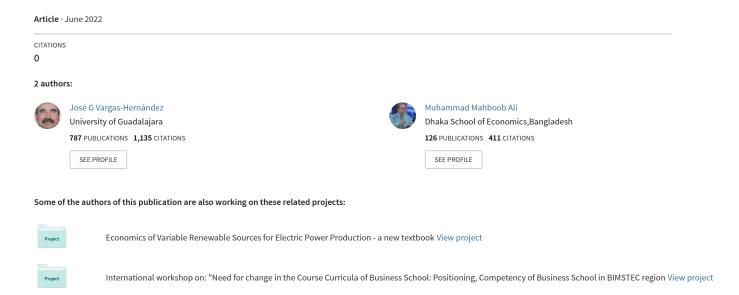
## Implementing Diversity, Equity, Inclusion, and Belonging Management in Organizational Change Initiatives A volume in the Advances in Human Resources Management and Organizational D...



## Implementing Diversity, Equity, Inclusion, and Belonging Management in Organizational Change Initiatives

Abeni El-Amin Fort Hays State University, USA



Published in the United States of America by

IGI Global Business Science Reference (an imprint of IGI Global) 701 E. Chocolate Avenue Hershey PA, USA 17033

Tel: 717-533-8845 Fax: 717-533-8661

E-mail: cust@igi-global.com Web site: http://www.igi-global.com

Copyright © 2022 by IGI Global. All rights reserved. No part of this publication may be reproduced, stored or distributed in any form or by any means, electronic or mechanical, including photocopying, without written permission from the publisher. Product or company names used in this set are for identification purposes only. Inclusion of the names of the products or companies does not indicate a claim of ownership by IGI Global of the trademark or registered trademark.

Library of Congress Cataloging-in-Publication Data

Names: El-Amin, Abeni, 1974- editor.

Title: Implementing diversity, equity, inclusion, and belonging management in

organizational change initiatives / Abeni El-Amin, editor.

Description: Hershey, PA: Business Science Reference, 2022. | Includes

bibliographical references and index.

Identifiers: LCCN 2022063144 (print) | LCCN 2022063145 (ebook) | ISBN 9781668440254 (ebook) | ISBN 9781668440230 (hardcover) | ISBN

9781668440247 (paperback)

Subjects: LCSH: Organizational change. | Diversity in the

workplace--Management. | Leadership. | Organizational effectiveness.

Classification: LCC HD58.8 (ebook) | LCC HD58.8 .I467 2022 (print) | DDC

658.4/06 23/eng/20220--dc03

LC record available at https://lccn.loc.gov/2022063144

This book is published in the IGI Global book series Advances in Human Resources Management and Organizational Development (AHRMOD) (ISSN: 2327-3372; eISSN: 2327-3380)

British Cataloguing in Publication Data

A Cataloguing in Publication record for this book is available from the British Library.

All work contributed to this book is new, previously-unpublished material. The views expressed in this book are those of the authors, but not necessarily of the publisher.

For electronic access to this publication, please contact: eresources@igi-global.com.

#### **EDITORIAL ADVISORY BOARD**

Saundra Johnson Austin, University of South Florida, USA

Taylor Danielle Bunn, Hope 4 All, USA

Yuxiang Du, Fort Hays State University, USA

Brendon Fox, Fort Hays State University, USA

Frank Robert Fuller, La Salle University, USA

Babu George, Christian Brothers University, USA

Ashley Gibson, Baylor University, USA

Althea Green, Uniformed Services University School of Medicine, USA

Nhung Hendy, Towson University, USA

Joseph L. Jones, Clark-Atlanta University, USA

Quinton Marks, Honeywell Corporation, USA

Cynthia Montaudon-Tomas, UPAEP Universidad, Mexico

Vaishali Verma, I Business Institute, India

Shakoor Ward, The Pennsylvania State University, USA

### **Table of Contents**

| Forewordxvi  |
|--|
| Prefacexviii   |
| Section 1 Diversity and Inclusion in Organizational Development and Performance  |
| Chapter 1 Organizational Climate Change: Diversity, Equity, Inclusion, and Belonging   |
| Chapter 2 The New Chief Diversity Officer: Establishing a Diversity, Equity, Inclusion, and Belonging Initiative   |
| Chapter 3 Promoting Inclusive Organizational Identity: Suggestions for Leaders to Reduce Communication Disconnect Caused by Cultural Differences                                 |
| Chapter 4 From Practice to Posture: Core Practices for Showing Up Authentically in DEIB Work   |
| Chapter 5 The Role of Intellectual Humility in Leadership and Promoting Workplace Diversity, Equity, Inclusion, and Belongingness: Leadership Intellectual Humility              |
| Chapter 6 Organizational Resilience and Appropriate Resources for Enterprise Development: A Theoretical View   |
| José G. Vargas-Hernández, Posgraduate and Research Department, Tecnológico Mario<br>Molina Unidad Zapopan, Mexico<br>Muhammad Mahboob Ali, Dhaka School of Economics, Bangladesh |

#### **Section 2**

#### Diversity and Inclusion in Entrepreneurship, Manufacturing, and Nonprofit Management

| Chapter /   |       |
|---|-------|
| The Business Case for Implementing a Diversity and Inclusion Quality-Based Strategy   | 123   |
| Chapter 8   |       |
| Socio-Intercultural Entrepreneurship Capability Building and Development  | . 146 |
| Chapter 9   |       |
| Building an Iron-Clad Supplier Diversity Program  | . 164 |
| Chapter 10  |       |
| Synthesis and Application of Transformative Learning in Nonprofit Management  | 176   |
| Section 3 Implementing Diversity, Equity, Inclusion, and Belonging in Educational Management Practices  |       |
| Chapter 11  |       |
| Inclusion, Diversity Belonging, Equity, and Accessibility Principles on College Campuses: How Faculty and Staff Can Create a Culture of Empowerment for Student Success | 202   |
| Chapter 12  |       |
| A Shared Vision for Online Teaching Effectiveness of K-12 STEAM Minority Teachers   | 216   |
| Chapter 13  |       |
| A Space Is a Terrible Thing to Waste: HBCU Role in Fostering Diversity, Inclusion, Equity,  | 22/   |
| Belonging, and Liberation   | 234   |
| Lakeshia L. Jones, University of Arkansas at Little Rock, USA   |       |

## Section 4 Social and Diversity Issues

| Chapter 14   |
|--|
| Empowering Arkansas Minority Groups: A Policy Analysis for Change                          |
| Frank Robert Fuller, La Salle University, USA  |
| Howard C. Smith II, LIFE Advocacy-Consulting Firm, Inc., USA                               |
| Chapter 15   |
| tital Inequities and Digital Inclusion in Education: An Agenda for the Post-COVID-19 World |
| Babu George, Alcorn State University, USA  |
| Yaprak Dalat Ward, Fort Hays State University, USA   |
| Elodie Jones, Fort Hays State University, USA  |
| Compilation of References  |
| About the Contributors   |
| Index 318  |

#### Chapter 6

# Organizational Resilience and Appropriate Resources for Enterprise Development: A Theoretical View

#### José G. Vargas-Hernández

https://orcid.org/0000-0003-0938-4197

Posgraduate and Research Department, Tecnológico Mario Molina Unidad Zapopan, Mexico

#### Muhammad Mahboob Ali

Dhaka School of Economics, Bangladesh

#### **ABSTRACT**

This chapter has analyzes the organization resilience and its implications on organizational structural construct based on a framework for elements for reliability, safety, and deployment of organizational resources. It is assumed that theoretical and empirical studies in organizational resilience have limited contributions on the concepts of high-reliability organization applied to a diversity of entities and with a variety of characteristics. The method employed is the analytical reflective of the theoretical and empirical literature review. This study concludes that the emerging concept of organizational resilience confirms that the creation and development of an organizational resilience framework for structural construct can be supported by elements based on flexibility of organizational culture, organizational safety and reliability, the promotion elements, and the deployment of organizational resources.

#### INTRODUCTION

The concept of organizational resilience and appropriate use of resources emerges from cognitive, affective; psychomotor and production sciences relate to enterprise development. among others to create and develop a framework for structural construct of organizational resilience supported on elements based on flexibility of organizational culture, organizational safety and reliability, the promotion elements, and the

DOI: 10.4018/978-1-6684-4023-0.ch006

deployment of organizational resources. Entrepreneurial mindset can be motivated by the organizational resources, resilience, and behavioral pattern.

Organizations seek to improve resilience of structure and functions, assets and infrastructure against disruption, degradation, and destruction through proper behavioral pattern with enterprise development. Tuazon, Wolfgramm, & Whyte (2021) argued that sustainability leadership and highlights complexities involved in facilitating effective decision-making among diverse actors in the process of enterprise development. Enhancing organizational resilience has a variety of concepts, principles, approaches, guidelines, and elements which combined enable to design a framework to be implemented at different organizational levels combined with varied factors at each level, creating and developing a theoretical model to influence organizational resilience. Gilson et al. (2020) described that South African mesolevel health system intensified the pre-existing hierarchical and rigidly procedural organizational culture.

A multilevel framework of structural construct of organizational resilience level emphasizes that it is constructed at different collective levels through workers and teams. A construct defined by the validity police perspective is relevant for a theoretical, conceptual, and methodological framework. Organizations use a resilience framework mindset to reinvent and reintegrate beyond former homeostasis. Key resilience practices are not always considered in many companies that might be reluctant towards establishing comprehensive and integrated resilience frameworks. The organizational resilience basis must be based on international best standards and practices for environmental scanning, too ease doing business process and developing enterprises. Supportive enterprises to cultivate, and hopeful comprehensive occupational expansion that creates decent employment chances aimed at altogether organizational resilience and resources.

There is a lack of a process framework for individual elements in different resilience phases. There is not an exhaustive list of elements and practices that constitutes organizational resilience which is contextualized in various settings. The definition of organizational resilience includes common elements and context-specific aspects. The components of the organizational resilience framework may change depending on the cumulative or individual weather extremes which helps to develop enterprises. The multi-disciplinary perspective of organizational resilience inquires the contribution of organization science and developing more robust framework with reification of assumptions to benefit from adverse and disturbing events and conditions.

A rigid quantitative framework for assessing organizational resilience allow to compare the levels of resilience between organizations and improve their engagement. Hillman, & Guenther (2021) review systematically the literature on organizational resilience construct covering both conceptual and operational issues to discuss the critics about the concept of resilience for being fuzzy and analyze the taxonomies and construct development. Enterprise may not be a formal or informal organization in many cases for which NGOs are nowadays may be considered as third sector of a country. Enterprise development is remaindering towards a planned importance for any country of the globe and NGOs as third sector can develop in more elaborate manner in the delivery of chances for home-grown enterprises.

Research question of the study is whether through reviewing the concepts of the organizational resilience and appropriate use of resources can develop enterprises?

#### LITERATURE REVIEW

Based on the research question mentioned in section:1, the following literature review ewer given:

Responsibility lines in organizations fosters accountability and low tolerance for failure in potential conflict between specific and general resilience (Tetlock, 1985). Mosakowski (1998) argued that entrepreneurial resources are defined as the propensity of an individual to behave creatively, act with foresight, use intuition, and be alert to new opportunities. The constituent elements of the concept of organizational resilience are not clear under any specific discipline encompassing a set of diverse organizational disciplines and challenging the validity of unconnected concepts in a theoretical paradigm (Hirsch, Levin, 1999). Functional decentralization as being simultaneously bureaucratic and decentralized facilitates organizational resilience in such a way that authority patterns shift to functional skills (Clarke, 1993, La Porte, & Consolini, 1991, 31).

Resilience is an on-going process that relates the individual with the organizational cultures that have the potential to self-correct after traumatic experiences (Paton et al., 2000). Some assumptions of empirical studies in organizational resilience limit their contributions such as the concept of high-reliability organization applied to a diversity of entities with a variety of characteristics (La Porte, & Consolini, 1998; Bigley, & Roberts, 2001; La Porte & Thomas, 1995). In adverse events the resources are brought from external sources, regional and state level to support the organizational resilience in order that organizations can be able to bounce back (Carpenter et al. 2001). Reliability and robustness determine organizational resilience when degradation, failure and error are no tolerated (Roberts, 1990).

Resilience is a mental restoration ability characterized as the internal individual ability to flexibly cope with and recover from temporary mental illness because of unexpected contingency (Oshio, Nakatani, Kaneko, & Nagamine, 2002). Some of the practices that are effective in enabling and fostering organizational resilience are to provide training and development of resiliency (Coutu, 2002). Resilience focuses more on the cultural change to facilitate problems (Sutcliffe and Vogus, 2003). Tierney (2003) organizational resilience is a structural construct with the dimensions of robustness, resourcefulness, redundancy, and rapidity. Vogus (2003), is based on factor analysis that identify structural resources, emotional resources, and cognitive resources, which are resources linked to organizational creativity.

Organizational resilience is an optimistic perspective focusing on the enhancement of safety and reliability and understanding of coping with the scenario (Sutcliffe, & Vogus, 2003). Organizational resilience is the ability to maintain positive adjustment, which emerge from conditions strengthened and more resourceful under challenging conditions (Sutcliffe and Vogus, 2003). The hurdle to organizational resilience is the inflexibility of organizational culture (Wilkinson et al., 2003). Organizations foster resiliency by increasing the psychological resources and motivation through task autonomy and discretion of employees to build competences, self-efficacy, and confidence to respond during challenging situations (Sutcliffe & Vogus, 2003; Masten & Reed, 2002).

Beyond the trade-offs between safety and production, and the link between the failure to balance production with safety risks and accidents, there are more to be studied and learnt about the enhancement of organizational resilience (Woods, 2003). Organizations that experience collapse are more specific in benefits rather than a general organizational resilience frame (Hamel, & Välikangas, 2003). Efficacy as an outcome of organizational resilience that enhances the ability to process feedback, rearrange and transfer resources and knowledge (Sutcliffe, & Vogus, 2003).

Organizational work resilience empowers the human resources, the business model, and interactions (Foster, & Dye, 2005). Resilience is defined as the ability in tricky situations to stay safe and avoid accidents (Hale, 2006, 40). A characterization of factors leading to impact resistance and rapidity elaborated by McDaniels et al. (2008) included several indicators ex-ante decisions and ex post adjustments of organizational resilience in the context of future climate variabilities and weather extremes. Resilience

has been constructed at different organizational levels which can be analyzed through the hypothetical organizational resilience construct development and measurement not to be confused with the criticized multidimensional constructs as a group of interrelated constructs (Hirsch, & Levin 1999; Wong et al. 2008; Carpenter and Brock 2008).

Development of hypothetical constructs and measurement scales of organizational resilience are confused sometimes as interrelated group of constructs (Hirsch, & Levin, vogus1999; Wong et al., 2008). The operationalization of a measurement model for organizational resilience requires the development of a construct able to clarify the structural relationship of the dimensions involved, as essential to elaborate good research questions and theoretical parsimony (Law et al., 1998, Wong et al., 2008). A construct taxonomy and development based on methodological literature leads to assess and evaluate the literature (Law et al., 1998, Podsakoff et al., 2016, Wong et al., 2008).

Behavior has an impact on vulnerability from structural change impact of resilience (Gallopín, 2006). In a reflective measurement model, any change in the construct as latent variable leads towards changes in the effect observable indicators while in a formative measurement model changes in indicators of the construct determine changes in the cause indicator as the latent variable (Diamantopoulos, & Siguaw 2006; Edwards, & Bagozzi, 2000). Organizational resilience constructs contribute to theoretical development and testing following the dialectical process of a lifecycle in construct development ion include both the validity police and the opposing perspective of an advocate perspective to achieve organizational effectiveness (Brahma, 2009; Suddaby, 2010; Hirsch & Levin, 1999).

Organizational resilience can be evaluated on its facilities, infrastructure, and supply chains (Kohno et al. 2012). Organizational resilience is considered as a second-order construct but manifests at the first-order level constructs identified by Richtnér, & Löfsten (2014) as cognitive, structural, and emotional resources linked to organizational creativity. Resilience is also the considered as the ability to absorb, stabilize the system structure, achieve function and identity in the cope of shocks. Organizational resilience is optimized by developing and maintaining a resilience culture, (Valastro 2011, Hiles 2011, Pasteur 2011, Daskon 2010, & Somers, 2009).

Organizational resilience from the perspective of individual level is based on the inference that the organization is resilience as its individuals (Coutu, 2002; Horne, 1997; Horne, & Orr 1998; Mallak, 1998, Shin et al., 2012). A high reliable organization can learn from errors rather than rigidity (Weick & Sutcliffe, 2007) enabling to analyze the conditions of resilience in an interactionist perspective questioning the notion of organizational resilience.

A multi-dimensional and latent reflective three first-order construct framework of organizational resilience developed by Richtnér and Löfsten (2014) applying conceptualizations of Sutcliffe and A framework of organizational research is developed by Williams et al. (2017) integrating two research streams related to resilience and crisis research. Definitions of resilience lack some common constituent elements (Aleksić et al., 2013). The collapse of an organizations can be reframed as a process of resilience. A comprehensive and integrated model that draws on various frameworks and approaches combines elements (Pasteur, 2011). Several factors improve organizational resilience which can be enhanced by the elements of people, core business systems and facilities (Foster, & Dye, 2005).

An institutional, legal, organizational and procurement aspects of societal resilience are used as a framework to retrieve indicators and patterns able to identify critical issues (Becker, Abrahamsson, and Tehler, 2014; Herrera, et al. 2014, Van Der Beek, & Schraagen, 2015). Indicators for social resilience developed by Cuthill et al. (2008) adopted the SMARTT framework referring to indicators being specific, measurable, achievable, reviewable, time-lined, and talking. Indicators of resilience may represent

what is considered healthy and successful. From the systemic perspective A three-dimension construct of organizational resilience based on robustness, agility and integrity was developed by Kantur and Iseri Say (2015).

To evaluate resilience, Tompkins (2007) proposes robustness, responsiveness, resourcefulness, rapidity, and redundancy. The ways to increasing organizational resilience are the redundancy, flexibility, and cultural change, which intends to address the resilience of future known and unknown events. Resilience is the ability to recover from disruption and improve by building redundancy and flexibility (Sheffi, & Rice, 2005). Mindset and engagement in resourcefulness and nature of social resources facilitate resilience (Williams, &Shepherd, 2016). Some leadership aspects are related to resilience such as integrity, accountability, resourcefulness, effective communications, etc. (Helwig, 2013). Inter-organizational relationships in supply chain resilience enhances organizational resilience draw from the design principles of redundancy and flexibility (Linnenluecke 2017; Pettit et al. 2010, Sheffi, & Rice 2005, Zsidisin, & Wagner 2010; Ponomarov, &Holcomb, 2009). Resilience is the capacity of a system, organization, or person to maintain the core purpose and integrity in the face of dramatic changes of circumstances (Zolli, & Healy, 2012).

Resilience has been analyzed in the context of high-reliability organizations (Weick, & Sutcliffe, 2001) and in the context of responses to weather extremes events (Linnenluecke, & Griffiths, 2012). The interdependent relationship between organizational and community reliability is basic for the resilience between the organization and community (Lee, Vargo, & Seville, 2013; McManus et al., 2008). A high reliable organization exhibits resilience in unanticipated occurrences (Kendra, & Wachtendorf, 2003, 14). Organizational resilience may be promoted by decentralization, redundancy, diversity, deployment of organizational resources and structures (Bruneau et al., 2003; Wildavsky, 1988; Vogus and Sutcliffe, 2007).

From the same perspective, Akgün, & Keskin, (2014) there are several elements that integrate organizational resilience, Resources and practices of organizational bricolage is relevant to resilience characterized by mindfulness (Bechky, & Okhuysen 2011). Fragility is a broken system damaged by variations (Taleb, 2012; Taleb & Douady, 2013). Resilience is critical to organizational success during times of high disruption relying more on policies, procedures, enforcement, and accountability and moving towards agility and analytics. Antifragility is the property of a system to face challenges, failures, and volatility (Taleb, 2012).

In building strong and flexible processes, Fuzzy Resilience Grade is distinct that fuzzy Resilience Early Warning Grade (Omidvar et al. 2017). In the micro-foundations of resilience, the organizational information systems may have risk and enabling factors. Organizations require a balance between the two processes Disembodying the system optimizes control of operations, but resilience decreases du to inflexibility, while embedding increases resilience but damage the organization (Ignatiadis, & Nandhakumar, 2007). The organizational resilience research links the reactions to unexpected events focusing on responses and organizational reliability dealing with mindfulness for the presence of unexpected events (Weick, & Sutcliffe, 2007).

Collective sensemaking is a relevant element of cognitive resilience (Lengnick-Hall and Beck 2009; Lengnick-Hall et al. 2011; Linnenluecke et al. 2012; Maitlis, 2005; Patriotta, 2003; Maitlis and Christianson, 2014). Conceptualization of organizational resilience focus on typologies of specific behaviors (Coutu, 2002; Hamel and Välikangas, 2003; Horne and Orr, 1998; Ishak and Williams, 2018), to integrate resilient resources and behaviors (Lengnick-Hall, & Beck, 2005; Sutcliffe, & Vogus, 2003; Vogus, & Sutcliffe, 2007). Create safety is inherent to resilience engineering perspective (Dekker et al. 2008).

Resilience in family organizations is evaluated by the role clarity, decision authority ownership equality, fairness of compensation, failure to resolve conflicts, unfair workloads, and competition for resources (Danes et al., 2009).

The promotion of organizational resilience features has been already identified such as organizational culture, leadership, communication, resources, etc. (Crichton, Ramsay, & Kelly, 2009, Lengnick-Hall, Beck, & Lengnick-Hall, 2011, Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008; Stephenson, 2010). The principle of organizational resilience encompasses the ethos, values, behaviors, and cultural change of the organization. Organizational resilience can be increased by the support of features such as organizational culture, social capital, leadership, communication (Castleden et al., 2011, Lewis, Donaldson-Feilder, & Pangallo, 2011). Resilience is the result of a combination of attitude, culture, process, and framework (Hiles, 2011, Daskon, 2010). Accessible financial, human and time resources are the foundation for adequate reactions under challenging situations (Hamel and Vaelikangas 2003; Lengnick-Hall and Beck 2009; Vogus and Sutcliffe, 2007).

Human capital, social and financial resources are influencing factors that facilitate organizational resilience (Danes et al., 2009). The financial growth is an element of organizational resilience. Social resources such as social capital are a source of organizational resilience (Gittell et al. 2006; Powley, 2009; Sutcliffe, & Vogus, 2003) in time of crisis and offer contextual benefits (Lengnick-Hall and Beck, 2009, Leana and van Buren, 1999; Faraj and Sproull, 2000; Gittell et al. 2006, McGuinness, & Johnson, 2014).

Organizational resilience enact safety by managing exceptional events (Antunes 2011). A viable system model can be used to assess resilience and structural arrangements (Chan, 2011). Employee enactment of safety to manage and deal unexpected events enhances organizational resilience (Antunes, 2011, Borges, & Menegon, 2012, Carvalho et al., 2012) supported by information technology (Chewning et al., 2013; Gimenez et al., 2017). Small and medium enterprises vulnerability and resilience are associated to resources, experiences, mindset, and risk taking (Kish-Gephart and Campbell 2015; Doern, 2016). Organizations are more organizational resilience reliability-seeking then reliability-achieving (Linnenluecke, 2017).

Entrepreneurial resilience is distinguished from organizational resilience in both theorizations and in practices in terms of resources, experiences, and slacks (Manfield & Newey, 2017). The idea of resilience is very capable theory and empirical research in organizational studies, despite those the conceptual and operational issues are considered of being fuzzy and the urgent need to develop taxonomies and construct frameworks (Clement, & Rivera, 2017, Des Jardine et al., 2017, Limnios, et al., 2014, Linnenluecke, 2017; Williams, et al., 2017). The concept of organizational resilience can be a single at the organizational level or multi-level concept (Linnenluecke, 2017) constructed and achieved at different organizational collective levels.

Resilience promotes the mitigation and preparedness relying on the quantitative conception of determining the real probability risk of adverse events and the severity of their consequences (Gephart, Van Maanen, & Oberlechner, 2009, 143). The motivation of employees may raise the level of organizational resilience to be able to behave responsively when facing unexpected situations (Dawson, 2010). Recovery operations may improve organizational resilience from testing and assuring availability of skilled human resources. Team and individual resilience can be developed and improved by training and human resources development (Lengnick-Hall et al. 2011).

An organizational culture of resilience sets the foundations for recovery and sustainability (Alesi, 2008; Coles and Buckle, 2004). Cultures are dynamic and can influenced resilience levels in organizations. Culture has an influence on various model frameworks for measuring organizational resilience and

societal resilience. Organizational resilience supports the equal involvement and participation of both women and men, subject to cultural influences. The communication systems using network theory are relevant to evaluate organizational resilience (Ruiz-Martin et al. 2017, Ruiz-Martin et al., 2015). Using a personal narrative helps credibility that fosters organizational resilience. Experience and expertise are the power that foster organizational resilience (Lengnick-Hall et al. 2011; Sutcliffe and Vogus 2003, Weick et al., 1999) in organic structures than contribute to improve resilience more than hierarchical and mechanistic management structures (Jaaron and Backhouse, 2014).

Some of the distinct attributes used to define organizational resilience are closely related to structure. Organizational resilience is the ability to maintain a structural configuration (McCarthy et al., 2017), surviving and retaining the structure and functions (Lampel et al. 2014, Salwan, & Gada, 2018), business functions (Antunes, 2011; Clement and Rivera, 2017) above-average returns (de Oliveira Teixeira, & Werther, 2013). A loss of resilience of organizational structures and processes may have consequences with direct and indirect impacts for organizations (Wilbanks et al. 2007; O'Brien et al. 2004). The resilience processes considered as the ability of the system to absorb and recover from disruptions and shocks, transforming structures and means for functioning in the face of stresses (Van der Vegt et al., 2015, 972, Williams, &Shepherd, 2016). Organizational resilience support structural and contextual ambidexterity (Eltantawy, 2016).

Networks are relational resources and protective factors that facilitate organizational resilience (Gittell et al. 2006; Kahn et al. 2013; Vogus and Sutcliffe 2007). Collective sensemaking is a relevant element of cognitive resilience (Lengnick-Hall and Beck 2009; Lengnick-Hall et al. 2011; Linnenluecke et al. 2012; Maitlis, 2005; Patriotta, 2003; Maitlis and Christianson, 2014). Conceptualization of organizational resilience focus on typologies of specific behaviors (Coutu, 2002; Hamel and Välikangas, 2003; Horne and Orr, 1998; Ishak and Williams, 2018), to integrate resilient resources and behaviors (Lengnick-Hall and Beck, 2005; Sutcliffe and Vogus 2003; Vogus and Sutcliffe 2007).

Organizational diversity and variation are initiative-taking in nature to ensure resilience. Some characteristics that can be used as indicators of resilience can be diversity, skills, physical substance, etc. Resilience rather than stability is supported by diversity (Brock et al., 2002, 272). Social network analysis (Borgatti et al., 2009; Borgatti, et al., 2018) is a tool to analyze the structure of interactions in organizational resilience. Organizations that must deal with unexpected events, identify resources, develop practices and processes to facilitate organizational bricolage leading to organizational resilience (Bechky and Okhuysen 2011).

Literature on organizational resilience is more based on normative and prescriptive methodology focusing on attributes, behaviors and resources (Boin & van Eeten, 2013, Duit, 2016, Sutcliffe & Vogus, 2003). The slack resources are a concept that is an antecedent to organizational resilience contributing to the problem solving of the organization (Acquaah et al. 2011; Gittell et al. 2006; Lengnick-Hall, & Beck, 2005, Linnenluecke, & Griffiths, 2012).

Discoveries from experiential research on organizational resilience led to Hillman, and Guenther (2021) to the deduction that the notion of organizational resilience as a valuable construct for management research requires more clarity in terms of measurement. Shirshitskaia et al. (2021) designated that for entrepreneurs who hope to obtain new ventures' sustainable development, they must first clarify the importance of learning from failure. Corvo et al. (2022) described that a forecast of the potential exacerbation of the difficulties currently faced by the third sector i.e., NGOs and with the provision of future strategic paths to contain the health, social and economic effects of the pandemic.

Desiana, et al. (2022) opined that internal factor have no direct significant effect on sustainability, but the ecosystem and innovation have been shown to have a direct and significant positive effect on sustainability. Hadjielias, Christofi & Tarba, S. (2022) found that exogenous crises, such as the CO-VID-19 pandemic, are mostly aggressive to the existence of smaller firms, policymakers, and small firm relations to enhance small business resilience and adopting supply-side policies and raising expenditure on training in command to advance the resilience skills of small business owner-managers would be beneficial. Heredia et al. (2022) commented that strategies which can boost organizational resilience in companies located in emerging economies.

All these issues included in the relevant literature studies, their differences, and aspects, which were explained above noted citations.

#### METHODOLOGY OF THE STUDY

A methodology to develop organizational resilience, resources for enterprise development have been based on structures and processes aimed to enhance the ability to respond to disruptions and create opportunities (Denver, 2017, p. 20). Organizational resilience can be defined in terms of its outcome or what does, as "the maintenance of positive adjustment under challenging conditions such that the organization emerges from those conditions strengthened and more resourceful" (Sutcliffe & Vogus, 2003; Vogus & Sutcliffe, 2007).

A case study has been taken from the write up related to Bangladesh's health enterprises, which source will be mentioned properly. For literature reviews, all quotations have been mentioned in the citation and in the references. Time period of the study is from January 2022 to March 2022. Only subjective judgement has been discussed in this article. No quantitative analysis has been made. The study is using secondary sources. Based on subjective judgement, a theoretical view has been developed.

#### **CASE STUDY**

From Ali (2021), the study has taken following case study:

In research I have recently conducted, excellent medical services were being provided by the Combined Military Hospital in Dhaka during the ongoing Covid-19 pandemic. Doctors and nurses there were well-equipped and tried to provide very smart services to the patients. But most of the other health facilities were found to have full of flaws and loopholes in the delivery of services. Gonoshahthaya Nagar Hospital at Dhanmondi in Dhaka, visited during the study period, found that they were not well-equipped, and no highly qualified doctors and nurses were available, as complained by the patients and attendants. Moreover, outdoor patients were charged extremely high without health insurance.

Serious allegations were made against them but there was nobody to take care of them in the true sense. In Bangabandhu Sheikh Mujib Medical University, a few young doctors were available during duty time and senior doctors come only for a while during their duty hours. A very cumbersome situation was observed at the Cumilla Medical College Hospital during the visit. Patients were getting annoyed but not getting any service. Out of three government medical college hospitals at Dhaka and one in Cumilla, one

similarity was found that during the office/visiting time, most of the specialised doctors were not available. Maximum senior doctors were staying outside Cumilla town. In most of the cases, doctors' oath and promise to provide treatment to the patients were violated though there are some exceptional cases.

While talking to patients and their attendants, it was known that in some cases, lower-grade health workers pilfer medicine and food of the patients. In a private medical college hospital at Cumilla --Eastern Medical College and Hospital -- the situation was such that it was hard to believe it is a medical college hospital. They did not have full-time specialised doctors and nurses. However, some doctors and nurses argued that the unavailability of personal protective equipment (PPE) was the main reason for the flaws in service delivery while some others complained that patients did not try to cooperate with them. Some doctors at private hospitals, visited during the study, blamed the hospital authorities for the poor service condition saying that most of the owners only want to satisfy their pockets with high fees even during the pandemic.

Some also said that due to inappropriate medical technological support systems, they could not deliver proper services despite having the intention to give. On weekly holidays, there were no doctors in most of the hospitals though duty should be assigned on a roster basis. Many patients interviewed during the pandemic said they prefer staying at home and dying peacefully rather than dying in hospital due to the unavailability of appropriate services, and the rough and tough attitude of the health professionals.

The study observed from the open-ended questionnaires that Bangladesh is not yet ready for modernisation of the healthcare facilities. It is increasingly evident during the pandemic of the country. Normal patients cannot trust doctors and health workers. Even telemedicine and satellite clinics are not properly functioning in the country. Most young doctors and nurses want their posting in the capital city or divisional metropolitan areas or in any lucrative district towns as Bangladesh Civil service cadre members. Moreover, those who are doing jobs are not doing justice to the patients and attendants. Some patients do not trust young and middle-aged doctors. Education provided by private medical colleges, though accredited, is low-standard.

No one is properly supervising their education. After graduating, doctors and nurses want to work in metropolitan cities and not in remote villages. If some of them join the government medical colleges or medical hospitals, which are situated outside the Dhaka city, then they want to get transferred to the capital or at least the port city of Chattogram as soon as possible. Corruption and nepotism are a prime loophole in the health sector. The Directorate General of Health Services office is indulging in corruption since the eighties. But the group has now become stronger by creating an oligopolistic market nature of 'cartel.' The vicious circle could not be broken despite different several government initiatives. The health management system of the country has become inefficient, incapable, and ineffective to deal with any health crisis before, during or after the pandemic.

They purchase low-quality products at higher rates. A vested quarter of corrupt people, brokers, owners of low-quality hospitals, nursing homes, pathologists, lab technicians, doctors and health professionals are associated with offering 'false treatment,' giving commission to doctors, billing, procurement, and issuing false reports of COVID-19 like using BCG matrix of cash cow flow. Excessive greediness of some vested quarters is making the situation worse. In the health sector, it is worse than the theory of the second-best.

Some respondents commented that extensive, mindless, and illogical use of antibiotics to the patients by doctors was happening during treatment. Some respondents complained about the misuse of medical equipment by the authorities of hospitals. Some respondents, for example, informed that the ICU-equipped ambulance in Rajshahi Medical College Hospital was not used for more than two years.

The researcher verified the complaint and found it true. Quite a large number of respondents, including even doctors and nurses, said the installation of medical devices and equipment at various places, especially in government hospitals, was not properly done. Some respondents claimed that they became ultra-poor from the middle-income group to get treatment either for themselves or their family members for the deadly disease COVID-19.

For the study conducted through open-ended questionnaires, the researcher asked questions to patients and their attendants at government hospitals. They all complained that the food quality is so poor that the patients cannot take it. They said that they were compelled to purchase food or bring it from home. When the matter was enquired with the superintendents of various government hospitals, they argued that the number of patients got extremely high due to the ongoing COVID-19 pandemic putting extra pressure on the food supply. But when the pandemic was receding half of the hospital beds were found empty. One of the hospital superintendents warned that if anyone writes against the 'true picture,' he will lodge complaints under the Digital Security Act-2018.

Even at a private medical college hospital -- Popular Medical College and Hospital -- at Dahanmon-di-2 in the capital, it was observed that patients were bound to take low-quality food from the canteen. Moreover, nurses declined to give medicine directly to patients and/or to help them eat or use catheters. They referred the patients to the critical care units to use catheters which means extra earnings for the hospital owners. Another crucial point was found from the open-ended questionnaires that most of the government hospitals lack basic medicine which was supposed to be given free.

From the open-ended questionnaires, the researcher found that there are brokers and intermediaries who lure patients to private medical hospitals from the government medical hospitals in exchange for commission. The respondents also commented that the cost of treatment of COVID-19 patients is abnormally high in the private sector and the Directorate General of Health Services failed to perform their duty to the people properly. However, most of the respondents argued that the government has long been struggling to ensure universal primary health services though a vested quarter created some obstacles to the government efforts. All observed that the anti-COVID-19 vaccine must be public goods as demanded by Bangladesh Prime Minister Sheikh Hasina in different forums.

The study found that even some up-market private medical hospitals have employed incompetent nurses who even cannot draw blood for which patients lodged complaints but to no avail. At Square Hospitals Limited in Dhaka's Panthapath, the authorities have enforced three- to four-tier security measures, which are not found in any Southeast Asian countries like Thailand or neighboring India in JCI-accredited hospitals. This is a misdeed supported by the Directorate General of Health Services. Most of the respondents found that maximum public and private medical hospitals are beset by corruption and nepotism. Another important allegation by the patients and their families was that they needed to bribe hospital people, lobby, or use the power of high-ups to get a hospital bed even during the ongoing pandemic.

#### **OBSERVATIONS**

From the aforesaid discussions, authors observed that due to inappropriate health systems, organizational development is not established while health enterprises in Bangladesh as it suffers from a vulnerable situation. A mafia, nexus in the health sector has been working which led to disrupt enterprise development

in the health sector as organizational reliance did not develop. Urgent need of the health enterprises in Bangladesh through organizational resilience and use of appropriate resources in Bangladesh is required.

#### DISCUSSION

This analysis form previously mentioned literature reviews relate to diversified approaches on organizational resilience structural construct evaluation in the sense that proposes an integrated new model of measurement based on the resilience performance of all the different organizational levels. This will lead to develop enterprises. As such organizational resilience's and proper utilization of resources lead to entrepreneurs to progress their entree to wealth, improve their procedural assistances and information, and reinforce the sustainability of superior commercial expansion facilities — altogether of which centrals to upsurges in initiatives, professions, and profits.

At the different organizational levels through a hypothetical organizational resilience construct development and measurement from a multidisciplinary perspective and not to be confused with the criticized multidimensional constructs as a group of interrelated constructs through organizational resources along with enterprise development. Entrepreneurship development is related to the organizational structural construct evaluation as supported by the attributes of the flexibility of the organizational culture, the organizational safety and reliability, the promotion elements for organizational resilience and the deployment of organizational resources for sustainability.

An analysis of an organizational resilience framework is leading to the development of a structural construct of organizational resilience for the evaluation of organizational resilience performance based on the attributes linked to enterprise development. Flexibility of organizational culture, followed by the analysis of organizational safety and reliability, to continue with the promotion elements for organizational resilience and finally, the deployment of organizational resources towards enterprise development. Potential threat scenarios provide specific organizational resilience, but not general resilience which can be supported through the organizational structure that encourages collaboration shared mission and enhance robustness.

The organizational resilience of hazardous industries depends on reliability and robustness which determines their ability to avoid degradation, failure, and errors. Structural resilience includes factors such as physical strength and robustness. The advantage of redundancy is the ability to increase organizational resilience in the face of failures. A resilience building approach after resource depletion in a post shock implies efficiency, supported by redundancy and overlap. Resilience can be fragile, antifragile and robust. Resilience relates to the concepts of fragility, antifragility, and robustness. During COVID-19, pandemic, organizational fault has been shown how much health enterprises are weak in Bangladesh.

Technological knowledge of systems supports specific resilience against known and unanticipated operations which can be balanced distribution of responsibilities and personnel programs in the organization. Organizational resilience splits between defensive, progressive, consistent, and flexible behaviors forming a framework termed as the tension quadrant. However, a fifth strand termed fitness for purposes has emerged. This may lead to develop enterprises. An inflexible organization become unproductive as well as the excessive cost cutting impedes resilience. Heredia et al. (2022) s' may be considered to develop organizational resilience strategies built by the entrepreneurs for smooth functioning.

Resilience is the physical ability to return and recover the original state, flexibility, and stability. Resilience is the ability of recovery flexibility minimizing the damages in coping with an unexpected

event and recover from the negative effects. Technological resources are used by organizations to achieve flexibility as required by the organizational resilience under the technology-in-practice framework. Employees play relevant the role in resilience to deal with unexpected events and access to resources. A flexible heuristics orientation may increase organizational resilience in adverse situations more than the efficient orientation of routines.

The purposes of organizational resilience related to maturity levels in which the higher the level, the more organizational resilience as it helps to activate enterprise development. These levels are decline, survive, bounce back, and bounce forward within an integrated framework and the establishment of resilience culture. When organizational resilience led to higher level business environment is related to better enterprise development scenario. Cultural factors influence organizational resilience based on knowledge that enable to implement and operate correctly. Cultural factors influence resilience at organizational level and introduce appropriate action plans and solutions required to reduce the negative impact.

Active resilience and resources motivate and inspires others with a manifesting compounding effect on the organization that provides a framework strengthen by culture and values to make decisions in tricky situations and required to survive, thrive, and stabilize. Fostering organizational culture change to build commitment towards resilience. The organizational cultural change perspective that promotes the involvement of anybody in the needed concerns and issues without any barriers can enhance the organizational resilience. The individual resilience characteristics can be applied to organizational resilience which are essential to create a growing organizational culture of resilience.

Development of an organizational resilience approach is underpinned by organizational cultural change and branding built on sharing experiences and interactions with others. Organizational resilience requires training based on leadership, culture of trust, empathy, and acceptance. Organizations can build their own resilience leading to reduce stress in change Culture of organizational resilience building should be supported by the served individuals. Some new cultural identified trends need further investigation and can stimulate more in-depth research. Organizational resilience is organizing for safety and reliability. The safety and reliability perspective of organizational resilience is a response to operate chaos without equilibria. The system's safety and reliability affect the dimensions of service aiming towards resilience.

A background for assessing resilience of systems and its components in a relationship of multiple risks to current operating parameters and the boundary of its safe operations is and indicator of resilience. More efficient and reliable organizations are also more committed to resiliency mindset to recognize and identify events that go wrong and resolve with the minimum of harm. Management of entrepreneurial system needs organizational resilience and resources properly be managed.

The essential elements of organizational resilience in functional domains are the combination of the of people behavior, process reliability and product excellence to provide experience, trust, and reputation aimed to achieve information, supply, and operational resilience. Resilience can be integrated with operating reliability across a range of conditions. The organizational structures and procedures ensure reliability and facilitate organizational resilience. Among others, competence orientation, behavioral preparedness, social capital, original and unscripted agility, practical habits, and resource networks helps to work for entrepreneurial development.

The resilience framework accommodates a qualitative capacity to absorb shocks and unexpected events maintaining the functions of recognition, recombination and renewal of organizational structures and processes. The range of a personal network relationships is an antecedent of resilience that have influence in the availability of resources to recover from crises. The framework is the contextual resilience are characterized by the social capital and the resource network.

An approach of organizational resilience from the internal structural and workflow articulation between occupational groups characterized by symbolic and identity values. The diverse types of structures, actors and contents of networks may affect the organizational resilience. Organizational resilience requires more distributed control with central coordination and not centralized control with distributed implementation. Diversity is the variability of features impacted by threat and unexpected events attacking species, physical attributes. Diversity provides increased resilience. Organizational resilience has indicators such as level of knowledge, adequacy of resources, diversity, information sharing, etc.

Organizational resilience is multilevel related to resources, processes, and routines related to enterprise development for which entrepreneurs must be play active role. The multi-level conception of organizational resilience across the organization, groups and individual interactions is related to the effective use of resources, processes, and routines dependent. Synergy between organizational resilience theory development and the ambiguous and resource constrained operating decision contexts may result in cyclical processes. Shirshitskaia et al. (2021) 's opinion is important for entrepreneurs to acquire from letdown to sustain competency in; long run.

Organizational resources make different contributions to resilience. Resource allocation decisions are made to support organizational resilience in anticipation of adverse conditions. The element of anticipation of organizational resilience emphasize to maintain effectiveness and avoiding degradation. Organizational resilience decisions on the use of resources requires a lot of sensitivity to continue consequences. Sensing process helps the organizational resilience orientation to perceive threats and opportunities from emerging resource factors and options, partnerships, business models, etc. Organizational resilience requires a buffer to maximize the potential to regenerate allowing more time for the emergence of a better option to enhance resilience and maximize resources.

The use of *salutogenic* lens, organizational resources, and assets as indicators for organizational resilience contribute to the evaluation and engagement of organizational contingency planning which in turn helps entrepreneurs to develop their organizations. Organizational resources losses and the conditions of failure and tough times require organizational resilience leading to renewal and constant change. Organizational interruption impacts determine losses from actual events with limited insights on predictive elements of future organizational resilience. Some factors promoting organizational resiliencies can be identified and assessed through different approaches.

#### CONCLUSIONS, IMPLICATIONS AND FUTURE RESEARCH

The reflective analysis of the concept of organizational resilience emerging from cognitive, ecology and engineering sciences, among others, confirms that the creation and development of an organizational resilience framework for structural construct can be supported by elements based on flexibility of organizational culture, organizational safety and reliability, the promotion elements, and the deployment of organizational resources. This led to enterprise development. Contextual resilience integrates the resources and connections to provide the setting for using the behavioral and cognitive resilience. The hierarchy composition principle determines the importance of the elements of organizational resilience. The organizational resilience approach is likely where there are resources constraints.

A low level of organizational resilience is present during the phase of release characterized by the rapid disbanding of the resources accumulated in the system. During the phase of reorganization, the organizational resilience increase characterized by the reassembly of resources and components of the

system. Collective leadership has a relevant role in organizational resilience and social responsibility. From the case study, the study recommends developing the health sector enterprises in Bangladesh with due diligences.

Organizational resilience is linked to the enterprise development for which resource management with divergent backgrounds of respondents despite their similarities, it is related as the ability to cope with risks and disturbances, planning and organizational structures. The structural arrangements of the working groups to cope with unexpected events question the boundaries to enhance the organizational resilience. Organizational resilience is dependent on the specific situation. The ability of building organizational resilience against unanticipated and unexpected threats by organizations can increase their resilience with limited resources.

Building and enhancing organizational resilience against unanticipated threats requires an ability to act outside of the response plans by investing some resources in risk-assessment and testing in the individual and system critical elements. Enterprise development ought to have a fruitful influence on socio-economic change for which organizational resilience and appropriate use of organizations resources are being required which will help entrepreneurs.

Flexibility can be developed, practiced, and enhanced at large scale state-wide and international level frameworks. Strong organizational basis can perform to participate in the period and wealth to assist individuals to start, develop or progress of organizations as an entrepreneurial determinant. Enterprise development can assist persons to receive a living need or treasure a method available of lack, and prime to lifelong financial development for populace, their family members, and their groups. NGOs are nowadays considered as third sector as proponent neither consider them government nor private sector.

Organizational resilience requires commitment of all involved to transform and build upon characteristics of values and behaviors achieved through interactions and ongoing relationships that focus on the protection of appropriate use of resources and assets from the external threats so the enterprises can do their business properly. Education, organization, and correction is being required to develop entrepreneurship. Establishment of a training and development center must be prepared starting from the grass root level organization to corporate level organizations so that user friendly and pro customer-oriented organizations can act.

No sort of corruption and nepotism and propaganda-free organization, backbiting free organization need to be built and organization must be depoliticized for smooth functioning. Supply chain management must be improved so that production process and distribution channel of the products may be improved. To shape resilience as producer can generate an agile web to providers and associates, which allows them to improve account to varying guidelines and suggestion clients' facilities so that organization can be helpful for the enterprises.

As the study is based on subjective assessment method, so that, organizational resilience, and use of appropriate resources to develop enterprises may lead to inappropriate report balances which lead to performance-based actions and may be unresponsive to negligible variations in flexibility lead to steadiness damages besides solitary deliver evidence on a particular time of the study. In future tests on a structural model may provide empirical evidence of a set of exogenous variables to determine endogenous variables can be used to determine the antecedent and positive outcomes of organizational resilience and appropriate use of resources to use enterprise development.

In future another study may be done through gathering information with numerous purposes as likely in an association with organizational resilience, appropriate use of resources and enterprise development. Econometric modelling may also be done by usage of indicators that will mirror in what way an organization is working to achieve an unforeseen happening to develop enterprises with in-depth analysis.

#### REFERENCES

Acquaah, M., Amoako-Gyampah, K., & Jayaram, J. (2011). Resilience in family and nonfamily firms: An examination of the relationships between manufacturing strategy, competitive strategy, and firm performance. *International Journal of Production Research*, 49(18), 5527–5544. doi:10.1080/002075 43.2011.563834

Akgün, & Halit, K. (2014). Organizational resilience capacity and firm product innovativeness and performance. *International Journal of Production Research*, 52(23), 6918–6937.

Aleksić, A., Stefanović, M., Arsovski, S., & Tadić, D. (2013). An assessment of organizational resilience potential in SMEs of the process industry, a fuzzy approach. *J Loss Prevent Proc*, 26, 1238–1245. doi:10.1016/j.jlp.2013.06.004

Alesi, P. (2008). Building enterprise-wide resilience by integrating business continuity capability into day-to-day business culture and technology. *Journal of Business Continuity & Emergency Planning*, 2(3), 214–220.

Ali, M. M. (2021, Oct. 13). Health care system in Bangladesh during pandemic. Bangladesh Post.

Antunes, P. (2011). BPM and exception handling: Focus on organizational resilience. *IEEE Transactions on Systems, Man, and Cybernetics*, 41, 383–392. doi:10.1109/TSMCC. 2010.20625 04

Bechky, B. (2011). Expecting the unexpected? How SWAT officers and film. *Academy of Management Journal*, *54*(2), 239–261.

Becker, P., Abrahamsson, M., & Tehler, H. (2014). An emergent means to assurgent ends: societal resilience for safety and sustainability. In Becom. Resilient. Ashgate Publishing, Ltd.

Boin, A., & van Eeten, M. J. B. (2013). The Resilient Organization—A critical appraisal. *Public Management Review*, 15, 429–445.

Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2018). Analyzing social networks. Sage (Atlanta, Ga.).

Borgatti, S. P., Mehra, A., Brass, D. J., & Labianca, G. (2009). Network analysis in the social sciences. *Science*, *323*(5916), 892–895. doi:10.1126cience.1165821

Borges, F. M., & Menegon, N. L. (2012). Different roles in the quest for system resilience. *Work (Reading, Mass.)*, 41, 3238–3245.

Carvalho, F. A., Koren, O., & Goodrich, J. K. (2012). Transient Inability to Manage Proteobacteria Promotes Chronic Gut Inflammation in TLR5-Deficient Mice. *Cell Host & Microbe*, *12*(2), 139–152. doi:10.1016/j.chom.2012.07.004

Brahma, S. S. (2009). Assessment of construct validity in management research. *Journal of Management Research*, *9*, 59–71.

Brock, W. A., Mäler, K. G., & Perrings, C. (2002). Resilience and Sustainability: The Economic Analysis of Nonlinear Dynamic Systems. In L. H. Gunderson & C. S. Holling (Eds.), *Panarchy: Understanding Transformations in Human and Natural Systems* (pp. 261–289). Island Press.

Bruneau, M., Chang, S. E., Eguchi, R. T., Lee, G. C., O'Rourke, T. D., Reinhorn, A. M., Shinozuka, M., Tierney, K., Wallace, W. A., & von Winterfeldt, D. (2003). A framework to quantitatively assess and enhance the seismic resilience of communities. *Earthquake Spectra*, 19(4), 733–752. doi:10.1193/1.1623497

Carpenter, S., Walker, B., Anderies, J. M., & Abel, N. (2001). From metaphor to measurement: Resilience of what to what? *Ecosystems (New York, N.Y.)*, 4, 765–781.

Castleden, M., McKee, M., Murray, V., & Leonardi, G. (2011, September). Resilience thinking in health protection. *Journal of Public Health*, *33*(3), 369–377. doi:10.1093/pubmed/fdr027

Chan, J. K. (2011). Enhancing Organisational Resilience: Application of Viable System Model and MCDA in a Small Hong Kong Company. *International Journal of Production Research*, 49(18), 5545–5563. do i:10.1080/00207543.2011.563829

Chewning, L. V., Lai, C.-H., & Doerfel, M. L. (2013). Organizational resilience and using information and communication technologies to rebuild communication structures. *Management Communication Quarterly*, 27, 237–263. doi:10.1177/08933 18912 46581 5

Clarke, K. R. (1993). Non-parametric multivariate analyses of changes in community structure. *Austral Ecology*, 18(1), 117-143. DOI: doi:10.1111/j.1442-9993.1993.tb00438.x

Clement, V., & Rivera, J. (2017). From adaptation to transformation: An extended research agenda for organizational resilience to adversity in the natural environment. *Organization & Environment*, *30*, 346–365. doi:10.1177/10860 26616 65833 3

Coles, E., & Buckle, P. (2004). Developing community resilience as a foundation for effective disaster recovery. *Australian Journal of Emergency Management*, 19(4), 6–15.

Corvo, L. (2022). The Impact of COVID-19 on Public/Third-Sector Collaboration in the Italian Context. *Sustainability MDPI*, *14*(2228), 1–17. doi:10.3390/su14042228

Coutu, D. L. (2002). How resilience works. *Harvard Business Review*, 80(5), 46–55.

Crichton, M. T., Ramsay, C. G., & Kelly, T. (2009). Enhancing organizational resilience through emergency planning: Learnings from cross-sectorial lessons. *Journal of Contingencies and Crisis Management*, 17, 24–37.

Cuthill, M. H., & Ross, K., Maclean, K., Owens, & Witt, B. (2008). Reporting Social Outcomes of Development: An Analysis of Diverse Approaches. *The International Journal of Interdisciplinary Social Sciences: Annual Review*, *3*, 145–158.

Danes, S. M., Lee, J., Amarapurkar, S., Stafford, K., Haynes, G., & Brewton, K. E. (2009). Determinants of family business resilience after a natural disaster by gender of business owner. *Journal of Developmental Entrepreneurship*, 14(4), 333–354. doi:10.1142/S1084946709001351

Daskon, C. (2010). Cultural resilience – the roles of cultural traditions in sustaining rural livelihoods: A case study from rural kandyan villages in central Sri Lanka. *Sustainability*, 2(4), 1080–1100.

Dawson, C. S. (2010). Leading culture change: what every CEO needs to know. Stanford University Press.

Desiana. (2022). Strategy for Sustainability of Social Enterprise in Indonesia: A Structural Equation Modeling Approach. *Sustainability MDPI*, *14*(1383), 1–19. doi:10.3390u14031383

Dekker, J. M., Funahashi, T., & Nijpels, G. (2008). Prognostic Value of Adiponectin for Cardiovascular Disease and Mortality. *The Journal of Clinical Endocrinology & Metabolism*, 93(4), 1489–1496. https://doi.org/10.1210/jc.2007-1436

Denyer, D. (2017). Organizational Resilience: A summary of academic evidence, business insights and new thinking. BSI and Cranfield School of Management.

DesJardine, M., Bansal, P., & Yang, Y. (2017). Bouncing back: Building resilience through social and environmental practices in the context of the 2008 global financial crisis. *Journal of Management*, 26. doi:10.1177/01492 06317 70885 4

Diamantopoulos, A., & Siguaw, J. A. (2006). Formative versus reflective indicators in organizational measure development: A comparison and empirical illustration. *British Journal of Management*, 17, 263–282.

Doern, R. (2016). Entrepreneurship and Crisis Management: The Experiences of Small Business during the London 2011 Riots. *International Small Business Journal*, 34(3), 276–302. doi:10.1177/0266242614553863

Duit, A. (2016). Resilience thinking: Lessons for Public Administration. *Public Administration*, 94, 364–380.

de Oliveira Teixeira E, & Werther, W.B. (2013). Resilience: Continuous renewal of competitive advantages. *Bus Horiz*, *56*, 333–342. https://doi.org/10.1016/j.bushor.2013.01.009

Edwards, J. R. (2001). Multidimensional constructs in organizational behavior research: An integrative analytical framework. *Organizational Research Methods*, *4*, 144–192.

Edwards, J. R., & Bagozzi, R. P. (2000). On the nature and direction of relationship between constructs and measures. *Psychological Methods*, *5*, 155.

Eltantawy, R. A. (2016). The role of supply management resilience in attaining ambidexterity: A dynamic capabilities approach. *Journal of Business and Industrial Marketing*, *31*(1), 123–134. doi:10.1108/JBIM-05-2014-0091

Faraj, S., & Sproull, L. (2000). Coordinating expertise in software development teams. *Management Science*, 46, 1554–1568.

Foster, S., & Dye, K. (2005). Building continuity into strategy. *Journal of Corporate Real Estate*, 7(2), 105–119.

Gallopín, G. C. (2006). Linkages between Vulnerability, Resilience and Adaptive Capacity. *Global Environmental Change*, *16*(3), 293–303.

Gephart, R. P., Van Maanen, J., & Oberlechner, T. (2009). Organizations and risk in late modernity. *Organization Studies*, 30(2–3), 141–155. https://doi.org/10.1177/0170840608101474

Gilson, L. (2020). Organizational change and everyday health system resilience: Lessons from Cape Town, South Africa. *Social Science & Medicine*. Advance online publication. doi:10.1016/j.socscimed.2020.113407

Gimenez, R., Hernantes, J., Labaka, L., Hiltz, S. R., & Turoff, M. (2017). Improving the resilience of disaster management organizations through virtual communities of practice: A Delphi study. *Journal of Contingencies and Crisis Management*, 25, 160–170. doi:10.1111/1468-5973.12181

Gittell, J. H., Cameron, K., Lim, S., & Rivas, V. (2006). Relationships, layoffs, and organizational resilience: Airline industry responses to September 11. *The Journal of Applied Behavioral Science*, 42, 300–329.

Hale, A., & Heijer, T. (2006). Defining Resilience. In E. Hollnagel, D. D. Woods, & N. Leveson (Eds.), *Resilience Engineering: Concepts and Precepts* (pp. 35–40). Ashgate.

Hadjielias, E., Christofi, M., & Tarba, S. (2022). Contextualizing small business resilience during the COVID-19 pandemic: Evidence from small business owner-managers. *Small Business Economics*. Advance online publication. doi:10.100711187-021-00588-0

Hamel, G., & Välikangas, L. (2003). The quest for resilience. *Harvard Business Review*, 81(9), 52–63.

Helwig, K. R. (2013). Resilience: A responsibility that cannot be delegated. *Frontiers of Health Services Management*, 30(2), 31-35. Retrieved from https://www.ache.org/pubs/Frontiers/frontiers\_index.cfm

Heredia, J. (2022). A. New Strategies to Explain Organizational Resilience on the Firms: A Cross-Countries Configurations Approach. *Sustainability*, *14*(1612), 1–22. doi:10.3390/su14031612

Herrera, I. A., Pasquini, A., Ragosta, M., & Vennesland, A. (2014). The SCALES framework for identifying and extracting resilience related indicators: preliminary findings of a go-around case study. *SIDs* 2014-Proc. SESAR Innov. Days, Eurocontrol.

Hiles, A. (2011). The Definitive Handbook of Business Continuity Management. Wiley.

Hillman, J., & Guenther, E. (2021). Organizational Resilience: A Valuable Construct for Management Research? *International Journal of Management Reviews*, 23, 7–44. doi:10.1111/ijmr.12239

Hirsch, P. M., & Levin, D. Z. (1999). Umbrella advocates versus validity police: A life-cycle model. *Organization Science*, *10*, 199–212.

Horne, J. F. (1997). The coming of age of organizational resilience. *Business Forum*, 22, 24–28.

Horne, J. F., & Orr, J. E. (1998). Assessing Behaviors that Create Resilient Organizations. *Employment Relations Today*, 24, 29–39.

Ignatiadis, I., & Nandhakumar, J. (2007). The Impact of Enterprise Systems on Organizational Control and Drift: A Human-Machine Agency Perspective. *International Journal of Enterprise Information Systems*, *3*(3), 36-51. DOI: doi:10.1057/palgrave.jit.2000087

Ishak, A. W., & Williams, E. A. (2018). A dynamic model of organizational resilience: Adaptive and anchored approaches. *Corporate Communications*, 23, 180–196.

Jaaron, A. A. M., & Backhouse, C. J. (2014). Service organisations resilience through the application of the vanguard method of systems thinking: A case study approach. *International Journal of Production Research*, 52, 2026–2041.

Kahn, W. A., Barton, M. A., & Fellows, S. (2013). Organizational crises and the disturbance of relational systems. *Academy of Management Review*, *38*, 377–396. doi:10.5465/amr.2011.0363

Kantur, D., & İşeri-Say, A. (2015). Measuring organizational resilience: A scale development, *Journal of Business, Economics & Finance*, 4(3), 456–472.

Kendra, J. M., & Wachtendorf, T. (2003). Elements of Resilience after the World Trade Center Disaster: Reconstituting New York City's Emergency Operations Center. *Disasters*, 27(1), 37–53.

Kish-Gephart, J. J., & Campbell, J. T. (2015). You Do not Forget Your Roots: The Influence of CEO Social Class Background on Strategic Risk Taking. *Academy of Management Journal*, *58*(6), 1614–1636. doi:10.5465/amj.2013.1204

Kohno, Y., Masuda, Y., Nagahashi, H., Tanaka, K., & Tashiro, K. (2012). Form development for self-rating an organization's vulnerability and resilience to disruption. *Journal of Disaster Research*, 7(4), 392–407. doi:10.20965/jdr.2012.p0392

Lampel, J., Bhalla, A., & Jha, P. P. (2014). Does governance confer organisational resilience? Evidence from UK employee-owned businesses. *European Management Journal*, *32*, 66–72.

Law, K. S., Wong, C.-S., & Mobley, W. M. (1998). Toward a taxonomy of multidimensional constructs. *Academy of Management Review*, 23, 741–755.

La Porte, T. R., & Consolini, P. M. (1998). Theoretical and operational challenges of "high-reliability organizations": Air-traffic control and aircraft carriers. *International Journal of Public Administration*, 21(6–8), 847–852. doi:10.1080/01900699808525320

La Porte, T. R., & Thomas, C. W. (1995). Regulatory compliance and the ethos of quality enhancement: Surprises in nuclear power plant operations. *Journal of Public Administration Research and Theory*, 5(1), 109–137.

La Porte, T. R., & Consolini, P. M. (1991). Working in practice but not in theory: Theoretical challenges of "high-reliability organizations". *Journal of Public Administration Research and Theory*, 1(1), 19–48.

Leana, C. R., & van Buren, H. J. III. (1999). Organizational social capital and employment practices. *Academy of Management Review*, 24, 538–555.

Lee, A. V., Vargo, J., & Seville, E. (2013). Developing a Tool to Measure and Compare Organizations' Resilience. *Natural Hazards Review*, *14*, 29–41. doi:10.1061/(ASCE)NH.1527-6996.0000075

Lengnick-Hall, C. A., & Beck, T. E. (2009). Resilience capacity and strategic agility: Prerequisites for thriving in a dynamic environment. In Resilience engineering perspectives, Volume 2. Preparation and restoration. Ashgate Publishing.

Lengnick-Hall, C. A., & Beck, T. E. (2005). Adaptive fit versus robust transformation: How organizations respond to environmental change. *Journal of Management*, *31*, 738–757.

Lengnick-Hall, C. A., Beck, T. E., & Lengnick-Hall, M. L. (2011). Developing a capacity for organizational resilience through strategic human resource management. *Human Resource Management Review*, 21, 243–255.

Lewis, R., Donaldson-Feilder, E., & Pangallo, A. (2011). *Developing resilience*. Affinity Health at Work. Retrieved August 31, from https://www.cipd.co.uk/

Limnios, A. M., Mazzarol, T., Ghadouani, A., & Schilizzi, S. G. M. (2014). The Resilience Architecture Framework: Four Organizational Archetypes. *European Management Journal*, *32*(1), 104–116.

Linnenluecke, M. K. (2017). Resilience in business and management research: A review of influential publications and a research agenda. *International Journal of Management Reviews*, 19(1), 4–30.

Linnenluecke, M. K., & Griffiths, A. (2012). Assessing organizational resilience to climate and weather extremes: Complexities and methodological pathways. *Climatic Change*, *113*, 933–947.

Maitlis, S. (2005). The social processes of organizational sensemaking. *Academy of Management Journal*, 48, 21–49.

Maitlis, S., & Christianson, M. (2014). Sense making in organizations: Taking stock and moving forward. *The Academy of Management Annals*, 8, 57–125. doi:10.1080/19416520.2014.873177

Mallak, L. A. (1998). Measuring resilience in health care provider organizations. *Health Manpower Management*, 24(4), 148–152. doi:10.1108/09552069810215755

Manfield, R. C., & Newey, L. R. (2017). Resilience as an Entrepreneurial Capability: Integrating Insights from a Cross-Disciplinary Comparison. *International Journal of Entrepreneurial Behaviour & Research*. Advance online publication. doi:10.1108/IJEBR-11-2016-0368

Masten, A. S., & Reed, M. J. (2002). Resilience in development. In C. R. Snyder & S. Lopez (Eds.), *Handbook of positive psychology* (pp. 74–88). Oxford University Press.

McCarthy, I. P., Collard, M., & Johnson, M. (2017) Adaptive organizational resilience: an evolutionary perspective. *Curr Opin Environ Sustain*, 28, 33–40. https://doi.org/10.1016/j.cosus t.2017.07.005

McDaniels, T., Chang, S., Cole, D., Mikawoz, J., & Longstaff, H. (2008). Fostering resilience to extreme events within infrastructure systems: Characterizing decision contexts for mitigation and adaptation. *Global Environmental Change*, 18, 310–318.

McGuinness, M., & Johnson, N. (2014). Exploiting social capital and path-dependent resources for organisational resilience: Preliminary findings from a study on flooding. *Procedia Economics and Finance*, 18, 447–455.

McManus, S., Seville, E., Vargo, J., & Brunsdon, D. (2008). Facilitated process for improving organizational resilience. *Natural Hazards Review*, 9(2), 81–90. doi:10.1061/\_ASCE\_1527-6988\_2008\_9:2\_81

Mosakowski, E. (1998). Entrepreneurial Resources, Organizational Choices, and Competitive Outcomes. *Organization Science*, 9(6), 625–643. https://www.jstor.org/stable/2640246

O'Brien, K., Sygna, L., & Haugen, J. E. (2004). Vulnerable or resilient? A multi-scale assessment of climate impacts and vulnerability in Norway. *Climatic Change*, *64*, 193–225.

Omidvar, M., Mazloumi, A., Mohammad, F. I., & Nirumand, F. (2017). Development of a framework for resilience measurement: Suggestion of fuzzy resilience grade (RG) and fuzzy resilience early warning grade (REWG). *WOR*, 56, 463–474. doi:10.3233/WOR-17251 2

Oshio, S., Nakatani, M., Kaneko, M., & Nagamine, K. (2002). Negative na dekigoto karanotatchinaori-womichibikushinritekitokusei; seishintekikaihukuryokusyakudo nosakusei [The psychological properties that promote bounce back from negative states]. *Japanese Journal of Counseling Science*, 35, 57–65.

Pasteur, K. (2011). From Vulnerability to Resilience: A Framework for Analysis and Action to Build Community Resilience. Practical Action Publishing.

Paton, D., Smith, L., & Violanti, J. (2000). Disaster response: Risk, vulnerability and resilience. *Disaster Prevention and Management*, 9(3), 173–179.

Patriotta, G. (2003). Sensemaking on the shop floor: Narratives of knowledge in organizations. *Journal of Management Studies*, 40, 349–375.

Powley, E. H. (2009). Reclaiming resilience and safety: Resilience activation in the critical period of crisis. *Human Relations*, 62(9), 1289–1326.

Pettit, T. J., Fiksel, J., & Croxton, K. L. (2010). Ensuring supply chain resilience: Development of a conceptual framework. *Journal of Business Logistics*, 31(1), 1–21.

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2016). Recommendations for creating better concept definitions in the organizational, behavioral, and social sciences. *Organizational Research Methods*, 19, 159–203.

Richtnér, A., & Löfsten, H. (2014). Managing in turbulence: How the capacity for resilience influences creativity. *R & D Management*, 44, 137–151.

Roberts, K. H. (1990). Some Characteristics of One Type of High Reliability Organization. *Organization Science*, *1*(2), 160.

Ruiz-Martin, C., Pérez Ríos, J., Wainer, G., Pajares, J., Hernández, C., & López-Paredes, A. (2017). The Application of the Viable System Model to Enhance Organizational Resilience. In Advances in Management Engineering, 88–100. https://doi.org/10.1007/978-3-319-55889-9\_5

Ruiz-Martin, C., López-Paredes, A., & Wainer, G. (2015). Applying complex network theory to the assessment of organizational resilience. *IFAC-PapersOnLine*, 48(3), 1224–1229. doi:10.1016/j.ifa-col.2015.06.251

Salwan, P., & Gada, V. P. (2018). Antecedents of resilience: An investigation into bharat forge. *Indian Journal of Industrial Relations*, *53*, 449–461.

Sheffi, Y., & Rice, J. B. (2005). A supply chain view of the resilient enterprise. *MIT Sloan Management Review*, 47, 41–48.

Shin, J., Taylor, M. S., & Seo, M.-G. (2012). Resources for change: The relationships of organizational inducements and psychological resilience to employees' attitudes and behaviors toward organizational change. *Academy of Management Journal*, *55*, 727–748.

Shirshitskaia, E. (2021). The Impact of Learning From Failure on New Ventures' Sustainable Development. *Frontiers in Phycology*. https://www.frontiersin.org/articles/10.3389/fpsyg.2021.784518/full

Somers, S. (2009). Measuring resilience potential: An adaptive strategy for organizational crisis planning. *Journal of Contingencies and Crisis Management*, 17(1), 12–23.

Suddaby, R. (2010). Editor's comments: Construct clarity in theories of management and organization. *Academy of Management Journal*, *35*, 346–357.

Sutcliffe, K. M., & Vogus, T. (2003). Organizing for resilience. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship* (pp. 94–110). Berrett-Koehler.

Taleb, N. N., & Douady, R. (2013). Mathematical definition, mapping, and detection of (anti)fragility. *Quantitative Finance*, *13*(11), 1677–1689. doi:10.1080/14697688.2013.800219

Taleb, N. N. (2012). Antifragile: Things that Gain from Disorder, 3. Random House.

Tetlock, P. E. (1985, September). Accountability: A Social Check on the Fundamental Attribution Error. *Social Psychology Quarterly*, 48(3), 227–236.

Tierney, K. J. (2003). Conceptualizing and measuring organizational and community resilience: lessons from the emergency response following the September 11, 2001, attack on the World Trade Center. Univ. of Delaware.

Tompkins, J. A. (2007). 4 Steps to business resilience. *Industrial Management (Norcross, Georgia)*, 49(4), 14–18.

Tuazon, G. F., Wolfgramm, R., & Whyte, K. P. (2021). Can You Drink Money? Integrating Organizational Perspective-Taking and Organizational Resilience in a Multi-level Systems Framework for Sustainability Leadership. *Journal of Business Ethics, Springer*, 168(3), 469–490. doi:10.100710551-019-04219-3

Valastro, J. (2011). Organisational resilience: A position paper for critical infrastructure. Commonwealth of Australia.

Van Der Beek, D., & Schraagen, J. M. (2015). ADAPTER: Analysing and developing adaptability and performance in teams to enhance resilience. *Reliability Engineering & System Safety*, 141.

van der Vegt, G. S., Essens, P., Wahlstrom, M., & George, G. (2015). Managing risk and resilience. *Academy of Management Journal*, 58, 971–980.

Vogus, T. J., & Sutcliffe, K. M. (2007). *Organizational resilience: Towardsa theory and research agenda*. Paper presented at the Systems, Manand Cybernetics, 2007. ISIC. IEEE International Conference.

Weick, K. E., & Sutcliffe, K. M. (2007). Managing the unexpected: Resilient performance in an age of uncertainty (2nd ed.). San Francisco, CA: Jossey-Bass.

Weick, K. E., & Sutcliffe, K. M. (2001). Managing the unexpected: Assuring high performance in an age of complexity. Jossey-Bass.

Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (1999). Organizing for High Reliability: Processes of Collective Mindfulness. In R. S. Sutton & B. M. Staw (Eds.), *Research in Organizational Behavior* (Vol. 1, pp. 81–123). Jai Press.

Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational response to adversity: Fusing crisis management and resilience re-search streams. *The Academy of Management Annals*, 11, 733–769.

Wong, C.-S., Law, K. S., & Huang, G.-H. (2008). On the importance of conducting construct-level analysis for multidimensional constructs in theory development and testing. *Journal of Management*, *34*, 744–764.

Woods, D. (2003). Creating Foresight: How Resilience Engineering Can Transform NASA's Approach to Risky Decision Making. Testimony on the future of NASA for Committee of Commerce, Science and Transportation, Washington, DC.

Wilbanks, T. J., Romero Lankao, P., & Bao, M. (2007). Industry, settlement, and society. In M. L. Parry, O. F. Canziani, J. P. Palutikof, P. J. van der Linden, & C. E. Hanson (Eds.), *Climate change 2007: impacts, adaptation, and vulnerability: contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press.

Wildavsky, A. B. (1988). Searching for safety. Transaction Publishers.

Wilkinson, A., Elahi, S., & Eidinow, E. (2003). Section 2. Background and dynamics of the scenarios. *Journal of Risk Research*, *6*, 365–401.

Williams, T., & Shepherd, D. (2016). Building resilience or providing sustenance: Different paths of emergent ventures in the aftermath of the Haiti earthquake. *Academy of Management Journal*. Advance online publication. doi:10.5465/amj.2015.0682

Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational response to adversity: Fusing crisis management and resilience research streams. *The Academy of Management Annals*, 11, 733–769.

Zolli, A., & Healy, A. M. (2012). Resilience: Why Things Bounce Back. Simon and Schuster, Inc.