

A Reflection on Resilience in Disasters; The Application of Thomas A. Spragens' Methodology

Seyyed Khodayar Mortazavi¹, Hossein Sharifara²

Date of submission: 29 June 2018, Date of acceptance: 20 Oct. 2018

Review Article

Abstract

Reducing vulnerabilities and enhancing capacities of communities to cope with disasters could be regarded as a new model in the disaster management approach. It changes traditional passive disaster response into an active resilience-based action. This new understanding can be considered as a way of treatment to get out of the critical traditional relief assistance as well as its challenges and bottlenecks. What is resilience and how to exploit Thomas A. Spragens' four-stage methodology of crisis theory, as theoretical justification of resilience, are two questions that the present study seeks to provide response to. The findings revealed that using Spragens' model including observation of disorder, diagnosis, reconstructing the polis, and prescription, the resilience process can be reconsidered in the field of disaster management, in order to present a comprehensive and systematized image of its role in the novel and resilience-based disaster management to the audience by putting it into the theoretical perspective.

Keywords: Resilience; Vulnerability; Crisis; Spragens; Sendai Framework; Hyogo; Yokohama

How to cite this article: Mortazavi SK, Sharifara H. A Reflection on Resilience in Disasters; the Application of Thomas A. Spragens' Methodology. Sci J Rescue Relief 2018; 10(3): 50-60.



Introduction

Resilience in the Sendai framework is the capacity and ability of a system to cope with incidents and unexpected disasters, so as to be able to sustain and resist, adapt, and overcome on time and effectively. Preservation and survival of the system and its core functions are among the consequences of resilience.

In order to reduce the risk of disasters, Sendai framework was approved in the Sendai City of Japan after consulting with beneficiaries and negotiations among various governments and endorsed by the United Nations (UN) General Assembly, during its 3rd global conference. It was known as Sendai Framework for Disaster Reduction 2015-2030 (1). In fact, Sendai Framework was replacement of the Hyogo framework of action 2005-2015, which had already been developed by the UN to build up resilience in nations and communities against disasters as a priority for the governments and

local communities. In this framework of action, resilience is referred to as the capacity of a system or community that is potentially exposed to risk to adapt to and maintain resistance or change with an acceptable level of structure and function. In its turn, the Hyogo framework was a solution that was introduced and approved following the approval of the Yokohama strategy and plan of action. It is to be noted that this strategy and plan of action was approved at the First World Conference on Natural Disaster Reduction, which was held with the theme of "a safer world" in Yokohama, Japan, on May 23-27, 1994. The Yokohama strategy and plan of action can be considered as a turning point in the area of risk and vulnerability reduction (2).

The attempt to introduce and institutionalize resilience in the set of disaster management activities was made to change the focus on passive responding into a management that emphasizes the development and empowerment of

1- PhD, Faculty Member, Department of Political Science, South Tehran Branch, Islamic Azad University, Tehran, Iran

2- PhD Student, Department of Political Science, South Tehran Branch, Islamic Azad University

Research Center for Emergency and Disaster Resilience. Red Crescent Society of the Islamic Republic of Iran, Tehran, Iran

Correspondence to: Seyyed Khodayar Mortazavi, Email: skmortazavia@gmail.com

humans and communities at all levels, while systematically and actively contribute to the creation and promotion of resilience in order to reduce the fatal and heavy impact of disasters; the impact that had put the development and advancement at serious risk and had become a major concern for countries. Until the 1990s, according to the annual report on the global disasters issued by International Federation of Red Cross and Red Crescent Societies, this concern established a wave of serious efforts aiming to organize disaster-induced disturbances in countries. The result of such concerns and efforts led to the naming of the 1990s as the International Decade for Natural Disaster Reduction, approved by the UN. Despite the activities planned to respond effectively to disasters, they were still used to dominate in causing deadly impacts and complex vulnerabilities. For instance, in accordance with the global annual report of disasters released in 2000, during the 1990s, 1,958,928,805 people were affected by 4,864 worldwide disasters during which 592,537 lost their lives, in addition, the disasters left \$ 741,033,383 of financial damage and millions of homeless and displaced people (3).

In response to such a situation and in order to find a more appropriate solution, the world natural disaster reduction conference was held in Yokohama, Japan, in 1994 with the theme of a safer world so that the officials in different countries, prone to disasters, can seek for ways to reduce the vulnerability, risk, and deadly impacts of disasters within a strategic framework. This conference, as a starting and decisive point, introduced the disaster management trend into a new and more promising stage.

In other words, the Yokohama strategy was a framework for activities that then led to the resilience plan as a treatment for the disorders and disturbances imposed on the lives and properties of humans in various countries. As formerly, despite the continuing effort to achieve a safer world, the disasters continued to cause deadly impacts on humans and communities in the absence of resilience, facing them with serious disorders in terms of living and development. In this regard, the UN report noted that on average, 240 million people annually suffered from homelessness and annihilation due to disasters around the world from 2000 to 2005. In an effort to organize the induced disruptions and ruins,

another set of different humanitarian efforts was undertaken, several inter-period investigations were carried out, and various programs were set up to optimize and organize the disaster response situations. All of this was accomplished with the aim to provide appropriate conditions and environment for living and growth of individuals, groups, societies, and countries against the pernicious and costly natural and unnatural disasters.

Given the importance and role of resilience in improving disaster management conditions, the present study uses the Spragens methodology model, seeking for a new form to achieve a deeper understanding of resilience. The claim in this study is that this theory is not only capable of providing a reliable theoretical support for effective operational disaster responses, but is able to provide a more comprehensive image of resilience in a broader perspective to the audience. This image can help disaster management practitioners in scrutinizing the decision-making processes and implementation operations, in addition to ultimately helping the individuals' stability, compatibility, and better recovery in effective confrontation and how to deal with future disasters. This study can be considered as an interdisciplinary subject addressing different aspects of disaster management and resilience to the disasters from the point of view of various fields.

In the book entitled "Understanding Political Theory", Spragens reviews explorations of political philosophers and presents a 4-level model that includes 1) observing crisis and disorder, 2) diagnosis of the problem and cause of the crisis, 3) imaginative reconstruction of the polis; and finally 4) prescribing a solution to the problem (4).

Since the first stage and the starting point of the Spragens' theory is to observe the crisis and disorder and its final phase is to provide a solution, it is referred to as the crisis theory. The Spragens methodology, which is essentially an effort to understand the political theories, has originally rooted in the accurate sciences and adopted from the field of empirical sciences, in particular medical sciences, and applied in the social and political sciences. In the Spragens viewpoint, the goal of the political theory is to provide a comprehensive insight into the political community. By placing politics in a broad

perspective, a political theorist tries to provide his audience with a comprehensive image. In essence, his goal is to eliminate the shortcomings often observed in understanding the political theory. In the following, the resilience subject has been investigated in light of the four stages of the Spragens crisis theory.

Concept of resilience

Specific and literal definition: In its root and Latin meaning, the term resilience is equivalent to returning to the first position (5). Connor and Davidson did not refer to resilience only as stability and resistance to damages or threatening conditions. They believed that resilience was not a passive state in dealing with dangerous conditions, rather it benefited from an active, influential, and constructive presence in its peripheral environment (6). In this sense, resilience is the ability of an individual to establish a biological-psychological balance in dangerous conditions.

Ranjan indicated that this term with such a concept appeared in the previous three decades in the field of ecology literature and in the study by Holling as “resilience and the stability of ecological systems” (7).

Two decades later, Holling et al. redefined this concept as an intervening capacity or the ability of a system to attract chaos or disturbance intensity before the system changes its structure by changing its variables (8).

General and terminological definition: Resilience to disasters emphasizes the processes and conditions in societies that increase or decrease the ability of humans to resist, adapt, and rehabilitate in the shocks, chaos, and disorders in the shortest time possible without the need for the external assistance.

Mitchell and Harris, while introducing resilience as an approach, suggest that resilience originates from mixing of interdisciplinary ideas including ecosystem sustainability, engineering infrastructure, psychology, behavioral sciences, and reduction of disasters risks. It also states that the recent attention of partner organizations to this concept has led the resilience to change from a theory to politics and practice. Such attention is due to the need for the identification of a broad discourse and a set of guiding principles to protect development advances against shocks and tensions (9).

In its report on resilience to disasters, the UK Department for International Development (DID) considers resilience as the ability of countries, communities, and households to manage change, which is achieved by establishing, and changing living standards against shocks and stresses such as earthquakes, droughts, or violence (10).

Resilience and systemic attitude: Resilience is the capability of a system to take chaos and change, while its function, structure, identity, and feedback remain unchanged.

The emphasis of this view is not only on the form and degree of system capacity that has the ability to resist the impact of events, but also emphasizes the continuation of business and its functions, as well as the normalization of conditions. It is worth noting that the normalization of the conditions of events and the continuity of business are the main issues and concerns of crisis management. In this case, resilience is capable of reducing the cost of disasters and can bring the critical situation back to better conditions than before.

Resilience is the capacity of a system or community to cope with the risk of potential disasters so that when disasters occur, they can achieve the optimal level of adaptability and consolidation of their structures and functions. This capacity relies on the ability of the system to enhance its ability to learn lessons related to the previous disasters and protect itself in the future while promoting risk reduction measures. Reports on disaster assessment, and particularly after action reports on disaster relief, contain valuable lessons that can be taken into account to facilitate and quicken the achievement of resilience. In fact, a system and community can be effective and resilient in the events and critical situations ahead, which can, based on the content of these reports and in order to improve the situation, identify and assess weaknesses, threats, strengths, and opportunities in the course of disaster management operations.

Resilience is a process that relates a set of compatible capacities to a flow of functions and compatibility in response to chaos. The reference of this claim to the fluidity of resilience reflects the importance of the continuing role of education, practice, monitoring, and evaluation in order to create flexibility and adaptability to changing circumstances. Accordingly, disaster management requires careful planning so that

individuals and communities can turn their potential capacities into suitable work and resilience in the event of a disaster.

Given the restrictions that the changes and uncertainties create for individuals and communities in determining the conditions ahead, as well as their effect on the quantity and quality of their ability, it is necessary in the disaster management to achieve the required preparedness for dealing with future events by preparing and relying on the contingency plan; in other words, reaching the necessary resilience. It is because resilience is the ability of a system to establish its functions and structure against internal and external changes, and if necessary to reduce it.

The systems should be able to absorb changes and maintain their stability (8). In the lack of such a program, management of unexpected disasters encounters serious challenges, disasters may simply become full-scale ones, and thus the ability to adapt to the conditions of change, and the rapid resilience and recovery from disruptions due to urgency become impossible.

Resilience is a functional system including subsystems such as critical infrastructure, economics, civil society, and sovereignty. The number and complexity of these subsystems have posed a major challenge in measuring resilience in large societies and countries (11).

Here, given the brief acquaintance with the literal and terminological meaning of the concept of resilience, and the awareness of the relation and position of this concept with the systemic attitude, and also since this concept is essentially an interdisciplinary concept and each of the various scientific disciplines look at it from its own point of view, it has been tried in this study to briefly look at this concept from the perspective of three fields of psychology, sociology, and management, and then address the Spragens theoretical framework.

Resilience from the perspective of psychology

In the 1950s, the attention of the positive psychologists to the abilities and talents of individuals and communities rather than addressing their abnormalities and disorders led the resilience to achieve a special place in the field of growth and development psychology as well as the family psychology and mental health. Positive psychology is the scientific study of potentials that enables individuals and

communities to work and be active. This field of study is based on the belief that people want to experience a meaningful and complete life in order to activate their internal capacities and add to their experiences of love, activity, and play.

Psychologists tried to benefit from the resilience to increase human adaptability and overcome the dangers and difficulties.

Mortazavi and Yarolahi suggested that Kumpfer considers resilience as the return to the initial balance or achieving balance in a higher level and in threatening conditions. With this attitude, resilience can be regarded as a successful adaptation to critical circumstances. Kumpfer also believes that adaptation resulting from the resilience process can provide a higher level of effective resilience (12).

Moreover, Rutter defined resilience as individual differences in coping with and responding to difficult situations (13). Therefore, a resilient person handles the bad situation in a better way and finds himself capable of dealing with it.

Ghasem and Hosseinchari declared that resilience to difficulties and flexibility in different situations is affected by self-efficacy of individuals (14). Besides, Rutter indicates that resilience stems from the individual belief in self-efficacy, ability, and confrontation with changes and the capacity and ability of the problem solving social skills (13).

Resilience from the perspective of sociology

In sociology, resilience means that of groups and social units.

Delake et al. claimed that social resilience is the capacity of a society to cope with and adapt to disorder and change, which addresses the social characteristics of a society, including age, gender, disability, and socioeconomic status, and discusses the subject of social capital (15).

The UN office for disaster risk reduction regards social resilience as the capacity of a community to cope with disruptions and changes, covering the ability of communities to self-organize, moderate tension, and enhance their capacity for learning and adaptation (15).

Accordingly, the resilient society is the one that is capable of positively responding to changes and tensions and maintaining its core responsibilities as the society.

In relation to aspects of resilience, Mashayekhi refers to the two individual and social aspects. In individual aspect, life skills such as problem solving, creative thinking, stress control, etc. play prominent role. However, in the social aspect, the resilience is completely different, leading to social potentials (16).

Regarding the importance of paying attention to the community in order to achieve the desired resilience, Cutter et al. believed that resilience to chronological incidents benefits from the greatest effectiveness starting with local community and its inhabitants. Because events are local, so it is necessary to build capacity among the local residents (17).

In explaining society, Norris considered society as a collection of actors including individuals, organizations, and businesses with the same identities and interests.

Resilience from the perspective of management science

Resilience management as a strategy focuses on managing the expected behavior of a system in a range of different situations. The objective of this management is to enhance the organizational capability of a system to overcome challenges and problems ahead. Since the 1970s, the concept and application of this term have been taken into consideration by thinkers and practitioners in the field of management, and especially the crisis and disaster management. Resilience is the subject of prediction, planning, and mitigation of incident risks aiming to protect the life, health, and assets of individuals and communities as well as cultural heritage, socio-economic properties, and ecosystems of countries. In the disaster and crisis management field, the characteristics of reversibility, flexibility, and better reconstruction are often attributed to the concept of resilience. Furthermore, resilience is associated with the capacity and recovery capacity of an organization or a system and is perceived with concepts such as the ability to flourish against disasters, capabilities, and resources available, capacity to deal with incidents, and managing them.

McManus recognized the continuous awareness of the situations as a requirement for a successful resilience management in the organization, and believed that the individuals responsible for implementing the resilience management should,

as much as possible, provide an organizational chart for promoting awareness (18).

Some experts of knowledge management and disaster suggest that resilience is an issue against vulnerability and is related to the capacity concept. However, other experts in this knowledge management attribute capacities to the capabilities of individuals and households and resilience to the accumulation of capacities alongside the social, institutional, and informational services leading to the optimal use of capacities.

Hartog regarded resilience as a society support process, whereby one can manage changes and better rely on himself, in addition to achieving improvement against economic, social, and environmental tensions and adversities (19).

Ashdown highlighted the importance of resilient management as a key issue, as the more a nation is resilient, the less the disasters can damage them, if affected by events, they can expeditiously recover (10).

The British Department of International Development sees the establishment of the pre-disaster resilience as the provider of a potential power for saving lives of humans and protecting them from future disaster (20). Almedom and Tumwine stated that the thinkers, scholars, and international relief agencies in the field of management study, used the term resilience for the first time at a time when a pattern change, i.e. transition from vulnerability to empowerment, was forming (21). In fact, this pattern change took place during the first international workshop on resilience in Tallaght, France, in July 2007. Of course, Almedom claimed that the use of this term in the area of preparedness for disasters had already been proposed in 2006.

Spragens theoretical framework for crisis

Thomas A. Spragens (1917-2006), chairman and professor of political science at Kentucky Center College, USA, declared his goal of providing a theory of crisis and authoring the book as "Understanding Political Theory" to make the world of politics understandable for civil society. He believed that only in the context of the logical understanding of political theories and the recognition of the manner of thinking and the personality structure of theorists one can identify and determine his current status and future position, that is, where we are now and where we are going to go (4).

Haghighat and Hejazi believed that Spragens was the advocate of the traditionalist school of the science of politics who considered the exploitation of historical, philosophical, and anthropological methods in the study of political science (22).

In his Book of "Understanding Political Theory", Spragens has proposed a dispute that has become a tool for rational thinking about political issues and political thinkers. He claimed that the political thinkers of every period are influenced by the conditions and problems of that period, and their political ideas have been presented in response to the political problems of society. Their effort was made to provide a more comprehensive picture and a more precise perception of the politics world. Hence, problems were the starting point of political reasoning and theorizing. Trying to understand political theories by drawing a differentiating line between the stages of political thinking, Spragens provided a theoretical framework allowing consideration of the internal logic of the theory of each theorist as well as the external logic reconstructed by other scholars. In his viewpoint, the goal of the political theories is to provide a comprehensive view of the political community with a critical look in order to make it understandable and to perceive its shortcomings and deficiencies and to restore health to society by confronting and overcoming the roots of disorders. In other words, from the point of view of Spragens, the goal of the political theory can be regarded as a psychological treatment of the political community (4).

Spragens has likened the political community suffering from disorders and crises to a sick and unhealthy person and considered the political theorist as a specialist physician who both, after facing the problem and the disease, with their own tools and methods (the physician by examining the results of tests and radiology and imaging and the political theorist through studying history, culture, etc.), seek to identify the roots and causes, and then present solutions and treatment prescriptions. Meanwhile, both the physician and the political theorist consider a healthy and ideal model of humans and their desirable society, and compare the human and their existing society or patient with it, thereby realizing their shortcomings and failures. Spragens adopted this stage from the medical field and employed it in the field of political theories, some example applications of which will be mentioned in the following.

Quoting from Plato, Spragens stated: What most people think of the politics world is not more than an imaginary world. They resemble cavemen who what they see is the shivering shadows on the walls of the cave. These people have never experienced the light outside the cave, and their imagination draws them to political holes (4)." Additionally, Plato considered the injustice and instability of the local government of Athens and the execution of Socrates as an indication of the Athenian democracy crisis, and regarded its roots in the separation of power and wisdom or politics and wisdom, and the lack of placement of social classes in their own place. Moreover, he prescribed the way of treatment for this complication as the combination of these two and the governance of a wise or philosopher king at the head of the political community. He counted such a community as the most similar society to a model world and a model for an ideal state or utopia, in which sovereignty is with wisdom, and each of the three classes is in its own place. Justice, stability, beauty, and proportionality are among its characteristics. This brief text on Plato's political view represents the four stages of the Spragens theory, which began with the observation of disorder and crisis, and ended in the drawing of a desirable pattern and then in providing the solution. Therefore, familiarizing with the stages of the Spragens methodology and the intellectual frameworks provided by him can help the audience understand the actions and reactions of the surrounding environment.

Spragens introduced his theory of crisis in a template consisting of four steps as 1) observation of disorder 2) diagnosis 3) reconstructing the polis and 4) prescription. In the preface, quoting Edmund Burke, the founder of the modern conservatism, he stated that: "The public are reluctant to political theories when they are happy and satisfied with life, however when they suffer from difficulties, they tend to theories, and this means that the country is administered in the wrong way, so the theorist's activity begins with the observation of a disorder (4). In this way, he considered the disrupted situations as the reason for theorizing, as a starting point, in order to organize ultimately it by providing solutions.

In the first stage, while pointing out the importance of paying attention to political theories and its resulting benefits, Spragens believed that without a deep understanding and a

deep recognition of the state of problems, disorders, and disruptions, the humans would probably jump out of the frying pan into the fire (would worsen the situation) (4). Thus, according to this thinker, observing the disorder is at the forefront of the theory of crisis with a profound and radical function. To further clarify this stage, Spragens introduced the quality and quantity of different types of crises and their features when observed by thinkers. Furthermore, he considered focusing on the realities of a disrupted society as a way to avoid hallucination and interference of opinions, psychological attributes, and personal experiences. Deep viewing of the disorder is difficult in some highly critical situations. His questions offered to theorists in confronting disrupted and disorganized situations at the observation stage are; What is the problem? What is dangerous, corrupt, and destructive? Or what motivates the theorist to write deepening and mental thinking in the form of a coherent political theory? What is the goal? Or what kind of failure and disorder does he want to treat (4)?

In the second stage, Spragens discussed issues such as examining and identifying the causes of social disruptions, and whether the complications are rooted in natural and involuntary factors, or that they have a voluntary and artificial origin. In addition, he addressed the individual and social causes, that is, whether the observed problem and disorder are caused by the observing thinker or it is his personal problem, or the problem is neither personal nor individual, rather a public problem related to the whole society and the country. Distinguishing between these causes and the exact identification of the roots of the problem has a firm and direct relationship with the provision of solutions and treatment. Because if the theorist considers natural and unavoidable factors of disruptions, his theory leads to conservatism which results in the surrender and justification of the present situation and tolerance of the problem. However, if the human and voluntary factors are involved, a radical and revolutionary theory will come out. He asked: "Is the root of disorder a natural factor or a factor made by the human being? If the problem is rooted from the natural factors, then do the human beings have to adapt their lives to it? Or is it a human-made and controllable, adjustable, or changeable factor?" (4).

Additionally, he categorized theorists in terms of their approach to detecting the causes of

disruptions. For example, he believed that more conservative political theorists, such as Peter Burger, regard human dissatisfaction due to the natural factors, and theorists such as Richard Neuhaus, Aristotle, and Skinner considered the lack of optimal education and the political and social institutions as the cause of the pain in societies. In this regard, he believed that the political worldview of a theorist who considers the main causes of human dissatisfaction with natural phenomena is likely to be more conservative than the one who considers the major causes of problems as social phenomena. He continued that this relationship is entirely logical (4). In addition, if the problem posed by the theorist is not a public problem or related to other members of the community, but a personal or family problem, his political theories and solution cannot be generalized to society, and vice versa.

In the third stage, Spragens focused on debates on community reconstruction. His conception of the kinds of thinking leading to the re-creation and rebuilding of political theories is a collection of creative and artistic activities of the theorist, along with his organized discovery and the operational thinking of his mind. He believed that the pressures, crises, disruptions, and irregularities in a situation make the theorist to rebuild an ideal state in his mind and present a novel and desirable model. Of course, for Spragens, rebuilding of a new and imaginative situation did not mean setting new conditions. He considered the creation of a new situation for those who attempt to reform. Spragens believed that the theorist must embody the model of good society in his mind and give a measure for it as well. With this change, political theory presents symbolic images of the rebuilt society. Since the reconstruction imagined by the theorist is a plan of society, as the society should be, he must rely heavily on his mind and thought. He simply does not describe the world as it is. Of course, he begins with describing the world, but he must also define the world as it should be (4). He considered this definition and symbolic images and criteria, which the theorist has carefully and overwhelmingly experienced and designed comparing with the disrupted conditions, as sensitive and dangerous actions. He also believed that the theorist must take into account all necessary precautions for a safe passing through the existing barriers, i.e., the resistance in the way

of maintaining the status by its supporters. In general, the third stage focused on the planning of a healthy and desirable society. In order to do this, the theorist employs both his imagination and his artistic taste, contemplates both the historical and real circumstances of the society, and depicts the ideal and healthy conditions by artistically combining these two dimensions.

In the fourth stage, suggesting that even the simplest statements about the facts have a vein of prescription hidden in them, Spragens recommended the researchers and readers carefully consider the treatment and the strategy prescribed and the suggestion made by theorists to improve the situation (1). To explain and clarify the way of treating and achieving confidence in the correct understanding of the theory proposed by the theorist, he declared that the political theories largely resemble the old naval maps written on the margin, "there is a dragon here", or showing that where the flat ground reached its end point? It was not written in any of these maps to not enter there or run (4).

By introducing the limitations and complexities of the situation and the data received, he also invited scholars to realism, prioritizing troublesome facts, rational behavior, accurate evaluation, and recognition of the horizons of the capabilities, and asks them to avoid short-sightedness, resorting to hallucinations, and personality psychological biases.

After providing a brief acquaintance with the four stages of the Spragens theory of crisis and his methodology of understanding political theories, it has been attempted in the present study to utilize this model for a theoretical organization to confront disasters and crises. Therefore, in the following part of this study, the steps to observe the disrupted situations caused by the adverse impacts of incidents, the quantitative and qualitative diagnosis of the plans and practices of the traditional management in crises, the visualization of good, effective, and efficient management of crises, and also the formation, adoption, and exploitation of resilience have been presented as a treatment for the crisis management situation using the Spragens method of understanding the political theories. This will help understanding of the crisis managers and controllers in the crisis management activities by providing a systematic concept for resilience and reliance based on firm theoretical foundations.

Resilience in the context of the Spragens crisis theory

Identification of the crisis (observing the disorder): Observing the disorder and disruptions caused by the destructive impact of natural and man-made disasters at the local, national, and international levels on the physics, mentality, and properties of humans brought about very serious concerns for nations, governments, organizations, and state and private small and large humanitarian institutions. The efforts to accurately observe the disruptions and understand their roots are made to devise a solution to the worrying situation hindering the development and advancement of the global community. This is an attempt that was considered by Spragens in understanding his political theories as an incentive to raise the question based on which theorists start examining the nature and cause of the disruption: Questions as what kind of problem is there in society? What is dangerous, corrupt, and destructive? What are the distinct failures and disruptions to be treated?, why is society is governed badly (4), and why are theorists eager to address the causes of disorder in society? Several reports on the status of the incidents, disasters, and their resulting damages have been prepared and made available worldwide by the organizations and institutions concerned, including the annual reports of disasters by the International Federation of Red Cross and Red Crescent Societies, the UN International Strategy for Disaster Reduction (UNISDR), Global Assessment Report (GAR) on accident reduction, and the reports released by national and international governmental and nongovernmental organizations. Numerous international meetings and conferences were held globally so that these observations are exposed to serious and responsible investigations and to organize disaster management dysfunctions. The inclination of individuals, communities, and organizations involved in this issue, as Spragens quoted Edmund Burke, was a misleading sign in the administration of affairs, urging the theorist to make political theories to explore the root and cause of the disorder, whether it is in the surrounding environment or within individuals, communities, organizations, and countries. In this regard, Spragens referred to a sensitive dimension in the process of observing disruptions in society. He believed that the theorist experiences disorder

in his own personal life and mentality as well. It is true that the disaster is out of his body, but it also affects him internally (4).

Second stage: diagnosis (pain diagnosis): Finding the cause of the disorder and the disturbances caused by the impacts of events reflected in global reports can be regarded as an answer to the disquiet of the observing and questioning minds that ask what is wrong, what are the causes of damage? Individuals, communities, and related organizations knew that the mere observation of this effect would not provide any practical guidance, and should not stop attempting to reach a solution until its elimination.

At this stage, they are trying to achieve a comprehensive analysis by examining the results of periodic evaluations and lessons learned from relief and monitoring of the implementation of operational projects. The objective was to find out the causes of the drastic and tragic events and, in addition to identifying the strengths and weaknesses of the relief operation. Because, as long as the causes of the problems and disorders do not appear, real understanding of them and, hence, the provision of an offer for the treatment or relief and reduction of illness and disadvantages is not feasible. The first question is of great sensitivity because its response can have a profound effect on the disaster management method. The question is whether the disorders and disruptions in the disaster management area are rooted in the mere focus on responding operations that is performed as unplanned and without identification of vulnerabilities and with passive images of victims of disasters? In this regard, the questioning minds of individuals in the relevant national and international organizations and institutions are pursuing extensive studies and academic advisories so that they can come up with an appropriate answer to this question. The diagnosis of pain and its diagnosis is a difficult stage. In this regard, through national, regional, and international calls, regardless of individual and organizational biases, as believed by Spragens in the pain recognition stage in the process of understanding political theory, it is sought to ensure that observing political disorders is not merely a result of projection or transmission or their psychological displacement (4).

Finally, by compiling the results of multiple periodic analyses and processes, common findings

were identified as causes of pain and disruptions in disaster management, including relief operations based on responding to disasters, lack of preventive measures, lack of preparedness and appropriate short-term, mid-term, and long term programs, lack of risk and vulnerability maps, disregard for human dignity and potential capacity and active role that they could have to improve conditions to mitigate the impact of disasters, as well as failure to implement training, information, and primary warnings.

Imaginary reconstruction of the order (planning desirable situation): Identifying the causes of disorders in disaster management shows that recognizing the causes of pain can be a step forward to reach the treatment and thus solve the disasters and problems of incidents and disasters in addition to reflecting the fact that the order could continue. That is, it is possible to imagine or find a regular and systematic solution to optimally manage the disasters. At this stage, Spragens reminded the theorist's attempt to indicate the image of the organized political community against his observation of disorder. He believed that the pressures, crises, disorders, and disruptions of the old system make the theorist to think of rebuilding a new political system in their own minds (4).

In this definition and representation of the desirable situation of disaster management, the organizations and institutions try to imagine the state of disaster management as it should be, on the basis of the objective and subjective studies on an effective disaster management; an ideal state without the existing disturbances and disruptions capable of organizing all disasters management activities. This is a management that places human dignity at the forefront of its plans and actions, and prior to any emotional response to disasters and crises, puts the prevention, prediction, and preparedness on the agenda. Furthermore, this management focuses on the capabilities of the affected areas, society-orientation, resilience, focus on prevention and prediction, strategies to reduce the impact of disasters, and rehabilitation to create more capabilities. This rebuilt and ideal management, as recalled by Spragens, is a combination of innovations and explorations as it requires a creative effort by the theorist. The normative political order that he presents is not just his observations or historical phenomena. The theorist must have some kind of mental

experiment in his mind to visualize a political order that meets human capabilities (4).

Provision of the solution (treatment prescription): Awareness of the causes of the disorganized disaster management situation and the inspiration from well-organized and ideal management lead to the encouragement of relevant institutions and organizations to find a solution to improve the situation. Prior to any prescription, it is necessary for the treatment strategy to be equipped with the required resolution and prudence focusing on facts, present situation and necessities, the horizons of capabilities, and the constraints of facilities and requirements (4). To this end, it is necessary to make fundamental changes in the form of emphasis on risk management against the traditional crisis management based on response, the need to rely on human capacity, and enhancement of the capacities and capabilities of humans and communities against disasters, in the form of creating resilience among the individuals, societies, and nations. Such cases are required to be identified and put at the forefront of thinking and action so that the threats and limitations ahead change into constructive opportunities in order to provide a sustainable future against the risk of accidents and uncertainties. In addition, in order to provide more resilience, it is recommended to provide supportive activities to facilitate and expedite the implementation of the treatment process within the framework of the programs, strategies, and measures mentioned. These recommendations include the prevention, risk reduction, preparedness, and development of their scope from natural disasters to man-made ones, calling for the attention of countries to the need to establish responsible institutions to manage and monitor the implementation of changes and the process of transition to a new management, in addition to attention to local actors and their vital role in facilitating community empowerment activities.

Conclusion

The necessity of coping with the disorders and disruptions resulting from the destructive and deadly impacts of disasters on the life and property as well as the sustainable development of individuals, societies, and countries has led the governments in the course of global agreements and actions, to achieve constructive

accomplishments to reduce this impact and improve the situation. These achievements include naming of the 1990s as the International Decade for Natural Disaster Reduction, preparation of the Yokohama Strategy with the theme of a safer world, the Hyogo Framework of Action for establishing resilience in nations and communities against disasters, and the Sendai Framework for Disaster Risk Reduction that considered the resilience as the potential capacity of adaptability of a system, community, or society to resist or change the structure and function at an acceptable level; a framework that is hoped that by 2030 will be able to achieve constructive and valuable practices following the activities undertaken in the framework of the above-mentioned global agreements, investigations, meetings, and conferences as a new model in the disaster management approach by replacing risk management with the traditional and passive disaster management based on response.

In this study, in order to provide a theoretical framework for resilience, its formation and emergence as a treatment in the framework of the four stages of the theory of crisis by Spragens, namely observation of disorder, pain diagnosis, reconstruction of the desirable situation, and provision of solution were investigated. In addition decades of disaster management activities since the 1990s to the present in the form of traditional and new management were addressed so that by exploiting the Spragens theory of crisis, readers are informed of the systematic and profound understanding of resilience to disasters, and consider this important issue as a regulating issue reliant on a clear theoretical basis and framework. The theoretical framework can lead to a more successful disaster management based on a cycle of activities, from prediction and prevention to recovery in the event of disasters.

Acknowledgments

The authors would like to appreciate all the individuals who somehow contributed to conducting the study.

Conflict of Interests

Authors have no conflict of interests.

References

1. United Nations Office for Disaster Risk Reduction. Sendai framework for disaster risk reduction [Online]. [cited 2015]; Available from: URL: <https://www.unisdr.org/we/coordinate/sendai-framework>
2. United Nations Office for Disaster Risk Reduction. Yokohama strategy and plan of action for a safer world: Guidelines for natural disaster prevention, preparedness and mitigation. Proceedings of the World Conference on Disaster Risk Reduction; 1994 May 23-27; Yokohama, Japan.
3. International Federation of Red Cross and Red Crescent Societies. World disasters report. Geneva, Switzerland: IFRC; 2000.
4. Spragens TA. Understanding political theory. Trans. Rajaei F. Tehran, Iran: Agah Publications; 2015. [In Persian]
5. Sharifara H. A linguistic approach to the literature of crisis management. Tehran, Iran: Arvij Publications; 2014. [In Persian]
6. Connor KM, Davidson JR. Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depress Anxiety* 2003; 18(2): 76-82.
7. Van Niekerk D. From disaster relief to disaster risk reduction: A consideration of the evolving international relief mechanism. *The Journal for Transdisciplinary Research in Southern Africa* 2008; 4(2): 355-76.
8. Holling CS. Resilience and stability of ecological systems. *Annu Rev Ecol Syst* 1973; 4: 1-23.
9. Mitchell T, Harris K. Resilience: A risk management approach [Online]. [cited 2012]; Available from: URL: <https://www.crhnet.ca/sites/default/files/library/Mitchell.Harris.2012.Resilience.Risk%20management%20approach.pdf>
10. Ashdown L. Humanitarian emergency response review [Online]. [cited 2011]; Available from: URL: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/67579/HERR.pdf
11. Carlson JL, Haffenden RA, Bassett GW, Buehring WA, Collins MJ, Folga SM, et al. Resilience: Theory and application. Argonne, IL: Argonne National Lab; 2012.
12. Mortazavi NS, Yarolahi N. Meta-analysis of the relationship between resilience and mental health. *J Fundam Ment Health* 2015; 17(3): 103-8. [In Persian]
13. Rutter M. Resilience concepts and findings: Implications for family therapy. *Journal of Family Therapy* 1999; 21(2): 119-44.
14. Ghasem M, Hosseinchari M. Psychological resilience and intrinsic-extrinsic motivation: The mediating role of self-efficacy. *Developmental Psychology* 2012; 9(33): 61-71. [In Persian]
15. Delake H, Samare Mohsen Beigi H, Shahivandi A. Evaluation of social resilience in urban areas of Isfahan. *Journal of Sociology of Social Institutions* 2017; 4(9): 227-52. [In Persian]
16. Mashayekhi M. Social resilience is more important than healthy air. *Etemad newspaper*. 2017 Nov 26: 13.
17. Cutter SL, Burton CG, Emrich CT. Disaster Resilience Indicators for Benchmarking Baseline Conditions. *Journal of Homeland Security and Emergency Management* 2010; 7(1):51.
18. McManus S. Resilience management: A framework for assessing and improving the resilience of organizations. Bangkok, Thailand: Bangkok Publishing Residence; 2007.
19. Hartog J. Disaster resilience in an ageing world: How to make policies and programmes inclusive of older people. London, UK: Help Age International; 2014.
20. Department for International Development. Defining disaster resilience: A DFID approach paper. London, UK: DFID; 2011.
21. Almedom AM, Tumwine JK. Resilience to disasters: A paradigm shift from vulnerability to strength. *Afr Health Sci* 2008; 8(Suppl 1): S1-S4.
22. Haghighat SS, Hejazi SH. A critical approach to the application of Spragens crisis theory in political studies. *Political Science* 2010; 13(1): 187. [In Persian]