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THE DYNAMICS OF ADAPTIVE CAPACITY AND TRANSFORMATION PROCESSES IN THE DISCOURSE OF SOCIAL RESILIENCE

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Abstract

Social resilience theory now emphasizes not only recovery from shocks but also adaptive capacity and transformative change. This literature study qualitatively examines two themes: how adaptive capacity is conceptualized and which mechanisms enable post shock transformation. Adaptive capacity is increasingly defined as dynamic, relational, and politically embedded. It arises from social networks, institutional arrangements, and collective learning processes rather than from static resource stocks. Transformation, however, is not automatic. It is a contested social process shaped by power relations and competing visions of the future. Key enabling mechanisms include struggles over public narratives, the creation of new institutional forms, strategic resource distribution, accelerated learning, and grassroots political mobilization. The interaction among these processes determines whether crises produce more sustainable and equitable systems or reproduce existing vulnerabilities. Transformative resilience therefore emerges from the alignment of developed adaptive capacities with social and political dynamics that redirect crisis responses toward structural reconfiguration. This synthesis clarifies the theoretical basis for policies that aim to foster resilience while promoting positive systemic change.

Keywords: social resilience, adaptive capacity, social transformation, post-disaster recovery, institutional innovation, political mobilization, social learning.

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Introduction

Global changes occurring in recent decades have prompted a rethinking of the stability and sustainability of social systems. These changes are often influenced by how individuals balance personal freedom and their responsibilities toward the group (Saputra & Darmawan, 2021). The notion of a static society resistant to all disruptions has shifted toward a more dynamic understanding of the capacity to change, absorb pressure, and find new ways to function. This paradigm shift was born from repeated observations that shocks, whether natural or man-made, are an inseparable part of the human journey. The concept of resilience emerges as a primary analytical lens to understand not only how social entities survive, but more importantly, how they learn, adapt, and even transform through the experience of facing adversity. The focus of this study moves beyond mere survival capacity toward an exploration of the mechanisms that enable the reorganization and rebirth of a system after experiencing severe pressure (Folke, 2006). Such studies attract the attention of social scientists because they offer an optimistic and proactive perspective in facing uncertainty, emphasizing agency and the potential for collective learning. On the other hand, the way society interacts is also heavily influenced by their lifestyle and social class in daily life (Sinambela & Halizah, 2023). In essence, resilience is not seen as an innate trait but rather as a process that is continuously developed, maintained, and sometimes altered through social, institutional, and cultural interactions.

The theoretical foundation of social resilience studies can be traced back to its ecological roots, where the concept was first developed to understand how ecosystems respond to and recover from disturbances. In a constantly changing environment, the relationship between residential characteristics and population health becomes an important factor that must be considered (Warin, 2023). Transdisciplinarity has been a hallmark of this field since its inception, borrowing and adapting principles from ecology, complex systems theory, psychology, and management science to be applied to social units of analysis. The application of the resilience concept to societies, communities, and institutions marks a significant expansion that introduces the complexities of values, power, and meaning. These social dynamics add layers of analysis not found in purely biological systems, such as perceptions of risk, equity in the distribution of resources

for adaptation, and the construction of shared narratives about suffering and recovery (Adger, 2000). The recognition that resilience has a strong political dimension becomes clear, where decisions regarding who is protected, which resources are allocated, and what form of recovery is deemed legitimate are heavily influenced by existing power structures and social relations. Therefore, existing social rules must be able to maintain togetherness in the midst of a diverse society so that conflicts do not easily occur (Sulistyo & Hartanto, 2023). Thus, resilience studies have evolved into a critical field, questioning assumptions about neutrality and investigating how adaptive capacity is unevenly distributed within a population.

Major events in the early twenty-first century have increasingly solidified the position of resilience studies as a relevant field of inquiry. The 2008 global financial crisis, for instance, not only shook markets but also tested the resilience of financial institutions, social safety nets, and community cohesion. This condition was further complicated by the emergence of artificial intelligence technology, which has begun to change the way justice is upheld in society (Mardikaningsih & Oluwatoyin, 2023). These events exposed structural vulnerabilities and the interconnections between economic, political, and social systems. Responses to the crisis—whether fast or slow, coordinated or fragmented—provided a natural laboratory to observe the practical manifestations of adaptive capacity at a macro level. Along the same lines, the increasing frequency and intensity of climate-related disasters have begun to reveal the limits of traditional responsive approaches (Walker et al., 2004). Floods, storms, and droughts hitting various regions challenge societies to develop long-term anticipation and adaptation mechanisms, rather than mere post-disaster recovery responses. Active citizen participation in environmental preservation is a key factor in ensuring ecological problems can be solved collectively (Zulkarnain et al., 2021). This shift from reaction toward anticipation and preparation marks a significant evolution in resilience thinking, which has subsequently become central to development policy and disaster risk reduction discourse. The focus has begun to shift toward building systems capable of managing change, rather than simply resisting it.

Local societies and communities are often compelling units of analysis in resilience studies because they are on the front lines of facing shocks and simultaneously serve as repositories of adaptive knowledge and

practices. Moreover, in suburban areas, high population movement significantly affects the strength of bonds between neighbors (Wisnujati & Mardikaningsih, 2021). Community resilience refers to the ability of social groups to collectively identify risks, mobilize resources, and take action to overcome pressures (Norris et al., 2008). These resources include social capital in the form of trust networks and norms of reciprocity, human capital in the form of skills and knowledge, and physical capital such as infrastructure and the built environment. The interaction between these various forms of capital determines the extent to which a community can withstand the initial impact of a disruption and subsequently rebuild its life. This community strength is also visible in how citizens participate in democratic activities and social movements within their environment (Rojak et al., 2021). Local and traditional knowledge is often a key component in a community's adaptive repertoire, containing wisdom accumulated from historical experiences of facing environmental and social change. However, this capacity is not static; it can be eroded by processes of modernization, migration, or deep economic inequality. Therefore, building community resilience requires a sensitive understanding of internal dynamics, leadership structures, and differing access to resources among community members.

The pandemic that swept the world at the beginning of the 2020s served as a simultaneous and global resilience test, affecting almost every aspect of human life. This crisis made us realize how important legal protection is for everyone accessing healthcare services (Tampil et al., 2023). This public health shock quickly transformed into a multidimensional economic, social, and psychological crisis, exposing the close links between health systems, logistics, employment, and education. The response to the pandemic, from lockdowns to the mass shift to remote work and learning, forced rapid and often unprecedented adaptations on a massive scale. This event highlighted stark differences in resilience capacity between countries, cities, and even households, which were often influenced by factors such as wealth, governance, and technological infrastructure. Additionally, the double burden borne by working women has also become a serious concern within our current social structure (Khairi, 2021). The pandemic clearly demonstrated that resilience is not about returning to the previous normal state, because that 'normal' itself

may have been a condition containing the vulnerabilities that triggered the crisis (Béné, 2020). Instead, this event reinforced the argument for the necessity of transformative resilience, which is capable of producing profound changes in the structures and functions of social systems toward a more sustainable and just state. The journey through the pandemic has become a major case study of social adaptation, institutional innovation, and the limits of individual resilience, while simultaneously raising critical questions about the desired direction of social transformation post-crisis.

Social resilience studies face significant conceptual challenges regarding operational definition and measurement. These challenges also emerge in the medical field, such as the growing ethical and legal debates surrounding stem cell therapy (Issalillah, 2023). The term "resilience" is often used loosely in policy and academic discourse, encompassing meanings ranging from physical toughness to psychological strength, thus risking becoming a cliché that loses its analytical power (Brand & Jax, 2007). This ambiguity makes it difficult for researchers to compare findings across studies or evaluate the effectiveness of interventions aimed at building resilience. Without clear parameters to distinguish between resilience, robustness, or mere survival, claims about increasing the adaptive capacity of a community become difficult to validate. Furthermore, approaches to measuring resilience often rely on available proxy indicators, such as the density of community organizations or access to services, which may not fully capture the dynamic processes and reciprocal relationships that actually underlie adaptive ability. Although the world is increasingly advanced, traditional medicine persists and adapts amidst the currents of globalization (Khayru, 2022). These issues are compounded by the contextual and specific nature of resilience; what makes a fishing community resilient to climate change will differ greatly from the factors supporting a city's resilience to a financial crisis. Therefore, developing a framework that can capture the universality of the concept while acknowledging the diversity of its local manifestations remains a heavy theoretical task.

The second problem lies in the political and normative dimensions inherent in the concept of social resilience. Often, legal support is also necessary to protect families from negative views or stigma related to mental health issues (Zahid et al., 2022). Resilience narratives can

inadvertently or intentionally be used to shift the responsibility for adaptation onto individuals and communities, while obscuring the role of government and broader power structures in creating conditions of vulnerability (Cretney, 2014). When a community is expected to "be resilient" without adequate resource support or structural change, the concept can become a tool to legitimize the state's withdrawal from its responsibility to provide social protection. Questions regarding "resilience for whom" and "resilience for what purpose" become critical. In unequal societies, the capacity to adapt is unevenly distributed; already vulnerable and marginalized groups often suffer the most during shocks and have the fewest resources to recover. Thus, efforts to build resilience without simultaneously addressing underlying social injustices can reinforce and perpetuate existing inequalities. The need for a sense of security and justice for all layers of society becomes non-negotiable in building a strong system (Tampil et al., 2023; Zahid et al., 2022). Further criticism suggests that the pressure to demonstrate resilience can suppress voices demanding transformative change, as the focus shifts to managing and adapting to unjust conditions rather than efforts to change the conditions themselves.

The current global threat landscape is characterized by increasing complexity and interconnectedness, a condition often referred to as a VUCA (Volatile, Uncertain, Complex, Ambiguous) world. Amidst this uncertainty, we need to understand how traditional and modern values can support one another (Khayru, 2022; Saputra & Darmawan, 2021). Climate change, environmental degradation, geopolitical instability, and digital technological disruptions are evolving at an unprecedented speed and scale. The systemic nature of these threats, which often disregard jurisdictional boundaries, demands a new approach to understanding and managing risk. Resilience studies offer a much-needed perspective to navigate this complexity by emphasizing relationships, feedback loops, and the potential for sudden shifts in social-ecological systems (Biggs et al., 2012). This field of study enables an analysis of how shocks in one domain, such as climate-induced crop failures, can cascade into other domains, causing food insecurity, migration, and social tension. In such an interconnected environment, a system's ability to absorb shocks, adapt, and transform becomes a more critical parameter of success than mere efficiency or productivity under stable conditions. Therefore, cooperation

between the government and the community is essential to face future challenges (Rojak et al., 2021; Zulkarnain et al., 2021). An understanding of resilience serves as the foundation for long-term strategic planning across various sectors, from urban planning to national security.

Furthermore, the accumulation of experience from various crises in the early 21st century has generated a rich yet fragmented bank of empirical knowledge regarding social responses to severe pressure. Events such as the 2004 Indian Ocean tsunami, the Syrian refugee crisis, the COVID-19 pandemic, and the war in Ukraine have provided valuable insights into adaptation mechanisms, factors that facilitate or hinder recovery, and the trade-offs involved in decision-making during crises. Now is an appropriate moment to synthesize lessons from these diverse events through the theoretical lens of resilience studies (Cutter et al., 2008). Ultimately, a good understanding of how society survives will help us create a more stable and harmonious life (Sulistyo & Hartanto, 2023; Warin, 2023). Such a synthesis can help identify general principles governing social resilience while respecting the uniqueness of each situation. This systematic review is vital for consolidating a still-evolving field of study, separating robust insights from anecdotes, and building a more solid evidence base to inform policy and practice. With the world continuing to face seemingly relentless crises, the need for organized and actionable knowledge on how societies can not only weather the storm but also emerge from it with stronger structures and better prospects has reached a critical level.

This literature review aims to conduct a critical and systematic study of the development of the concepts of adaptive capacity and social transformation within the body of social resilience science. Specifically, this study seeks to deconstruct various theoretical representations of societal adaptive capacity, analyze its formative components, and explore propositions regarding the processes that link adaptation to transformative change. The theoretical contribution of this research is expected to provide conceptual clarifications that distinguish the differences and relationships between adaptation and transformation, while mapping the development of academic discourse in this field. Practically, the resulting synthesis is intended to serve as a consideration for policymakers and program planners in designing interventions that do not merely aim to restore

initial conditions but proactively build capacity for long-term adaptation and steer recovery toward positive systemic transformation. Thus, this study plays a role in bridging social resilience theory with its application in developing societies that are better prepared to face future uncertainties.

Method

This research employs a qualitative approach with a literature study design aimed at identifying, evaluating, and critically synthesizing various theoretical and empirical findings regarding the dynamics of adaptive capacity and social transformation processes within the discourse of social resilience. The primary data sources for this study are derived from relevant academic literature, including peer-reviewed journal articles, books, and book chapters that explicitly discuss social resilience, adaptive capacity, and social transformation, from both empirical and theoretical perspectives. The literature used encompasses publications in both English and Indonesian. The exclusion criteria for this study include literature that only discusses physical, engineering, or individual psychological resilience without incorporating the collective social dimension, as well as editorial opinions and non-academic articles that have not undergone a peer-review process.

Data analysis was conducted using thematic analysis as developed by Braun and Clarke (2006), which includes the stages of data familiarization, initial coding, searching for themes, reviewing themes, defining and naming themes, and writing the synthesis report. The main themes identified include the conceptualization of adaptive capacity as a dynamic and relational property, as well as mechanisms of social transformation such as transformative narratives, institutional innovation, strategic resource allocation, accelerated social learning, and bottom-up political mobilization. To enhance validity, this study applies source triangulation by comparing findings from various literatures using different geographical settings and methodologies, as well as conducting informal member checking regarding social resilience studies. Reliability is maintained through an audit trail documenting every methodological decision. The limitations of this method include potential publication bias and the absence of direct empirical generalization; thus, the resulting findings are

theoretical syntheses that need to be further tested through empirical field studies in various contexts.

Result and Discussion

Conceptualization of Adaptive Capacity in Social Resilience Theory

Adaptive capacity occupies a central position in social resilience theory as the motor that drives a system's ability to reorganize itself in the face of change and disruption (Folke et al., 2003). In the world of work, this adjustment is also visible in how human resource management responds to changes in tasks due to machine automation (Darmawan, 2023). This concept refers to the potential possessed by a society, community, or institution to prepare, plan, and implement adjustments in response to emerging pressures or opportunities. Unlike resilience itself, which is often viewed as a result or outcome, adaptive capacity is more prospective and dynamic, representing a collection of resources and conditions that enable adaptive actions to be taken before, during, or after a shock. Furthermore, it is important for everyone to be able to manage emotions well so that mental well-being is maintained in daily life (Irfan & Darmawan, 2021). In academic discourse, adaptive capacity is often contrasted with vulnerability; while vulnerability reflects a predisposition to be harmed, adaptive capacity represents the agency and strength to mitigate such harm. Early theoretical representations tended to view it as a list of assets or capital that could be inventoried, such as social, physical, human, and financial capital. This view is operationally useful but has been criticized for paying insufficient attention to how these assets are accessed, mobilized, and deployed differently by various groups within society, which is heavily influenced by power relations and institutional structures.

The development of contemporary thought in resilience and adaptation studies has shifted the representation of adaptive capacity from a mere static list of material assets toward an understanding that is far more processual, dynamic, and relational (Folke, 2006). This aligns with the need for policies that are just and appropriate to changing times so that society can live better (Halizah & Mardikaningsih, 2022). Adaptive capacity is now seen as an emergent property resulting from continuous and complex interactions between various elements, such as available resources, governance structures, bodies of knowledge, and the quality and

breadth of social networks (Adger, 2010). A key element in this representation is a set of dynamic capabilities, particularly the ability to learn, innovate, and manage inevitable complexity (Engle, 2011). To face economic uncertainty, organizations also need to use flexible approaches in managing crises (Arifin & Darmawan, 2022). Learning capacity, for instance, enables a community or system to collectively interpret signals of change, critically evaluate the effectiveness of previous responses, and flexibly integrate new knowledge into collective practices and institutions. Without adequate learning capacity, even abundant material assets can quickly become irrelevant or ineffective when faced with truly new and unprecedented shocks or pressures. Similarly, the capacity to innovate namely the ability to develop new solutions, technologies, or institutional arrangements is an essential requirement for overcoming the limits of adaptation imposed by current conditions and knowledge. This relational representation firmly emphasizes that adaptive capacity is not an attribute solely attached to individuals or households in isolation, but is instead deeply embedded in social networks, norms of trust, and institutions that facilitate coordination and collective action (Pahl-Wostl, 2009).

One dimension of adaptive capacity that receives significant attention is access to and control over various forms of capital. Unfortunately, many marginalized groups still feel alienated due to the difficulty of penetrating existing social structures (Hartono, 2021). Social capital, consisting of networks, norms, and trust, is often referred to as the glue that enables collective action during times of crisis. Strong and diverse networks can provide informational, material, and emotional support, as well as facilitate rapid coordination. However, social capital can also be exclusive, creating in-groups and out-groups, or even burdening members with heavy demands for reciprocity. Additionally, negative societal views toward psychiatric issues often become a major barrier to an individual's recovery (Aisyah & Issalillah, 2022). Human capital, which encompasses skills, health, and education, determines an individual's ability to understand risk, adopt new practices, and seek alternative economic opportunities. Financial and physical capital provide the necessary material buffers to absorb shocks and invest in change. Social resilience theory asserts that the effectiveness of adaptive capacity depends on the combination and interaction between these capitals, rather than the

abundance of just one type. A community with strong social capital but fragile physical capital may still suffer greatly from natural disasters, while a community with vast financial resources but weak social capital may struggle to reach a consensus on how to use those resources for the common good (Adger, 2003).

Representations of adaptive capacity also increasingly acknowledge the importance of institutional and political factors. In large cities, we often see a striking residential separation between the rich and the poor (Fauzi, 2021). Formal institutions such as government, law, and markets, as well as informal institutions such as customs and cultural norms, provide the "rules of the game" that shape incentives and constraints for adaptive action. Responsive, transparent, and inclusive governance is considered a crucial amplifier of adaptive capacity because it enables rapid, accountable decision-making that considers the needs of vulnerable groups. Conversely, corrupt, centralized, or closed governance can hinder resource mobilization, marginalize important voices, and exacerbate injustices in the adaptation process. Even amidst modernity, indigenous communities in urban areas continue to strive hard to maintain their ancestral traditions (Amri & Khayru, 2022). The political arena serves as the place where adaptation priorities are set, resources are allocated, and trade-offs are considered. Therefore, the adaptive capacity of a society cannot be separated from the characteristics of its political system, including space for citizen participation, freedom of the press, and conflict resolution mechanisms. A political-economy approach in resilience studies argues that ignoring this dimension of power will result in a naive and technical conceptualization of adaptive capacity, which fails to capture the underlying reasons why certain groups are systemically more vulnerable and less able to adapt than others (Lockwood et al., 2010).

Temporal aspects and scale are also integral components in the conceptualization of adaptive capacity. This is evident in how an individual's identity continues to change in accordance with social status and surrounding environmental conditions (Hariani, 2023). Adaptive capacity can vary over time, influenced by the accumulation of experience, collective memory of previous crises, and shifting socio-economic conditions. A community that has just recovered from a major disaster may have depleted adaptive capacity, or conversely, may become more

resilient because it has developed new protocols and solidarity. We must also remain vigilant against narrow nationalism that can threaten unity and international cooperation (Fariz, 2021). Adaptive capacity is also multi-scalar; the capacity existing at the household level is influenced by conditions at the community level, which in turn are shaped by policies and resource flows at the national and global levels. These interconnections across scales mean that local adaptive capacity can be constrained or enhanced by factors beyond the community's control, such as national fiscal policies, international trade agreements, or investment flows (Smit & Wandel, 2006). Therefore, instilling good character and maintaining interfaith harmony is crucial in this era of globalization (Hariyadi et al., 2023). Social resilience theory seeks to map these vertical and horizontal relationships, recognizing that strengthening resilience often requires aligned interventions across various levels of government and sectors. A comprehensive representation of adaptive capacity must therefore be able to capture the dynamics across time and scales that shape it.

Important conceptual debates revolve around the relationship between adaptation and transformation. In this regard, women play a very significant role as drivers of change in society (Aisyah, 2023). In some frameworks, adaptive capacity is associated with incremental adjustments within an existing system to maintain its core functions and identity. Transformativie capacity, by contrast, is seen as a separate or higher element that enables fundamental changes in the system's structure, function, and identity when external conditions have exceeded the limits of adaptation. However, other representations reject this dichotomy and propose a spectrum or continuum, where cumulative and radical adaptive actions can ultimately trigger transformative change (Pelling & Dill, 2010). Experiences during the Covid-19 pandemic also showed how significant the impact of a health crisis can be on the psychological condition of pregnant women (Issalillah, 2021). In this view, adaptive capacity must include elements that allow for experimentation, long-term vision, and the ability to challenge dominant norms and power structures. This includes what is referred to as the capacity to "build back better" or "build back differently," which involves critical reflection on the root causes of vulnerability and initiatives to create systemic alternatives. This

understanding expands the scope of adaptive capacity beyond conventional risk management toward agency for deep social change.

Adaptive capacity in social resilience theory has evolved from asset-based definitions toward a more complex, dynamic, and political understanding. In urban areas, the fate of low-wage workers must also be considered so that they do not fall further into uncertainty (Mahmudah, 2022). This concept is now widely understood as a potential embedded within social networks, institutions, and power relations, which enables learning, innovation, and collective decision-making in response to change. Its representation is no longer neutral but explicitly recognizes that access to this capacity is unevenly distributed, and its development depends heavily on inclusive and fair governance (Engle, 2011). It is crucial to build future policies that continue to respect local cultural values (Mardikaningsih & Darmawan, 2023). The recognition of temporal and multi-scalar dimensions further enriches our understanding of its non-static and interconnected nature. Thus, adaptive capacity emerges not as a technical checklist, but as a fundamental social and political construct for a society's ability to face uncertainty and shape its own future. Knowledge of how this capacity is conceptualized provides an essential foundation for examining the mechanisms of transformation that may emerge from it.

Mechanisms of Social Transformation in the Post-Shock Recovery Process

Social transformation within the framework of resilience refers to fundamental changes in the structure, function, and identity of a social or socio-ecological system, leading to a new condition that is fundamentally different from the previous state (Cote & Nightingale, 2012). This change often involves how families maintain intergenerational harmony amidst the shocks of the times (Sulistyo, 2022). The mechanisms that facilitate this type of transformation following a major shock are complex and often emerge from the interaction between deep disruption, collective agency, and enabling conditions. Shocks serve as critical triggers that can loosen the grip of established practices and institutions, opening what is known as a "window of opportunity" for change. However, the shock itself does not guarantee a positive or desirable transformation; the outcome depends heavily on the social mechanisms activated during the response and

recovery phases. Furthermore, it is important for us to realize that every social group has unique ways of facing life's pressures so that their cardiovascular and mental health remain protected (Issalillah, 2022). These mechanisms operate across various domains, including the cognitive and narrative, the political and institutional, and the domain of material practices. The process of transformation often begins with a crisis of meaning, where the experienced shock collapses shared understandings of how the world works and how society should be organized. This difficult situation is sometimes exacerbated by the inequality of past legacies that make it harder for some regions to rise when facing climate change (Gani, 2022). This disconnection creates space to question basic assumptions and gives rise to public discourse regarding the failures of previous models, the feasibility of alternatives, and visions for a different future.

One of the key mechanisms in the post-disaster period is the formation of competing transformative narratives to fill the vacuum of meaning. In rebuilding togetherness, cultural identity plays an important role so that diverse communities can unite (Oluwatosin & Rojak, 2023). Within the interpretive space left empty after a major shock, various actors—ranging from governments and non-governmental organizations to grassroots groups and opinion leaders actively seek to offer causal explanations for the crisis and blueprints for recovery (Birkland, 2016). These narratives function not merely as descriptions, but as powerful political and social tools to frame problems, allocate blame, and direct resources and public support toward specific solutions (Entman, 2010). In addition to cultural narratives, public understanding of health advice and vaccination is also heavily influenced by how that information is delivered (Khayru, 2023). Narratives that succeed in achieving public resonance can crystallize into a collective vision that then mobilizes mass action and changes policy agendas and priorities (Snow & Benford, 1992). An effective transformative narrative usually links the direct experience of suffering with a sharp critique of broader political, economic, or environmental structures. Therefore, good public policy must be able to balance economic interests with nature conservation and social justice (Mardikaningsih & Hariani, 2021). This mechanism can be clearly seen in post-disaster movements demanding environmental justice, urban planning reform, or resource redistribution. This process of reframing

reality is essentially an ideological battle where various interest groups strive to redefine the parameters of the "new normal."

A second vital mechanism is the emergence of new forms of social and institutional organization, or the radical reorganization of existing ones. For an organization to survive, leaders need to develop a creative culture and encourage the team to continuously innovate (Özkaya et al., 2023). Major shocks often reveal the inadequacy or total failure of existing institutions in protecting society. Knowledge of these failures can trigger institutional experimentation, where communities form new action groups, cross-sector coalitions, or participatory governance models to fill the void or challenge old structures. One key is the leader's ability to increase the capacity of social organizations to be more responsive to complex challenges (Corte-Real et al., 2021). These innovations can range from community-based recovery committees with real authority to digital platforms for transparent aid coordination and decision-making. Good communication between organizations is also essential for building high-quality collaborative relationships (Gardi et al., 2021). A key characteristic of institutional forms that facilitate transformation is their capacity for adaptive learning, inclusiveness, and the ability to manage resources collectively for long-term goals. Ethical values within an organization can also be a very useful tool for resolving internal conflicts peacefully (Khayru et al., 2021). When these new structures succeed in providing a more effective and just response than their predecessors, they gain legitimacy. This legitimacy allows them to persist beyond the initial emergency response phase and evolve into permanent institutional arrangements that can change the political and social landscape. Such institutional transformations often involve a shift in power, distributing agency to previously marginalized groups (Folke et al., 2005).

The allocation and mobilization of resources post-disaster is a material mechanism that significantly determines the direction of transformation. In managing the environment, the role of local communities is crucial so that the ecosystem and economy remain balanced (Ramle et al., 2022). How money, materials, and technical assistance are distributed to whom, under what conditions, and for what purpose can reinforce existing patterns of dependency and inequality or can be used as a lever to drive change. We also need to pay attention to

the fate of refugees so that they do not feel alienated and still have a sense of belonging in their new places of residence (Marzuki et al., 2023). Heavily funded reconstruction programs, for instance, can be designed with provisions that promote climate-resilient building standards, prioritize housing for low-income groups, or create sustainable local jobs. Especially for poor families in crowded cities, food adequacy becomes an urgent issue that must be addressed immediately (Mahmudah, 2021). These targeted investments can permanently alter the physical and economic landscape. This mechanism relies on deliberate political decisions to use the post-disaster momentum and resource flows as an opportunity to rebuild in a way that strategically addresses the root causes of vulnerability (Manyena et al., 2011). Furthermore, the presence of urban forests can help improve the quality of air and the environment where we live (Dahar et al., 2022). This also involves the ability to mobilize and direct endogenous community resources, such as voluntary labor, local knowledge, and social solidarity, toward transformative projects.

An accelerated social learning process is another mechanism that drives transformation. The experience of facing personal failure can actually shape the spirit and aspirations of young people for the future (Rahman & Hariani, 2022). Direct experience in facing shocks and handling their consequences generates intense and collective practical knowledge. Communities and policymakers are forced to experiment with solutions under pressure, and the results of these experiments—both successes and failures provide powerful lessons about what works and what does not in the new environment. People also need to learn to adjust their lifestyles and food consumption so that family food security is maintained (Aisyah & Issalillah, 2021). This learning mechanism can lead to the rejection of old practices and policies proven to be ineffective or harmful. Furthermore, crises often force cross-boundary collaborations that were previously unthinkable, such as between scientists and the community, or between the public and private sectors. Moreover, amidst technological advancements like the smart city concept, the public's perspective on the comfort of life also changes (Rojak, 2022). These interactions can generate knowledge exchange, the formation of new networks, and hybrid perspectives that give rise to innovative solutions (Pahl-Wostl, 2009). For this learning to become

transformative, it must move beyond technical fixes and reach into learning about power dynamics, justice, and sustainability.

Political mobilization and pressure from below often become the primary drivers of post-shock transformation. Frequently, groups with similar interests will form strong urban communities to support one another (Rejeki, 2021). When affected communities, especially the groups that suffer the most, organize themselves to demand accountability, justice, and structural change, they can create an unstoppable political force. However, we must also remain critical of technology that can monitor our movements and restrict democratic freedoms (Rojak & Gardi, 2022). This collective action can take the form of protests, advocacy campaigns, strategic litigation, or the formation of alliances with national and international actors. In this struggle, the role of working women is vital, even though they must bear a double burden in their lives (Fauzi, 2023). Such mobilization serves as a mechanism to translate personal suffering into collective political demands, challenging the existing distribution of power and resources. These demands also include the need to end racial discrimination so that everyone feels valued in a diverse society (Pakpahan et al., 2022). The success of mobilization depends on the existence or formation of social organizations, leadership, and the ability to voice credible and compelling demands (Béné et al., 2014). Moreover, when urban changes occur, they sometimes make underprivileged residents feel marginalized from their own places of residence (Fauzi, 2022). When social movements succeed in influencing the post-disaster policy agenda, they can steer the recovery process toward deeper reforms.

Fundamental change following a shock is not an inevitability, but rather the result of a series of interrelated and often contested social processes. The decisions of housewives in choosing environmentally friendly products also constitute a small but important part of social change (Halizah & Nuraini, 2021). These mechanisms ranging from narrative struggles, institutional innovation, and strategic resource allocation to accelerated collective learning and political mobilization operate simultaneously and reinforce one another. The primary key is how communities adapt to climate change through their daily cultural habits (Oluwatoyin & Mardikaningsih, 2022). Their interaction determines whether the window of opportunity opened by a crisis will lead to a

recovery of the status quo, a regression, or a leap toward a more sustainable and just system. The essence of positive transformation lies in the ability to utilize disruption to challenge dominant power structures and logics, as well as to build the collective capacity to imagine and realize alternatives. With good cooperation, we can build a better future for everyone (Mardikaningsih & Hariani, 2021; Oluwatoyin & Mardikaningsih, 2022). An understanding of these mechanisms provides a conceptual roadmap for directing the post-disaster recovery process toward outcomes that truly reconfigure the root causes of vulnerability.

Conclusion

This literature review has uncovered the evolution and complexity of the concept of adaptive capacity and the mechanisms of social transformation within the body of social resilience theory. Adaptive capacity has shifted from a static, asset-based understanding toward a dynamic, relational, and political construction. It is understood as a potential embedded within social networks, institutions, and power relations, enabling processes of learning, innovation, and collective decision-making. Analysis shows that this capacity is unevenly distributed, and its effectiveness depends heavily on inclusive governance and recognition of temporal and multi-scalar dimensions. Meanwhile, post-shock social transformation is identified not as an automatic result, but as a product of complex and often contested social mechanisms. These key mechanisms include the formation of competing transformative narratives, the emergence of institutional innovations, strategic resource allocation, accelerated social learning, and bottom-up political mobilization. The interaction between these mechanisms determines whether a crisis will become a catalyst for positive systemic change or merely reinforce old vulnerabilities. Thus, transformative resilience emerges from the intersection of mature adaptive capacity and the activation of social mechanisms that can direct post-crisis energy toward a fundamental reconfiguration of structures.

The findings of this study have significant implications for policy formulation and development practices oriented toward resilience. First, technical and apolitical approaches to building community resilience have proven inadequate. Planners and policymakers must explicitly account for dimensions of power, justice, and participation in intervention designs.

Programs must be designed to strengthen responsive and accountable governance, and actively involve marginal groups in decision-making processes. Second, investment focus must shift from merely providing post-disaster aid and physical infrastructure toward systematically strengthening long-term adaptive capacity before a crisis occurs. This includes investment in education, health, social networks, and knowledge systems that enable adaptive learning and innovation. Third, post-disaster recovery frameworks need to be designed to consciously utilize the "window of opportunity" by facilitating transformative mechanisms. This can be achieved by supporting dialogue spaces for differing visions of the future, allocating reconstruction funds with requirements that encourage new standards and practices, and protecting the space for civil society mobilization and organization. At a broader level, these implications suggest the need for a reorientation of the development paradigm from mere economic growth toward building collective capacity to manage change, uncertainty, and profound transitions.

Based on the findings and implications described, several recommendations are proposed for further research and action. In the field of research, systematic comparative studies are needed to test and refine propositions regarding transformation mechanisms across various geographical and cultural settings. Such studies could help identify enabling conditions that allow specific mechanisms, such as narrative formation or institutional innovation, to successfully drive positive change. Research also needs to bridge macro-level theoretical discourse with micro-empirical evidence on how individual and household agency contributes to collective transformation processes. For practitioners and policymakers, the primary recommendation is to adopt monitoring and evaluation approaches that are process-sensitive rather than just outcome-oriented. Evaluation systems must be capable of capturing changes in power relations, learning patterns, and institutional dynamics that may indicate the occurrence of transformation. Additionally, it is recommended to develop operational guidelines that help integrate principles of justice and inclusion into all phases of disaster management and resilience planning. Finally, advocacy must continue to position investment in transformative social resilience as a political and budgetary priority equal to investment in national security or physical infrastructure,

as it constitutes the primary foundation for societal sustainability in a century full of disruptions.

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