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HUMAN RESILIENCE UNDER STRESSFUL CONDITIONS: THE ROLE OF ADAPTIVE PSYCHOLOGICAL MECHANISMS

Abstract. Against the background of mounting global stressors, ranging from pandemics to geopolitical turmoil, the investigation of human resilience has grown in relevance. This paper is an exploratory approach to the adaptive neurobiological and psychological processes that facilitate the capacity to endure, to recuperate from, and even to flourish in the face of challenging circumstances. Here, resilience is understood not as an invariant personal attribute, but as an active and multi-level dynamic consisting of the interaction between cognitive, emotional, physiological, and social systems. It is informed by an interdisciplinary body of literature, including systems theory, developmental psychology, and neuroscience. It draws together the results of recent survey studies that clarify the biological substrates and psychological patterns of resilience.

The debate features the function of safe attachment, emotion management, reappraisal of the cognitions, and meaning-making as psychological resources that facilitate adaptive responses. Neurobiologically, the paper identifies HPA axis management, prefrontal cortex functioning, reward processing, immune functioning, and neuroplasticity as critical for modulating responses to stress. In addition, the paper critiques the ethical and methodological nuances of resilience science and its possible misapplication and oversimplification in service and clinical



contexts. The paper concludes with suggestions for further investigation, focusing on culturally competent, developmental stage-consistent, and system-informed models to advance and understand human resilience within and across various populations and contexts.

Keywords: resilience, stress, adaptive mechanisms, neurobiology, psychological coping, mental health, HPA axis, cognitive regulation, emotion, systems theory.

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ПСИХОЛОГІЧНА РЕЗИЛЬЄНТНІСТЬ ЛЮДИНИ В УМОВАХ СТРЕСУ: РОЛЬ АДАПТИВНИХ ПСИХОЛОГІЧНИХ МЕХАНІЗМІВ

Анотація. У сучасному світі, що характеризується зростаючою кількістю глобальних стресорів — від пандемій до геополітичної нестабільності — дослідження психологічної стійкості людини набуває особливої актуальності. У статті здійснено теоретичний аналіз адаптивних психологічних та нейробиологічних механізмів, які дозволяють особистості справлятися зі стресом, відновлюватися після травматичних подій та демонструвати здатність до особистісного зростання. Психологічна стійкість розглядається не як стабільна риса, а як динамічний багаторівневий процес, що формується у взаємодії когнітивних, емоційних, фізіологічних та соціальних чинників.

У роботі проаналізовано результати міждисциплінарних досліджень, що ґрунтуються на системному підході, розвитку дитини та нейронауках. Розглянуто роль емоційної регуляції, когнітивної переоцінки, досвіду позитивних емоцій, безпечної прив'язаності та пошуку сенсу життя як ключових психологічних чинників стійкості. Також висвітлено роль регуляції НРА-осі, нейропластичності, системи винагороди та імунної відповіді у формуванні нейрофізіологічної основи стресостійкості. Автори також звертають увагу на проблеми етичного та методологічного характеру, пов'язані з концептуалізацією стійкості, включаючи ризик надмірного спрощення поняття у клінічній та соціальній практиці. У підсумку подано рекомендації щодо подальших досліджень, акцентуючи увагу на необхідності культурно чутливого,



розвитково обґрунтованого та системно орієнтованого підходу до вивчення людської стійкості.

Ключові слова: стійкість, стрес, адаптивні механізми, нейробиологія, психологічне подолання, психічне здоров'я, НРА-вісь, когнітивна регуляція, емоції, системний підхід

Problem statement. Understanding human resilience has become centrally important to all fields during an age characterised by global crises, from long-lasting armed conflicts to the COVID-19 pandemic. Once an afterthought or loosely conceptualised psychological entity, resilience has become the central construct of mental health, developmental psychology, and neurobiology. Individuals can restore or achieve psychological well-being in the face of adversity, trauma, or prolonged stressors (Southwick & Charney, 2012). Resilience inquiries differ from the traditional pathology-focused models. Instead of answering why people succumb to stress, why many do not, and how others outright flourish, the resilience literature is trying to answer the same questions in the affirmative. This has shifted resilience from an abstract quality to an active, modifiable process supported by recognisable cognitive, emotional, and biological processes.

The word “resilience” is itself omnipresent and slippery. As Luthar, Cicchetti, and Becker (2000) [2] contend, its conceptual vagueness has produced non-consistent operationalisation in psychology. A few models define it as an enduring character trait (e.g., hardiness), but others frame it as an ongoing dynamic of effective adaptation across time. Masten (2001) described resilience as “ordinary magic” because it tends to emerge from ordinary, day-to-day psychological and environmental resources, not internal superior fortitude. This conceptual tension makes it critical to scrutinise how resilience is built, measured, and developed under various stress conditions.

The phenomenon of stress also requires a clear definition. The transactional model of stress and coping by Lazarus and Folkman (1984) provides an informative framework, where the psychological effect of stress is determined to the greatest extent by cognitive appraisal and coping. In this model, resilience operates not as resistance to the phenomenon of stress but as a modulation of the stress response through adaptively regulated influence. The neurosciences have further enriched the perspective, illustrating how the alterations produced by stress on the prefrontal cortex, amygdala, and hypothalamic–pituitary–adrenal (HPA) axis influence cognitive and emotional function (Feder, Nestler, & Charney, 2009).

In the last few years, the scientific literature has moved towards studying adaptive psychological processes that facilitate resilient functioning. These include meaning-making, emotion regulation, cognitive reappraisal, and psychological flexibility (Kalisch et al., 2015) [3]. Significantly, these processes do not work



autonomously but continually interact with neurobiological substrates and social contexts. For instance, well-functioning prefrontal areas may contribute to reappraisal activation, dampening amygdalar activation during threat processing. Further, cultural beliefs, social support, and secure attachment can condition the expression of resilience (Panter-Brick & Leckman, 2013).

The present paper intends to analyse human resilience as a multi-faceted construct with specific attention to the contribution of adaptive psychological mechanisms during stressful circumstances. It will initially present the theoretical background on resilience and critically evaluate the essential psychological strategies underlying resilience. The paper then discusses neurobiological correlates, interindividual differences, and environmental impacts, preceding the discussion on pragmatic applications to psychological intervention and resilience-promoting programs. Through a synthesis of knowledge between and among disciplines, the present effort intends to explain what resilience is and suggest how it can be intentionally nurtured.

Analysis of Recent Studies and Publications. Recent scholarship has enriched resilience science's theory and data landscape, increasingly conceptualising resilience as a multisystemic and context-dependent process. Rutten et al. (2013) and Kalisch et al. (2024) [3] have combined psychological and neurobiological findings to illustrate how safe attachment, emotion regulation, and reward sensitivity engage with neural systems, including the HPA axis and prefrontal cortex, to influence adaptive functioning. Bush and Roubinov (2021) [1] have also stressed the developmental origins of resilience, specifically in childhood, within ecological models that position resilience within large-scale social and biological contexts. At the same time, critics, including Mahdiani and Ungar (2021) [4], have confronted the normative presumptions of resilience and how it may conceal dysfunction or activate deleterious conditions. In conjunction with increasing attention to biomarkers, plasticity, and epigenetic management, this critical debate highlights the move from isolative to integrative models that aspire to integrate cognitive, behavioural, and somatic aspects of stress adaptation.

Purpose of the Article. This article aims to synthesise psychological and neurobiological research to elucidate the core adaptive mechanisms that enable human resilience under stressful conditions.

Presentation of the primary material. Resilience has become a central construct in psychology, health sciences, and the social sciences, defining an individual's or system's ability to adapt, survive, or recover from challenging circumstances successfully. Resilience has been understood and conceptualised through various lenses, from biological mechanisms and psychological characteristics to socioecological models. Although widely considered to be an antecedent to and buffer against stress and trauma, resilience is increasingly being



recognised as an active and dynamic process, not an immutable characteristic. This section discusses the historical and contemporary resilience theory and provides a biosycho-social, systemic conception and understanding of resilience and how it operates.

The most powerful contemporary conception of resilience is the systems science approach, which defines resilience as the capacity of a system to recover to a high utility state after perturbation by stressors (Oken, Chamine, & Wakeland, 2015) [7]. In the present conception, stressors are external or internal stimuli that move the body's physiological or psychological systems from a baseline state to an altered and less optimal one. This transition is accompanied by measurable bodily alterations, including hormonal shifts within the hypothalamic–pituitary–adrenal (HPA) axis or changes in autonomic nervous system functioning. Resilience is how the systems restore themselves and how allostatic load—the body's wear and tear brought about by recurrent stress response—is lessened. The ability to recover indicates biological homeostasis and includes the capacity for cognitive appraisal, perception, and behavioural flexibility.

In line with such an approach at the systems level, Cicchetti (2010) [2] posits a multilevel perspective that unifies neurobiological, psychological, and environmental factors in the aetiology of resilience. His work illustrates explicitly how early-life stress, including child maltreatment, can compromise biological and psychological function yet induce adaptive responses in specific individuals. These responses are guided by the plasticity of the neural and endocrine systems, which, in nurturing circumstances, can subserve favourable adaptation. Cicchetti's model is clear that resilience is not an endowment but rather a developmental pathway guided by the interaction between internal predispositions and external experiences.

Parallel to the systems and multilevel models, other integrative reviews emphasise the conceptual richness of resilience, highlighting the multiplicity of definitions and the variety of theories developed throughout history. Métais et al. (2022) [5] systematically reviewed the literature. They concluded that resilience is either described as a return to the pre-trauma level of functioning or as growth beyond the pre-trauma state—a construct similar to post-traumatic growth. The authors contend that resilience should be considered in terms of a transactional framework, where the person is always acting on and accommodating to an ever-changing environment. It lends itself to an enriched constructivist perspective, where resilience is co-constructed through individual agency and affordance in the environment.

Sisto and others (2019) [10] further articulate the construct by delineating five macro-categories within the definition of psychological resilience: persistence, existential meaning-making, internal coherence, personal growth, and contextual adaptation. According to them, resilience is best understood as a transversal



psychological attitude—a malleable resource that can be called on across various domains of life. Their definition places resilience within existential and developmental contexts. It posits that resilience encompasses recovery from adversity and the ability to preserve meaning orientation in the face of adversity.

Vella and Pai (2019) [11] trace the history of resilience work, mapping how it has moved from deficit-based to strength-based paradigms. They illustrate how previous work mainly looked at behavioural responses to adversity and how recent work has looked at what lies beneath resilience, including biological mechanisms such as the regulation of cortisol and heart rate variability, psychological characteristics such as optimism and self-efficacy, and social factors including networks of social supports. One take-home message from the review is the persistent necessity for conceptual clarity, particularly around resilience and how it might be measured within and between populations and contexts.

However, not all perspectives on resilience are necessarily unqualifiedly positive. Mahdiani and Ungar (2021) [4] present the opposing critical perspective by speaking of the “dark side” of resilience. According to Mahdiani and Ungar, in some contexts, resilience can become maladaptive, for example, where individuals repress vulnerability, do not seek help, or continue in abusive contexts because of an inappropriate sense of perseverance. By differentiating between functional and dysfunctional resilience, the authors invite scholars to move beyond normative presumptions regarding the inherent desirability of resilience. This perspective puts the field on notice to consider whether an individual is resilient and whether the resilience is sustained, contextually appropriate, and beneficial for overall well-being.

Reiterating such caution, Rutter (2023) [8] encourages conceptual sophistication in using the resilience construct. As with attachment theory, Rutter indicates resilience has become oversimplified in professional and popular discourses. Rutter urges restoring focus on the original empirical basis of resilience theory, including its developmental origins and the contextual factors that mediate its expression. For example, resilience during childhood might be expressed differently than in adulthood, and interventions need to be attuned to these developmental paths.

These insights posit that resilience is best described as an active, systemic, and context-sensitive phenomenon. The long-established conception of resilience as an unchanging characteristic—something one “possesses”—is increasingly being replaced by more dynamic models highlighting adaptation, feedback, and transactional dynamics between the individual and their environment. This theoretical advance enables a richer sense of how resilience functions in actual environments, including biological regulation and sociocultural embeddedness.

In addition, the increasing focus on multi-level frameworks strengthens the scientific validity of resilience research by stimulating integrative methods. Random



controlled trials, neuroimaging studies, and molecular genetic analyses, as proposed by Cicchetti (2010) [2], provide the direction for discovering biomarkers and neurobehavioral pathways that promote resilient functioning. These paradigms can ultimately guide precision interventions according to differentiated risk profiles and developmental phases.

In summary, resilience theory has shifted from simplistic views of individual resilience to sophisticated, system-oriented, and contextualized concepts. The discipline accepts resilience as an interconnected, multidimensional construct with biological, psychological, and environmental components. It requires precise operationalisation, ethical awareness, and critical consideration of normative presumptions. Future studies must develop further and narrow resilience frameworks to be comprehensive, scientifically sound, and practically applicable across various settings.

Resilience, in the general sense of restoring or preserving mental health after facing adversity, is increasingly understood as an active, dynamic and multi-faceted process as opposed to an inborn, fixed characteristic. The interaction between cognitive, neurobiological, genetic, and environmental components influences the individual's response to stress. While contemporary societies are confronted by mounting global threats—pandemics to geopolitical turmoil—the necessity of improved understanding and provision for mental resilience has become ever more important in both scientific and treatment domains.

Historically, traditional definitions of resilience were primarily centred around the non-occurrence of psychopathology in the aftermath of adversity. Rutten et al. (2013) offer an extended framework, though, advocating that resilience is an active process that not only prevents mental disorders from being initiated but also allows for fast recovery and even growth after traumatic events. This broader definition acknowledges not just psychological resilience but also neurobiological flexibility. Resilience now encompasses both the protection against mental disease and the active regeneration after such dysfunctions through the effects of adversity. Significantly, resilience is not an on-or-off affair but an ongoing trajectory influenced by dynamic interactions between internal dispositions and environmental contexts.

Several major psychological processes are persistently found to form the basis of resilience. Rutten and colleagues (2013) include secure attachment, optimism, and meaning as the main psychological features. In the early years, secure attachment leads to trust, emotion regulation, and efficacious coping methods. Those with secure attachment backgrounds are well-positioned to develop an integrated sense of the self and the ability to build and maintain helpful others—capabilities essential in meeting future hardships.



Positive feelings also come into play. As suggested by the broaden-and-build theory of positive emotion, the feelings of joy, gratitude, and contentment broaden cognitive repertoires and construct psychological resources that can be mobilised under stressful conditions. People with a clear direction in life are also shown to exhibit greater perseverance, optimism, and the capacity to see meaning in challenges—abilities built into resilience outcomes.

Recent neurobiological work has identified critical systems and circuits mediating the physiological response to stress and resilience. Bush and Roubinov (2021) [1] highlight the necessity of conceptualising resilience as a multisystem construct within the context of childhood. Consonant with Bronfenbrenner's bioecological model, Bush and Roubinov contend that body systems ranging from the autonomic nervous system (ANS) to the hypothalamic–pituitary–adrenal (HPA) axis, immune function, and even epigenetic processes all contribute to an integrated set of factors determining an individual's response to stress.

The ANS, which includes the sympathetic and parasympathetic branches, is the system involved in immediate physiological responses to stress. The dysregulation of the system, and specifically the hyperactivation of the sympathetic response in an extended manner, has increased susceptibility to stress-related disorders. The HPA axis, which controls cortisol secretion, is another key player. Acute activation of the HPA is an adaptive response, but chronic dysregulation is associated with a higher risk of depression, anxiety, and PTSD. Resilient individuals tend to have a well-balanced and flexible response to stress by the HPA.

Bush and Roubinov (2021) [1] also propose that biomarkers, including immune markers, markers of cellular ageing (for instance, telomere length), and epigenetic alterations, are increasingly becoming the focus of resilience studies. The biomarkers provide insight into how adversity can "get under the skin" and influence long-term health paths. For instance, epigenetic alterations such as DNA methylation can change the expression of genes without altering the DNA sequence and, as such, influence the brain's ability to manage emotion, attention, and memory. These biological markers are modifiable, which opens doors to prevention and early intervention.

Murrough and Russo (2019) [6] further include that neurobiological resilience is not just the passive lack of maladaptive responses but the active management of neurobehavioral systems to maintain homeostasis. Their model stresses resilience to stress as an adaptation to which the functioning of circuits involved with reward, executive function, and emotional management is sustained despite challenging conditions. These include brain areas like the prefrontal cortex, the hippocampus, the amygdala, and the dopaminergic system involved in motivation and pleasure.

Kalisch, Russo, and Müller (2024) [3] explore the system biology of resilience and find specific neural networks underlying various dimensions of stress response



and recovery. In line with their exhaustive review, the network in the hippocampus that enables the differentiation between threats and non-threats is central to the suppression of pathological fear responses, as observed in PTSD conditions. At the same time, prefrontal cortex-mediated top-down control enables emotion regulation and cognitive flexibility, which are adaptive in stressful situations.

In addition, the function of the reward system, specifically the capacity to anticipate and relish pleasant experiences, is shown to defend against the onset of anxiety and depressive disorders. These results fit with the literature related to anhedonia (loss of capacity to feel pleasure) as the primary vulnerability state for the pathogenesis of mood disorders. Significantly, Kalisch et al. discuss the integrity of neurobiological resilience as being interconnected with the function of other body systems, including the immune system, gut microbiome, and blood–brain barrier, all of which influence brain functioning during stress.

Differences between individuals, such as biological sex, genes, and the timing of developmental stages, also influence resilience. According to Murrough and Russo (2019) [6], women and men might use different coping mechanisms during stress, and there are neurobiological consequences. Stresses during early life may also organise brain development into patterns that lead to vulnerability or resilience in the future, depending on the timing and characteristics of the stress. For instance, the critical periods of brain development can be windows of risk and opportunity to influence responses to stress.

Bush and Roubinov (2021) [1] also highlight that childhood is an essential period for establishing neurobiological resilience. Assistance to caregivers during early development, an enriched environment, or stress inoculation procedures can enhance physiological resilience and better regulate stress in the future. These results highlight the necessity for developmentally aware, multisystemic interventions to build resilience, specifically in at-risk populations.

Comprehending the underlying mechanisms of resilience has significant ramifications for preventive and clinical interventions. Rutten et al. (2013) believe that incorporating genetic, environmental, and developmental information is critical to identifying risk and providing tailored interventions. This is echoed by Kalisch et al. (2024) [3], who propose that interventions in the future might focus on the modulation of neural plasticity, reward processing, and immune function to maximise adaptive response. Pharmacologic agents that modulate neuroplasticity and behavioural therapies to enhance executive control or build healthy feelings are all potential tools.

Notably, scientists in these studies are warning against oversimplified models. The neurobiology of resilience is highly complicated, with various interactive systems and very idiosyncratic profiles. Murrough and Russo (2019) [6] pointed out that despite the accelerated progress, translation into useful therapies is still ongoing.



Translational and longitudinal studies at a large scale are essential to fill the knowledge gap between mechanism-based understanding and treatment application.

Resilience is an advanced construct rooted in both neurobiological and psychological functioning. Psychological processes, including meaning-making, positive affect, and secure attachment, equip individuals with the resources to interpret and regulate adversity. At the same time, neurobiological systems—the HPA axis, prefrontal regulation, reward processing, and immune function—facilitate adaptive physiological responses that preserve mental stability. As science develops, the most viable pathway to serving mental wellness throughout the lifespan is through the multisystemic, developmental, and individualized model of resilience.

Examining resilience as a multi-domain construct has indicated the need for an integrative, holistic approach across the neurobiological and psychological fields. The present paper has shown that resilience cannot be compressed into one mechanism or system but is instead an evolving interaction of cognitive, emotional, social, and physiological processes acting together to equip individuals to adjust to conditions of adversity successfully. Although there has been significant progress, some major areas remain to be worked on concerning the conceptual coherence, consistency in methodologies, and applicability of resilience-based studies.

Among the most potent insights from recent findings is the reconceptualisation of resilience as an active recovery process, not just stress resistance. The literature reviewed offers sustenance for the view of resilience as an adaptive pathway rather than an attribute-like characteristic. The psychological processes of positive affect, secure attachment, and meaning-making are foundational to resilient outcomes when engaged within an optimal social and environmental setting. However, the stability and modifiability of such processes across the lifespan are still areas of academic debate.

From the neurobiological perspective, resilience to stress largely relies on the adaptability of physiological networks, specifically the HPA axis, prefrontal cortex, reward system, and immune signalling networks. The intricacy of these networks—and their two-way interactions with environmental stimuli—makes it difficult to define precise biomarkers of resilience. Kalisch et al. (2024) [3] and Murrough and Russo (2019) [6] are among the authors who pointed out that resilience-related biological processes tend to be non-linear and context-dependent and are thus resistant to simplistic categorisation. For instance, the same stress-induced adaptation might be beneficial in one situation and detrimental in another.

Although integrating human and animal models has aided in understanding resilience pathways, translational limitations exist. Behavioural avoidance and recovery from imposed stressors are how resilience is often operationally defined in animal studies, but do not necessarily reflect the social and cognitive components



essential to adaptation in human psychology. Individual differences in characteristics such as gender, stage of growth, and cultural background also remain inadequately described in neurobiological investigations and may reduce the applicability to human populations.

A significant criticism of the domain, submitted by Mahdiani and Ungar (2021) [4], is the possibility of maladaptation in resilience in specific contexts. In other words, resilience in some contexts contributes to greater exposure to dangerous environments or the suppression of vulnerability expressions. This “dark side” of resilience complicates the ethical and pragmatic grounds on which resilience is built. It has specific relevance where the cultivation of resilience may displace needed structural or system-level change. Resilience, therefore, needs to be assessed not just based on personal outcomes but through the lens of broader social and ethical contexts as well.

The literature is also confronted with the problem of methodology. An absence of consistency in the definition and conceptualisation of resilience has produced non-comparable assessments across studies. While some utilise longitudinal assessments to trace the recovery process, others use cross-sectional data points or self-report tools that do not fully recapture resilience's dynamic and multi-faceted nature. To address these problems, higher consideration of mixed-methods designs, ecological validity, and longitudinal data gathering will be called for.

Notwithstanding these limitations, there is much potential in the continuing work that examines multisystemic and developmental models. For example, Bush and Roubinov's (2021) [1] extension of Bronfenbrenner's ecological model highlights the need to position resilience within nested systems of influence, ranging from neurobiological substrates to cultural and policy contexts. This allows new doors to open for the design of interventions, such as early-life prevention, community resilience programs, and culturally competent therapy.

At the application level, interventions to build resilience will need to consider both biological malleability and psychological plasticity. It is established that cognitive behavioural therapy (CBT), mindfulness-based treatments, and stress inoculation training effectively build healthy responses to challenges. The pharmacologic literature is just starting to examine the potential to modulate neuroplasticity and reward sensitivity as adjuncts to psychotherapeutic treatment. Nonetheless, ethical considerations must remain at the top of the agenda when creating interventions that can impact an individual's ability to cope with suffering or injustice.

Lastly, resilience science needs to avoid becoming an imposed normative ideal for all populations. While resilience has long been extolled as an ideal, all individuals do not necessarily react to suffering or adversity with measurable growth, and ought not to be held to do so. Suffering and vulnerability are equally legitimate human responses that may exist alongside adaptive functioning. The



future of resilience science is not just about finding protection, but about acceptance of a kinder, context-based view of human variance in the face of adversity.

Conclusion. The current paper aims to develop an integrated understanding of human resilience in stressful situations and emphasises the primary adaptive psychological and neurobiological processes on which the phenomenon depends. Through the synthesis of theory and data, it has become clear that resilience is not an inherent quality of the person but an active and context-based dynamic typified by flexibility, recuperation, and development in the face of challenge.

At the level of the psyche, the primary processes, including secure attachment, positive emotion regulation, meaning-making, and reappraisal of cognitions, play an essential role in the ability of individuals to move through stress. These are internalised within the person and influenced by early developmental, interpersonal, and environmental affordances. Thus, resilience is produced from the dynamic interaction between person and context—a transactional model contradicting simplistic, individualised accounts of mental resilience.

From neurobiological viewpoints, resilience is the ability of neural and physiological systems to adapt to stress while persevering in functional integrity. The function of the HPA axis, prefrontal cortex, limbic circuitry, and reward system is well established. Still, increasing evidence highlights the role of immune function, epigenetics, and the gut–brain axis. These biological systems act on one another and modulate and are modulated by psychological processing, further attesting to the merits of multisystemic and transdisciplinary resilience concepts.

Future research needs to reach for conceptual clarity and methodological innovation. Ecologically valid and mixed-method longitudinal studies are particularly called for. The intervention needs to be tuned to the developmental phase, culture, and population-specific stressors faced by the individuals or the community, to strengthen resilience as an adaptive continuum rather than an optimal norm. Ideally, the science of resilience provides not just accounts of how people survive and flourish despite adversity, but also concrete resources for promoting well-being, agency, and human dignity in the hardest of times.

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Література:

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