

Aging-related Resiliency Theory Development

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Abstract

As a dynamic developmental process, the older population further displays the capacity to resist change over time, improve resilience, and keep a basis for the continuity working and progress over positive management of detrimental consequences of life risks and difficulties. This study aims at developing a theory that endeavors to explore the process of developing aging-related resiliency in people's later in life that can lead to a successful aging experience. In the development of a theory, this study utilized a deductive reasoning approach specifically, using the axiomatic approach. Aging-related Resiliency Theory was efficaciously developed by three propositions generated from four axioms that were derived after reviewing several sets of literature and studies. This developed theory implies that various deleterious events in life activate older persons to respond, adapt, and recover effectively. Acceptance emerges as they acknowledge the natural effects of aging while taking adaptive strategies and supportive resources to be resilient to one's environment. In this sense, it impacts their optimistic outlook towards successful aging. Based on the extraction of axioms, such propositions denoted those older adults call to respond with their total capacity to accept, adapt, recover, and continuously resist deleterious life experiences while using enriched coping strategies and resources towards an optimistic outlook in achieving successful aging. Therefore, emphasizing to improve their capacity to respond to natural decline to essential processes could benefit them at promoting a healthier life span.

Keywords

aging; aging; adaptation; humans; longevity; life change events; nursing

Introduction

As the aging population surges, the demand for understanding towards optimistic features of aging and aged individuals' influences on ones' welfare and many are likewise increasing (Rantanen et al., 2018). In the year 2050, a projected 1.5 billion older persons aged 65 years or worldwide doubled such 703 million aged population in 2019 – that is, they globally shared the world population increased from 6% in 1990 to 9% in 2019 (United Nations, 2019). In this sense, maintaining a whole and independent life is the essence of successful aging, which is one of the gerontologists' most positive thoughts that perhaps every individual desire to age successfully until even in their older years (Andersen et al., 2019). It has become imperative to define the eminence of the aged, a multifaceted idea, and the key emphasis is how to magnify purposeful years in an advanced life period (Annele et al., 2019). As a multidimensional cycle of life, it involves resiliency with positive coping to escape from age-related morbidity and frailty, the preservation of physiological and perceptive ability, and constant social and engagement to dynamic events (Moore et

al., 2015; Martínez-Moreno et al., 2020). In the process of aging, health-related events occur that compromise one's activities or even one's independence that emergent evidence has demonstrated concerns among older persons in achieving successful aging, which has resulted in difficulty achieving physical independence, satisfaction, and other related societal appreciation. However, older adults may exist with at least minimal ability to stun the challenges and adjust to the trials of progressive age despite advancing age in consideration with a phenomenon of a decline in every person's essential process (Martin et al., 2015; Araújo et al., 2016; Chaves et al., 2018). Therefore, an essential component contributing to age successfully is developing resilience and coping effectively with changing well-being later in life (Hochhalter et al., 2011).

Resilience defines and depicts the individual complexities and group responses to distressing and challenging events (Aburn et al., 2016; Hadley et al., 2017; Martin et al., 2019). In several studies, resilience is repeatedly used to advocate the capacity to overcome through recovery from a traumatic and relative degree of coping successfully that varies based on the confronting situations (Hicks & Miller, 2011; Wang et al., 2015). Resiliency in the elderly is simply maintaining stability

despite the loss, risk, or threats to physical and psychological health and likewise involves optimistic psychology, adult improvement, and stress and adaptive coping mechanisms inclusive of wisdom (Mlinac et al., 2011).

In the face of various attempts to augment understanding of the aging process and its implications to health, highlighting resiliency in the context of this normal life process infuses the idea that amidst changes caused by aging, adapting to these potentially brings about favorable outcomes. Therefore, this study aims at developing a theory that endeavors to explore the process of developing aging-related resiliency in people's later in life that can lead to a successful aging experience. Developing a working knowledge on how a person attains aging-related resiliency will contribute to assessing and managing health promotion among aging individuals. This will also provide an additional theoretical background in gerontology nursing.

Literature Review

Rowe and Kahn's idea of successful aging, the standard of old-age life, indicates an imperative ideal of older adult welfare that is likewise an interesting concern that is essentially important to investigate (Chard et al., 2017; Hsu et al., 2018). Research incorporating models (Pruchno & Carr, 2017; Cosco et al., 2019) and theories (Wang et al., 2015; Yates et al., 2015) of resilience towards successful aging, an optimistic result, notwithstanding some presence of stressful adverse events, has the prospective to recognize options for older adult well-being advocacy (Moore et al., 2015; Angevaere et al., 2020). The idea of adapting and resilience works a function in reaching a hopeful consequence that can aid at promoting older-adult quality of life (Huisman et al., 2017; Laird et al., 2019; Xu et al., 2019; Sun et al., 2020).

Likewise, maintaining psychological (Legdeur et al., 2018; Wister et al., 2018; Laird et al., 2019; Carandang et al., 2020), physiological (Fredriksen-Goldsen et al., 2015; Hadley et al., 2017; Jeste et al., 2019; Martínez-Moreno et al., 2020), emotional (Knepple Carney et al., 2021), and social health support (Fredriksen-Goldsen et al., 2015; Musich et al., 2019; Carandang et al., 2020; Martínez-Moreno et al., 2020) are possible domains to attain aging-related resiliency in older adults (MacLeod et al., 2016) that can influence their optimistic outlook towards aging (Kim et al., 2019; Martínez-Moreno et al., 2020). Such domains to attain aging-related resiliency were highlighted in several studies. An imperative shielding feature, psychological resilience, is an aid to fight that links to psychological well-being threats, low subjective well-being, and even both personal growth and life purpose (Laird et al., 2019; Carandang et al., 2020; López et al., 2020; Li et al., 2021). Likewise, it is a manner concluded to societal cope source that suggests person's promotion towards an approach of constructive adaptation and successful aging (Jeste et al., 2019; Soonthornchaiya, 2020). Aside from psychological, emotional, and social domains, physiological/functional domains characteristic is likewise coupled with resilience as it has been considerably linked with affirmative endings, involving efficacious and active aging, minor despair, and durability (MacLeod et al., 2016; Lau et al., 2018; Rantanen et al., 2018; Wister et al., 2018).

Methods

In the theory development, this study utilizes a deductive reasoning approach specifically, using axiomatic one to perform a theory-testing process that begins with an established generalization and later seeks to explore its' application to certain occurrences. In this sense, this approach employs pre-existing theories to deduce a hypothesis that must be subjected to empirical findings, which presents the theory and data relationship – based on existing theories to collect data to apply to specific circumstances (DeVellis, 2017). Therefore, this approach was more suitably adopted since empirical findings were collected and driven by existing theories and models to apply to the specific phenomenon – that is to develop a theory by framing several aging-related resiliency axioms based on studies and literature review, derive propositions from extracted axioms, and finally, analyze and interpret these propositions to support the developed theory, Aging-related Resiliency (ART).

ART followed an axiomatic deductive approach that intended to begin with the identification of the phenomena of interest. These concepts that relate to the topic are classified along with the inclusion of gerontology nursing to facilitate the enrichment of understanding. Understanding older adults in the context of the aging process and resiliency is substantiated with rigorous reviews of literature that encompassed formulation of review objective, extant literature search, screening for inclusion, quality assessment of information sources, data extraction, and analysis of literature data (Paré & Kitsiou, 2017). Following the generation of gathered information, the next steps proceeded with the identification of propositions along with exploration of possible relatedness of concepts. Consistent with the axiomatic approach, the extensive literature review paved the identification of non-debatable facts known as axioms. The study included the review of related literature as a basis in developing the axioms. The axioms served as the foundation of the propositions that considered the stand of the theorist and its assumptions. The selection of related literature is based on relevance following the traditional literature review approach using critical analysis. Through logical reasoning, the researchers developed the propositions that made up the theory assumptions developed. The formulation of propositions that serve to constitute the respective axioms followed an organized and systematic fashion.

Ethical Consideration

The protocol of this theory development is considered an exemption for review, which allows the authors to proceed in the study.

Results

Table 1 reflects the extracted four (4) axioms that generate three (3) propositions after the review of literature and studies. People uniquely able to cope for *people are subjected to various stressors that stimulate coping (Axiom 1)*. Such capability reflects those *older adult responses to distressing and challenging life events contribute an impression to their*

total capacity to adapt and to recover positively (**Proposition 1**). Sustainment throughout adulthood or further in life provides a basis for the continuity working and progress over positive management of detrimental consequences of life risks and difficulties (e.g., hospitalizations and bereavements – loved ones’ sickness and death, illness and mishaps, prestige loss, and even uncontrollable late events affecting loved ones).

Human beings grow older through different phases in life. In later stages of life, several natural essential processes are declining that are helpful to understand, acknowledge, and accept aging in the context of these phases. In some people, changes in perspectives start when they are conscious of the change and decide to accept it or not. In a simpler sense, *acceptance is acknowledging one’s environment as a primary phase to adapt (Axiom 2)*. It ensured the utmost suggestive impact on one’s adaptation, which embodies the capability to adjust effectively to instabilities or threats. Therefore, *adaptive coping among older adults is manifested by the effective use of coping strategies and resources (Proposition 2)*. Coping is comprehended as managing, resisting, and recovering from

the deleterious consequences of stressful events in life that call for resilience as a primary focus of interventions – building older adult psychological, physiological, social, and emotional resilience and support associations. Such *factors contributing to one’s adaptation are important initiatives to sustain resiliency (Axiom 3)*.

Common characteristics are critically related to resilience, and therefore may all these contribute to successful aging, which resilience as a process implicates the idea that the older adult *resiliency is regarded as a dynamic capacity towards successful aging (Axiom 4)*. Certainly, numerous models of successful aging have been suggested implicating intricate relations amongst physiological, mental, emotional, and psychosocial performance to optimism and resiliency for *resilient older adults tend to maintain a more positive outlook and cope with stress more effectively (Proposition 3)* and is likewise a hypothetically changeable health asset that values further to enhance the probability of healthy aging and enhancing the capability to respond to stressors.

Table 1 Propositions derived from axiomatic extractions

Axioms	Propositions	Theory
Axiom 1: People are subjected to various stressors that stimulate coping.	Proposition 1: Older adult responses to distressing and challenging life events contribute an impression to their total capacity to adapt and to recover positively (<i>Axioms 1 and 2</i>).	In acknowledging the natural decline of essential processes, older adults respond to adapt and use coping techniques and resources to achieve and enhance resiliency that impacts optimism – aiding to age successfully (Aging-related Resiliency Theory).
Axiom 2: Acceptance is acknowledging one’s environment as a primary phase to adapt.	Proposition 2: Adaptive coping among older adults is manifested by the effective use of coping strategies and resources (<i>Axioms 2 and 3</i>).	
Axiom 3: Factors contributing to one’s adaptation are important initiatives to sustain resiliency.	Proposition 3: Resilient older adults tend to maintain a more positive outlook and cope with stress more effectively (<i>Axiom 4</i>).	
Axiom 4: Resiliency is a dynamic capacity towards successful aging.		

Discussion

ART overviews the understanding that as people age, they adapt accordingly to the experienced changes. While changes may vary from the physiological, psychological, and other aspects of this normal occurrence, the older adults are faced with a responsibility to thrive and to adapt, described in this context as resiliency. People are distinctively capable of handling their lifespan involvements and managing means (Fuller & Huseth-Zosel, 2021). They further display coping leading to resiliency afterward, especially those who cope with several stressful events such as personal experiences, deteriorating health, or socioeconomic circumstances (MacLeod et al., 2016). Such capability to high resilience is found despite stressful circumstances and is significantly associated with optimistic results, like, for instance, less despair and permanency (MacLeod et al., 2016). Likewise, their age expresses their ability to contest variation over time, which generates resilience (Levy et al., 2015).

Resilience is a dynamic course or a progressive ability relative to an inactive consequence or personality feature (Yates et al., 2015; MacLeod et al., 2016). It embodies the capability to adjust effectively to instabilities that threaten functioning and development (Masten, 2014). While resilience

and coping skills established during younger years in life can endure being influenced in advanced ages (Boggs et al., 2017). For this reason, older individuals are skilled in great resilience while acknowledging financial difficulties, individual life involvements, and deteriorating health later in life (MacLeod et al., 2016). Coping is comprehended as managing, resisting, and recovering from the deleterious consequences of stressful events as age advances (Fontes & Neri, 2015). Refining adaptive coping skills helps to craft resilience through older adults’ capacity to value constructive experiences, accomplishments to inspire expectation of upcoming occurrences, and gears to reinforce associations that initiate feelings of delightfulness (MacLeod et al., 2016). Therefore, coping effectively with risk and difficulty necessitates personal means, social resources, and other significant coping-related strategies (Fontes & Neri, 2015). However, assimilative older persons’ coping strategies rest on their secondary assessment processes in which they judge their coping options’ accessibility, efficacy, and sustainability. Older individuals with more enhanced coping ranges are hypothesized to be more resilient, have improved decision-making skills, and have chances for a more objectively defined, resource-rich resilience (Golant, 2015).

Frailty is identified condition of condensed resilience to disturbances and amplified susceptibility to unfavorable

consequences (Xu et al., 2019). However, research findings illustrated resilience in older adults contrary to the predominant view of vulnerability, especially during a pandemic crisis (Fuller & Huseth-Zosel, 2021). Therefore, resilience has been the primary focus of interventions such as social support to improve adjustment (Sun et al., 2020). Significant variables (e.g., well-being, fundamental association, societal involvement, and psychological welfare) are highly related to resilience (Fontes & Neri, 2015). Psychological and psychosocial resources (e.g., resilience and social support) are highly associated with reducing stress and increasing the likelihood to cope further (Moore et al., 2015). Psychological resilience, optimistic self-rated well-being, and apparent societal assistance are defending influences that impact personal health. Therefore, building older adults' psychological resilience and common encouragement associations within the society can improve their well-being (Carandang et al., 2020). However, such factors (e.g., physiological and psychological health-related quality of life, shared support, and social network size) can be protective ones from uncertainties – leading to better health and successful aging, which are critically important to be equalized and personalized while managing to support the strengths and difficulties older adults are experiencing (Fredriksen-Goldsen et al., 2015). Likewise, physical health supports can enable older adults to adjust to change while holding individuality and resilience (Grimmer et al., 2015). More so, resilience was expressively associated with a scope of older adult psychological vigor concepts with depression (Laird et al., 2019). Several studies have established that psychological, physiological, and social characteristics reveal a significant role in sustaining heightened resilience. The greatest evidence implies that psychological factors are essential aspects of preserving great resilience and would likewise be considered indispensable effectual management (MacLeod et al., 2016). More so, older adults attempt to keep emotional well-being whereas in older adults having faced with a lesser extent of the undesirable effect on their welfare or way better in controlling undesirable emotions than younger adults which findings are coherent with the strength and vulnerability integration model (Knepple Carney et al., 2021). Components (e.g., substantial role, interest, societal commitment, and psychological characteristics), including resilience and social engagement, have a particular emphasis on successful aging (Moore et al., 2015). Finally, merging components of challenges and efficacious coping within functional, social, and psychological domains generates a measure of resiliency related to a more optimistic health consequence (Wister et al., 2018).

Common characteristics (e.g., psychological, physiological, social, and emotional) are critically related to resilience, resulting in the best outcomes of enhanced quality of life or successful aging, happiness, and well-being or longevity (MacLeod et al., 2016). Positive psychological factors (e.g., resilience and self-efficacy) are predictive of future older adult quality of life (Moore et al., 2015) for positive resources (e.g., resilience and social networks) aid to safeguard the influences of adverse physical features among older adults (Musich et al., 2019). Likewise, protective factors (e.g., psychological resilience, optimistic self-rated well-being, and apparent societal assistance) lower subjective well-being.

Therefore, building older adults' psychological resilience and social support systems within the community can improve their subjective well-being (Carandang et al., 2020). More so, resilience is most habitually regarded as a "process rather than a personality trait" that in time develops later in life despite personal experiences, deteriorating health, or socioeconomic circumstances (MacLeod et al., 2016). All these contribute to the successful aging formulation that entails the examination of how resilience and adaptation of people impact their quality of life (Golant, 2015). Certainly, numerous representations of successful aging have been suggested implicating intricate relations between psychological, mental, emotive, and psychosocial performance. Psychological and psychosocial resources (e.g., resilience and social support) have usually been reviewed in the perspective of stress and successful aging concepts (Moore et al., 2015). Recognizing resilience in centenarians implies that they may have several factors related to successful aging (Beker et al., 2020). Optimism, one of the utmost related concepts of affirmative psychology that are advantageous for both physiological and psychological well-being, is defined as a prognosticator of resilience in individuals who were highly disturbed by deleterious events, which associates with the capability to cultivate an efficacious aging process and thus, may aid to escalate older-adult quality of life (Hadley et al., 2017; Kim et al., 2019; Martínez-Moreno et al., 2020; Igarashi et al., 2021).

Aging-related Resiliency Theory

Amid challenges, resilience was identified as a dynamical activity of sustaining healthy adjustment and efficient managing approaches, especially that multiplicity within the aging population is broadly acknowledged that intensifies the need to recognize the concept of resiliency in aging interposes to the course of successful aging (Allen et al., 2011; Hochhalter et al., 2011; Carandang et al., 2020; Fuller & Huseth-Zosel, 2021). People are distinctively adept at handling their life experiences and coping mechanisms (Fuller & Huseth-Zosel, 2021). Such capability to high resilience is found despite stressful circumstances and is significantly associated with positive outcomes (MacLeod et al., 2016). As exemplified in **Figure 1**, Aging-resiliency Theory conveys those various deleterious events in life, which can be physiological, psychological, emotional, and social domains (Martin et al., 2015; Araújo et al., 2016; MacLeod et al., 2016; Chaves et al., 2018; Fuller & Huseth-Zosel, 2021) activate older persons to respond, adapt and recover effectively (Levy et al., 2015; Moore et al., 2015; Wang et al., 2015; Aburn et al., 2016; Hadley et al., 2017; Martin et al., 2019).

Acceptance emerges as they acknowledge the natural effects of aging while taking adaptive strategies and supportive resources to be resilient to one's environment (Huisman et al., 2017; Laird et al., 2019; Musich et al., 2019; Xu et al., 2019; Carandang et al., 2020; Sun et al., 2020; Knepple Carney et al., 2021). As a self-motivated development, resilience is identified as a progressive capacity to adjust effectively and influence the level of adaptation for health maintenance (Yates et al., 2015; MacLeod et al., 2016; Sun et al., 2020; Sadang & Palompon, 2021). In this sense, it impacts their optimistic outlook towards successful aging (Hadley et al., 2017; Wister et al., 2018; Kim et al., 2019; Martínez-Moreno et al., 2020; Igarashi et al., 2021). *Therefore,*

this theory hypothesizes that with advancing age, older adults assume to respond, accept, cope, and recover from life challenging experiences that hasten the capacity to resist over time which impacts optimistic outlook to age successfully. It likewise implies emphasizing for improving older adult capacity with appropriate focused interventions, coupled with healthcare provider competency in delivering care safety as a

response to natural decline to essential processes (Hadley et al., 2017; Hsu et al., 2018; Feliciano et al., 2019; Kim et al., 2019; Feliciano et al., 2020; Feliciano et al., 2021). In this manner, the older group population could benefit from promoting a healthier life span for their coping strategies rest on their secondary assessment processes in which they judge their coping options' accessibility, efficacy, and sustainability.

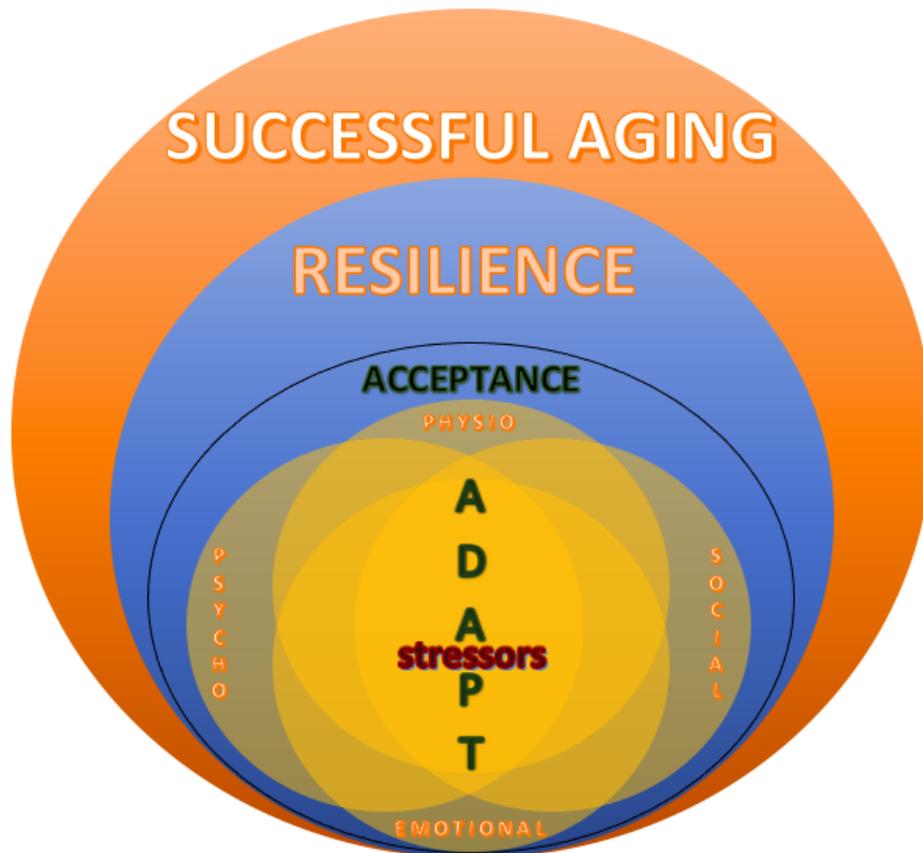


Figure 1 Aging-related Resiliency Theory

Conclusion

In a dynamic process of aging, older adults further display to be resilient, improve ones' resiliency that keeps them at continuing to function and progress as positive management from detrimental natural consequences of age-related life risks and adversities. As a primary phase to adapt, acceptance emerges when older adults take adaptive strategies and resources to cope and be resilient effectively. Amid challenges, resilience was identified as a dynamical course of sustaining healthy adaptation and effectual managing approaches, especially that multiplicity within the aging population is broadly acknowledged that intensifies the need to recognize the concept of resiliency in aging interposes to the course of successful aging. Threaded within the scope of advocating for older adults' health amidst challenges, responsiveness towards their needs positively favors quality living, dignified role assumptions, and acknowledged contributions to society. Therefore, it is essential to include healthcare interventions that may augment resilience to

promote older adult healthy aging that is consistent and appropriate in the practice of gerontology nursing.

Declaration of Conflicting Interest

All authors declare no potential conflict of interest.

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Authors' Contributions

EF conceptualized, designed, analyzed, and drafted the study. AF contributed to conceptualization, edited, formatted, and prepared the final draft. DP likewise contributed to conceptualization and analysis, reviewed, and supported concepts with intellectual content and literature search. AB supported analyzed data with intellectual content and literature search. All authors substantially contributed with equal efforts until approval of the final

article and acknowledged that all those entitled to authorship are listed as authors until publication.

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Data Availability

Not applicable.

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