population.

Identity, Values, and Vision: the Cornerstone of Occupational Therapists in Emergencies and Disasters

Occupational therapy is a field of knowledge and intervention in health, education, and the social sphere whose professional identity is anchored in promoting social participation and valuing meaningful occupations for autonomy and emancipation (World Federation of Occupational Therapists, 2017). Its values and vision are grounded in human rights and an ethical, social, cultural, and political commitment to justice and sustainability.

Given social transformations and the increase in the frequency and complexity of disasters (Quarantelli, 2005; United Nations Office for Disaster Risk Reduction, 2024), occupational therapists have prioritized the well-being of populations in vulnerable conditions (Habib et al., 2013). Their identity (Galheigo, 2014), vision, and values guide political action, with the potential to influence macrostructural changes, from public policies to institutional reorganizations (Stark, 2013), in line with Cutter's (2001) perspective, which proposes overcoming a risk-centered logic and prioritizing the reversal of vulnerabilities.

Historically, the profession has stood out in promoting social participation and autonomy in diverse contexts, including humanitarian crises (Stark, 2013), natural disasters (Taylor et al., 2011; Ching & Lazaro, 2021; Rashad et al., 2022), technological disasters (Hossain et al., 2013; Borges, 2017; Souza, 2023), and, more recently, the COVID-19 pandemic (Nizzero et al., 2017; Smallwood et al., 2021; Rodrigues, 2023). In such situations, professionals work directly with the effects of occupational disruption and support adaptability (Sima et al., 2017).

³ Dead letter refers to something that has become less relevant or has lost its meaning.

Although studies in the area⁴ are expanding, it is necessary to problematize the field to broaden knowledge about phenomena related to disasters. The World Federation of Occupational Therapists (WFOT) has adapted to global demands to ensure occupational justice, sustainability, and equity (World Federation of Occupational Therapists, 2014, 2016, 2024). However, a gap persists in formal participation and research production in emergencies and disasters. Despite the existence of regulations, such as Resolution No. 383/2010 (Brasil, 2013), issued by the Federal Council of Physiotherapy and Occupational Therapy (COFFITO), the consolidation of this practice in Brazil is still in progress.

International and National Frameworks: Mere Invitation or Immediate Call to Action for Occupational Therapists?

In recent years, international frameworks in this field have expanded, with global and national goals and strategies being established (Brasil, 2012, 2023; Comissão das Nações Unidas para o Desenvolvimento Sustentável, 2012; United Nations Office for Disaster Risk Reduction, 2015; Pontes, 2024; Nações Unidas Brasil, 2024). Under some social pressure, representative occupational therapy organizations have been recognizing the role of the profession. One example is the set of recommendations published after the 2004 Indian Ocean disaster, aimed at preparing occupational therapists (Sinclair et al., 2005). In 2011, the American Occupational Therapy Association (AOTA) declared that the profession has a role in response and DRR (American Occupational Therapy Association, 2011, 2017). Similarly, the World Federation of Occupational Therapists (2014) stated that these professionals should be involved in all phases of DRM.

An important milestone in recognizing occupational therapists' intervention in this field occurred in 2016, when the World Health Organization (WHO) included rehabilitation professionals in emergency teams, establishing minimum standards for their participation:

The specialized rehabilitation care team must be composed of at least three rehabilitation professionals. Teams should be multidisciplinary and include at least one physical therapist, as well as another rehabilitation discipline (occupational therapy, psychiatry, and/or rehabilitation nursing) (World Health Organization, 2016, p. 14).

In Brazil, the occupational therapy code of ethics and deontology establishes the duty to provide services in “[...] cases of war, catastrophe, epidemic, or social crisis” (Brasil, 2013)⁵. We are summoned to act, but what exactly will we do, and how will we do it? This is an ethical, moral, and political challenge. In this regard, investigating differences stemming from geographic locations, social contexts, resources, disaster origins, as well as prior

⁴ According to a proposal outlined in the scoping review protocol (Ribeiro & Magalhães, 2024). In that project, the work of occupational therapists was studied with the aim of mapping the state of the art regarding the actions of occupational therapists in emergencies and disasters (Ribeiro & Magalhães, 2024).

⁵ It should be noted that there is no mention of disasters, which are possibly being used interchangeably with catastrophes. Moreover, it is important to distinguish disasters from conflicts (such as wars) because, while disasters tend to elicit pro-social and cooperative responses, conflicts present greater behavioral variability, often involving antisocial attitudes (Quarantelli, 2005).

engagement in policy and strategy formulation, can lay the groundwork for occupational therapists' contributions in this field.

In 2024, the WFOT updated its document, reaffirming the local, national, and international responsibilities of occupational therapists. The update, based on interviews with 14 experienced professionals, presented advances in person-centered actions, community-based rehabilitation, and advocacy, aiming to create and/or strengthen policy changes (World Federation of Occupational Therapists, 2024). These initiatives encompassed all disaster phases with intersectoral approaches. The document also highlighted progress in research and curricula, encouraging their continuity (World Federation of Occupational Therapists, 2024). Nevertheless, it continues to emphasize actions under a risk-centered logic, overlooking the social construction of vulnerabilities that exacerbate challenges, an issue that seems problematic in our context.

Despite growing recognition, the presence of these professionals in the prevention and preparedness phases remains limited (Habib et al., 2013; World Federation of Occupational Therapists, 2016, 2024). Ching & Lazaro (2021), in interviews with occupational therapists, found that their work occurs mostly in the response and recovery phases, focusing on (1) mental health of survivors and families, (2) identification of persons with disabilities, (3) home visits, and (4) environmental adaptation.

The risk-centered logic underscores the thin line between reactive response and proactive preparedness. Without prior actions, the response often appears disconnected, feeding the false idea of the unexpected. However, interventions frequently occur without planning, coordination, or structured leadership. Professionals and students are sometimes affected and take on the role of responders to the same disaster, as in the nightclub Kiss fire (Conselho Regional de Fisioterapia e Terapia Ocupacional, 2020), the Vale and Samarco dam collapses (Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis, 2015; Fundação Getúlio Vargas, 2019), the extratropical cyclone (Universidade Federal de Pelotas, 2023), and the heavy rains in Rio Grande do Sul (Blunck, 2024).

Simon (2005) conducted a literature review and found no records of preventive actions by occupational therapists. Still, Asher & Pollak (2009) pointed to relevant possibilities, such as planning transportation and positioning for persons with disabilities, selecting essential equipment, and ensuring access and safe routes.

Habib et al. (2013) reported the preventive work of three occupational therapists in Bangladesh, including home risk mapping and the identification of persons with disabilities and environmental barriers. They also listed available community resources and trained volunteers, which contributed to safer and more effective actions, as recommended by the United Nations Office for Disaster Risk Reduction (2015). These are factors that can make a difference in DRR action plans.

Overall, the approach presented in the international literature, related to occupational therapists' practices, remains centered on risk logic, focusing mainly on the negative effects of disaster occurrence and directing occupational therapists' attention toward *victims*. As an example, the very concept of disaster adopted by the UN, included in the updated World Federation of Occupational Therapists (2024) document, describes:

A severe disruption in the functioning of a community or society at any scale, caused by hazardous events interacting with conditions of exposure, vulnerability, and capacity, leading to one or more of the following: human, material, economic, and environmental losses and impacts (United Nations, 2016, cited by World Federation of Occupational Therapists, 2024, p. 9, Our translation).

According to Quarantelli (2005), this lack of consideration for the broader context reflects the predominant historical approach to disaster research. However, if we focus on disasters rather than risks, we will consider a broader view of the social aspects of disasters, which can lead occupational therapists toward a new direction, still lacking research and systematization.

This stance requires considering the significant social changes occurring in political, economic, family, cultural, educational, and scientific spheres (Oliver-Smith, 2021). Quarantelli (2005) brings an important reflection: if we do not consider social transformations, we will treat disasters solely as social problems, failing to perceive the positive effects that can emerge from these situations. Although controversial, it is known that the traditional perspective emphasizes the negative and the reactive. Yet, according to Quarantelli (2005, p. 346), “[...] we probably underestimate how many of our concepts and ideas in the disaster area do not fully reflect the range of human experiences in the world”.

In this new perspective, Quarantelli (2005) evokes the positive and the proactive, a concept developed by Scanlon (1988), who addressed various positive aspects of disasters across all social levels. However, if we examine disasters through this new lens, we will need to change our conduct and research agendas, integrating this new focus. Given the multiple ways emergencies and disasters affect people, will this be possible? Another point to consider, in the case of heavy rains, is the precarious condition of those affected before the events. The assistance received, even if insufficient, after the disaster may seem beneficial to them (Comissão Interamericana de Direitos Humanos, 2025). It is worth asking: given the precarious situation, can these be considered positive aspects? This reflection leads us to another question posed by this author: Do the concepts we have adopted in the disaster field fully reflect the diversity of human experiences? (Quarantelli, 2005).

The concept of uncertainty is central to occupational therapy practice (Aldrich, 2024). Intensified by vulnerabilities, uncertainty is not merely an external factor but part of everyday experience, and it is vital for planning interventions. The ability to cope with what seems unpredictable, such as the potential lack of control and instability during disasters, requires us to adjust our approaches, being sensitive to the different adaptation strategies people develop, as well as to the recognition and respect of our own pace. This position helps us support individuals and groups more comprehensively in restructuring their routines and occupations, fostering the restoration of autonomy and well-being in contexts that demand resilience, agency, and flexibility. Therefore, if we consider disasters as an integral part of the evolution of social systems, it will be essential to examine both the functional and dysfunctional aspects in this context (Quarantelli, 2005).

Understanding the Past to Build a Safer and More Supportive Future

The configuration of this field, although incipient for occupational therapists, requires the extraction of lessons learned and the adoption of a theoretical-practical stance that fosters dialogue on the subject, considering its epistemic complexities. It is essential to propose actions aligned with international, national, and local frameworks through a critical analysis of reality. In the future, it is expected that our work will be expanded and integrated into the curriculum, strengthening its role and promoting its practices toward the desired social changes.

Changing the world is as difficult as it is possible (Freire, 2000, p. 20).

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Fernanda Laís Ribeiro: study design, research, writing, and review of the manuscript. Diogo Schott: conceptual revision and text review. Elaine Silva Miranda: conceptual consultancy and manuscript review. Lilian Magalhães: study design and guidance and manuscript review. All authors approved the final version of the text.

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