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An Agenda to Advance Integrative Resilience Research and Practice

Key Themes From a Resilience Roundtable

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Short abstract

Presents recommendations for an integrated agenda to promote transdisciplinary resilience research and practice, drawing on proceedings from a 2016 Resilience Roundtable and a supplementary literature review.

Keywords: Community Resilience, Emergency Preparedness, Health and Wellness Promotion, Health Behaviors, Natural Hazards, Social Determinants Of Health

Abstract

People are facing an increasing variety and number of stressors, ranging from interpersonal difficulties to environmental hazards and societal forces. Resilience is the process of, capacity for, or outcome of adapting well in the face of adversity, trauma, tragedy, threats, or significant sources of stress. The science of resilience has advanced greatly since 2000, but there is an increasing recognition of the need for researchers and practitioners from different disciplines and sectors to work better together on this topic and for a shared agenda for promoting transdisciplinary resilience research.

The study provides a path forward, primarily built on proceedings from a Resilience Roundtable, held in June 2016, and supplemented with relevant literature review. The Resilience Roundtable brought together researchers, practitioners, and policymakers, across disciplines and sectors for a daylong discussion of where and how we can move to a more integrated and cohesive resilience agenda, with attention to critical factors that would motivate more collaborative work. The roundtable identified priorities for advancing a shared resilience agenda and made ten recommendations for implementing it.

Introduction

People are facing an increasing variety and number of stressors. The nature of these stressors ranges from interpersonal and financial difficulties to environmental hazards and societal forces, affecting individuals, institutions, and communities. Extensive research has focused on the healthiest and most effective ways that people and communities respond to and recover from stress. Yet while the science of resilience has expanded greatly since the year 2000, many gaps remain.

Resilience is defined as the capacity of any dynamic system to anticipate and adapt successfully to difficulties. Individual resilience is the process of, capacity for, or outcome of adapting well in the face of adversity, trauma, tragedy, threats, or significant sources of stress. While resilience science has advanced greatly in terms of understanding the factors that promote individual as well as community resilience, there

is increasing recognition of the need for transdisciplinary research[1] (among disciplines such as psychology, environmental health, public health, architecture, planning and community development, economics, political science, criminal justice, etc.).

Challenges to Advancing the Field of Resilience

To ensure that transdisciplinary resilience research has the strongest impact, several challenges must be overcome. First, as the field advances, confusion grows about what it encompasses, its scope and intent. Second, even when definitions are clear, communities struggle with how to translate resilience frameworks into actions for change in communities. Third, measurement continues to evolve, but efforts to integrate indicators of the various types of impacts into a useful metric lag behind. What is needed is a shared agenda, going forward, that will promote research in resilience in a way that builds across disciplines.

The Resilience Roundtable

Approximately 80 leading researchers, practitioners, and policymakers met in June 2016, to explore opportunities for a future resilience agenda. A primary focus was on how to integrate progress in parallel streams of individual and community resilience research and implementation activity. The meeting also sought to identify enduring questions which need to be answered in order to further advance the field and successfully implement resilience concepts.

Prior to the meeting, the organizers prepared a discussion paper, based on a literature review and current practices, that was then shared with the meeting participants. Among the information included in the paper were a set of four topics proposed as the focal points of the agenda: acute and chronic stress; systems orientation; workforce development; and culture and equity. These topics encompass both key opportunities and challenges for advancing the field.

During the meeting, groups of participants met in breakout sessions to discuss each topic and offer recommendations in four areas: facilitation of ongoing multisectoral and interdisciplinary dialogue on resilience; expansion or enhancement of policies, programs and services; improvement of workforce resilience; and development of resilience measures and performance systems to help guide future measures.

Prior to the close of the meeting, the attendees participated in an exercise aimed at prioritizing future research. The results were synthesized into three themes: 1) Stresses: addressing the continuum of stress from acute to chronic; 2) Systems: developing and building systems that are oriented to resilience; and 3) Workforce: building a broader workforce that can integrate resilience principles.

Priorities to Move the Field Forward

Stresses: A Resilience Framework Should Be Applied Across a Variety of Stresses

Background. The concept of allostasis refers to the process by which the body attempts to regain homeostasis in response to stressors. Allostatic load represents the total amount of acute and chronic stress to which an individual is exposed and the wear and tear it inflicts. However, most of the research on allostatic load has been within particular disciplines and research frameworks that have not yet conceptualized allostatic load as the combination of stressors at the individual, the household, the community, and the environmental level. Increasing evidence suggests that health disparities may be partially attributable to allostatic overload from the combination of physical, social, and psychological stressors.

Key themes from Roundtable discussions. The Roundtable participants noted the challenge of taking a holistic approach to measuring resilience that considers stressors at multiple levels, largely due to the difficulty in crafting a compelling narrative about these interconnections. They also identified entrenched

barriers (e.g., lack of resources, leadership and workflow silos) to operationalizing resilience research for implementation, particularly in the areas of scalability and generalizability when considering both acute and chronic stress together.

Participants suggested new streams of data (e.g., social media, community experiential data) should be used to build a new and more comprehensive resilience assessment framework. They also emphasized the need for new methodological approaches and for the crafting of resilience narratives to build empathy and bridge divides.

The discussion resulted in three recommendations:

- **Recommendation 1:** Develop a taxonomy of stressors and related policy that will support an integrated approach to resilience assessment over the continuums of time (day-to-day stressor and over the long term) and level (individual, family, community). Incorporate community historical knowledge and ideas into data assessment and measurement.
- **Recommendation 2:** Capture resilience data longitudinally from individuals and communities to support the development of complex systems modeling, and pilot test interventions based on that systems modeling.
- **Recommendation 3:** Focus on narratives, storytelling, and digital media to increase understanding within and across communities of acute and chronic stress and build a culture of resilience.

Systems: A Systems Approach to Building Resilience Is Required

Background. Adapting current systems to foster resilience requires changes not just to reduce the continuum of stressors (e.g., acute, chronic) that individuals and communities face, but also to connect and improve the complex range of dynamic and interconnected systems (e.g., health, justice, education) that constitute a community. Complex systems theory is a useful framework for conceptualizing resilience because it embodies the basic tenets of nonlinearity (e.g., the nonlinear processes that characterize disaster response and recovery); adaptability (e.g., responding to environmental shocks or stress); and connectivity across a range of scales (i.e., between individuals within communities and from one community to another). This model challenges the normative thinking that every observed effect has an observable cause and that the whole can be understood by studying the pieces.

Further key themes from Roundtable discussions. While most participants prioritized the need for a systems orientation to further resilience research and policy, noting that the lack of that orientation was central to why integrative progress across individual and community resilience domains had not occurred, many participants also struggled definitionally and conceptually. They questioned the boundaries of the system and argued for better articulation of the goal for a system that effectively promotes resilience. An important topic of discussion was a need to identify the policies that can support resilience in a systems framework, as well as the policies that have historically served as impediments across systems to advancing resilience. Participants noted that more work was needed in this resilience system to promote a shared vision and shared accountability among sectors working together on common resilience metrics.

The discussion resulted in four recommendations:

- **Recommendation 4:** Develop a community resilience systems map that defines the system boundaries (i.e., key actors and intersection points) and margins of system performance (i.e., thresholds where performance is adversely affected).
- **Recommendation 5:** Identify effective models for inter-organizational and administrative partnerships and return on investment for investing in partnership activities.

- **Recommendation 6:** Identify cutting-edge policies, practices, and plans from across the globe and share them across systems, disciplines, and levels (organization, family, individual).
- **Recommendation 7:** Develop a preliminary set of measures that can begin to benchmark system resilience and capture resilience return on investment.

Workforce: Resilience Can Be Built by Strengthening Community Leadership, Workforce, and Educational Training Programs

Background. Fields like resilience require structures for meaningful collaboration and strong leadership to effectively align disciplines and sectors for joint action. It is difficult to further a field like resilience without workforce development that trains a resilience workforce. The field of resilience requires new ways of thinking, training, and active consideration of the connection between "people development and placemaking."[2]

Further key themes from Roundtable discussions. During the Roundtable discussions, participants underscored many of the challenges confronting the development of a robust workforce that can address the need for more transdisciplinary and integrated action. Resilience leadership development was a leading priority action. The overarching question was whether the current workforce that addresses issues of human and/or infrastructure resilience matches needs. Participants concluded that more training was needed.

The discussion resulted in three recommendations:

- **Recommendation 8:** Define and measure the elements of training that will support resilience education.
- **Recommendation 9:** Create structures that support a more collaborative workforce model on behalf of resilience.
- **Recommendation 10:** Identify and promote leadership models to advance resilience orientation.

Summary

Despite ideas that have been put forth for transdisciplinary research agendas, the field lacks a shared resilience framework upon which to rest policy or build a cohesive workforce.

We can look to preventive medicine to sound a cautionary alarm when it comes to moving forward the field of resilience. Although the findings depend on the condition and the type of approach, there is clear evidence that some preventive approaches are more cost-effective than therapeutic interventions for the chronic disease they seek to prevent (Chokshi & Farley, 2012). Despite this, the needed paradigm shift hasn't really happened, possibly because of competing financial or other entrenched interests, structural roadblocks, or lack of leadership development and training; all of which also still exist in the field of resilience.

The next steps in applying the resilience agenda will need to identify factors that support implementation. RWJF can play a key role in advancing the efforts to further research and translate it to practice (e.g., workforce development could be linked to RWJF's Leadership for Better Health and Global Ideas for U.S. Solutions programs and commitment to multisectoral teaming), and encouraging key partners to pursue these lines of activity. Further, successful implementation of a future, integrative resilience agenda will now require ways to incentivize coordination and alignment as the norm, rather than as the exception.

Notes

[1]"Transdisciplinary research is defined as research efforts conducted by investigators from different disciplines working jointly to create new conceptual, theoretical, methodological, and translational innovations that integrate and move beyond discipline-specific approaches to address a common problem" (Harvard School of Public Health, 2017).

[2]Placemaking is a multipronged approach to planning, design, and management of public spaces to promote health and well-being by leveraging community assets and inspiration (McCann, 2002).

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