

Geriatric Resilience: An Insight into the Current Researches

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Abstract : The traditional conceptualisation of resilience focuses on the positive adaptation after facing significant adversity primarily amongst the younger population. However, in today's times, with the perspective being shifted towards understanding the causes contributing to wellbeing of the geriatric population, resilience is found to be an important contributing factor. Due to this, there is an enhanced interest in understanding and measuring the concept of resilience amongst the elderly populations and its implications on wellbeing in the later years. Resilience is an important contributing factor for resilience as it is understood to maintain quality of life of elderly individuals. In this paper, we attempt to trace the path of geriatric resilience research, additionally; we make an attempt to examine the geriatric resilience research done in the Indian context. This paper is an in-depth, systematic review of the study done on understanding resilience amongst the elderly seeks to situate resilience in the twilight years. This paper is unique in regards that it charts the development of geriatric resilience and explored its implications for planning the wellbeing of geriatric population

Keywords: geriatric resilience, Indian context, healthcare, social support/

I. INTRODUCTION

Resilience is the ability to withstand the challenges and adversities of life (Wagnild, 2009). American Psychological Association defines resilience as "the process of adapting well in the face of adversity, trauma, tragedy, threats or even significant sources of stress (para. 4)". Luthar, Cicchetti and Becker (2000) define resilience as the active process of maintaining positive adaptation and employing effective coping strategies in challenging situations. Resilience has been expressed in terms of a characteristic and a process by different researchers. Langer (2004) in his research on understanding the life experiences of the middle aged and elderly individuals which stimulate them to develop strengths and resources to deal effectively with the challenges that they encounter focuses on resilience as a process of adaptation to challenges (Luthar et al., 2000). On the other hand, Wagnild and Young (1993) understand resilience as the individual difference, ability or characteristic to effectively manage with change or calamity. According to them, resilient persons are self-assured and know their assets and limitations. After detailed interviews with resilient individuals, Wagnild and Young have also developed a psychometrically sound scale to measure resilience, which provides a measure of an individual on five themes of resilience, which are, equanimity, perseverance, self-reliance, existential aloneness, and spirituality/meaningfulness. The most commonly accepted definition of resilience is given by Luthar (2006) where he defined resilience as positive adaptation despite adversity. Presence of resilience is measured indirectly through the evidence in the dimensions of significant adversity and positive adaptation. A person's resilience can be understood as the changes in transaction with specific circumstances and challenges (Magnusson & Ohman, 1987; Rutter, 1987)

The initial researches on resilience were conducted by Garmezy and Streitzman (1973) which aimed at recognising the risk factors and protective reasons related to resilience. The studies conducted on comprehending resilience have generally concentrated its emphasis on children who are at risk of being exposed to significant adversity, who have been exposed to trauma, faced hard socioeconomic environments and other chronic stressors (Smith & Hollinger-Smith, 2015). However, alongside the development of the concept of successful aging, psychologists have begun to explore the role of resilience in it, which is demonstrated by a growing area of research on geriatric resilience.

Keeping aside the chronological age of an individual, resilience can be conceptualised as a pattern of positive (or evading the damaging) adjustment as a result of experiencing earlier or current challenges and risk, which presents a hazard to beneficial and virtuous adjustment (Kaplan, 2006; Rutter, 2007; Wright & Masten, 2006). Therefore, understanding resilience highlights the importance of recognising the within-individual variation which leads to interindividual variation in mitigating stress and adversity, which leads to us asking two central questions, which are (a) across a period of time, what are the influences towards empowering an individual to recover after facing adverse circumstances? And (b) why is it that some of the individuals who go through similar adversities and hazards emerge with positive aftermaths and others are not able to show similar results? (Rutter, 2010). In order to comprehensively understand resilience, the role of internal, characteristic resources has to be understood in congruence with the role of external environmental supports and limitations (Fuller-Iglesias, Sellars, & Antonucci, 2008). Zimmerman and Arunkumar (1994) stated that resilience can be comprehensively comprehended by understanding the concept as dynamic since it is a function of the situation it is manifested in. We can understand resilience to be an adaptive dispositional attribute which is possessed by all individuals in differing degrees; a vigorous and active process which highlights the importance of coping with developmental and cultural change as well as with hostile experiences (Leipold & Greve, 2009)

Rowe and Kahn (1997) gave the concept of successful aging, where they stated that successful aging is measured by three components: low probability of disease and disease related disability, high cognitive and physical functional capability and active engagement with life. However, such a definition does not provide a complete picture of successful aging in the elderly individuals, as it has been reported that elderly individuals suffering from disease and disability might report a good quality of life and identify themselves as successful agers (Romo, Wallhagen, Yourman, Yeung, Eng, Micco & Smith, 2012). However, with increase in age, there is also an increase in the risk of having serious illness or disability. This pattern becomes even more salient for those above the age of 60 years (Martin, Meltzer & Elliot 1988). The traditional conceptualisation of successful aging does not take into consideration the fact that not all individuals will experience their twilight years as free of disease and disability and ignores self-evaluated appraisals for their own successful aging (Bowling & Dieppe, 2005). Therefore, newer

models of successful aging focus on the importance of adaptation, which essentially is a factor observed even in resilience. Selective Optimisation and Compensation model (Baltes & Baltes, 1990) states that individuals manage their lives by engaging in a process of adaptation which includes the components of selection, optimization and compensation. Successful aging refers to effective utilisation of these processes which help us in maximisation of gains and minimisation of losses over a period of time. Selection refers to focusing one's attention to lesser and more important goals, due to loss in the range of adaptive potential due to aging. Thus, individuals prefer to focus on those tasks which is of high priority to the individuals and involve a confluence of environmental demands and individual motivations and skills. Optimisation refers to engagement in those behaviours which enrich, qualitatively and quantitatively, the elderly individual's chosen life course and supplement their reserve capacities. The component of compensation refers to reduction or loss of certain behavioural capacities leading to less than adequate functioning. Such a loss is usually because of restrictions in the range of plasticity and adaptability due to advanced age.

Baltes and Baltes (1990) gave the propositions of successful aging, out of which the 'self' remaining resilient even in old age was an important one. Elderly individuals tend to not differ from younger individuals in their reports of satisfaction with life or on self-related measures of personal control and self-efficacy (Butt & Beiser, 1987). According to Baltes and Baltes (1990), three factors exist which point towards this maintenance of enhanced life satisfaction, and subsequent maintenance of resilience even in old age. The factors are: (a) existence of multiple selves, which are our conceptualisations of ourselves, which help us adjust to the various life situations; (b) modification in goals and aspirations one has, where, an individual can adjust the expectation they have about the new levels of functioning based on success and failure experienced, expectations about the nature of stages of life and experience with their own changing situations.

The growing literature on optimal aging has delineated distinct patterns of developmental plasticity, ie, patterns of adaptation, across various domains of life. Resilience is commonly understood as recovering from the harmful repercussions of adverse circumstances and developing and improving even after facing unpleasant situations (Staudinger, Marsiske & Baltes, 1995). Resilience has been distinguished from recovery (Bonnano, 2004), which are conceptualised to be distinct, empirically separable outcome trajectories which follow adversity (Bonanno, Galea, Bucciarelli, & Vlahov, 2006). Resilience has also been understood as developing positive outcomes after facing adverse circumstances and there has been a considerable amount of research exploring this association as well (Ryff & Singer, 2003a; Ryff, Singer, Love, & Essex, 1998).

Ego resiliency is found to be an important psychosocial asset in the domain of adult resilience. According to Fredrickson and colleagues, it was observed that individuals high on egoresiliency tend to recover faster from stress, emotionally and physiologically (Fredrickson, Tugade, Waugh, & Larkin, 2003; Tugade, Fredrickson, & Barrett, 2004). However, ego resiliency is a trait while resilience is a process. It is important to understand the interaction between the attributable and process mechanism of resilience.

The current understanding of resilience includes the following points (Skerratt, 2013; Southwick, Bonnano, Masten, Panter-Brick & Yehuda, 2014) :

- Resilience spans across many levels, including individual level, community level and regional levels and functions independently across these levels;
- Resilience is accumulative, ie, it is constructed over time with persistent usage of recurrent procedures and pathways; and
- Background and environment dependent (social, cultural and material resources and ways of executing, being, and understanding)

Multitude of researches has been carried out in order to further the understanding of resilience and aging. Resilience has been regarded as a process which has an interplay of personal and situational factors. The components of self, such as social and family support, self-esteem and emotion regulation and community engagement and relationships are found to be important in conceptualising resilience. Other important factors for resilience are maintaining adequate functioning, subjective wellbeing, having positive adjustment, motivation for activity and engagement in those activities which protect the individual from risk and loss (Fontes & Neri, 2015). Janssen, Van Regenmortel and Abma (2011) state that the recent shift towards understanding aging processes in the context of personal and community resilience indicates towards a shift in the focus towards the positive impact of health and life satisfaction.

This research is an attempt to chart nearly two decades worth of knowledge related to resilience processes in old age and also, the personality traits associated with resilient behaviour amongst the elderly individuals. A detailed literature review has been carried out which shall be explicated in the following pages.

II. Research Question

This review paper identifies the various psychological factors associated with resilience among the elderly individuals, which has traditionally been regarded as a vulnerable group. This review aims at recognising the recent evidences related to geriatric resilience in Indian as well as International context by reviewing studies which aims to understand resilience and resiliency amongst the elderly individuals.

III. Objective

This review paper focuses on the manifestation of and correlates to the construct of resilience amongst the elderly individuals. Such a research will be helpful in enabling service organisations, agencies and government bodies for formulating effective programmes and services.

IV. Method

A detailed search has been carried out to uncover the research work done from 2003 to 2019 in the field of resilience and aging. A review of peer reviewed literature was undertaken. The following keywords were used for search: resilience, aging, psychological resilience, resilience and aging, resilient processes and aging, resilience and elderly individuals and resilience and successful aging. Only those researchers which met the following inclusion criteria was taken under consideration: the researches should be original, published in peer reviewed journals, published after 2000, report outcomes regarding personal resilience on individuals above the age of 50 years and written in English language.

V. Data Sources

35 studies, which met the inclusion criteria were identified for assessment in this research paper. These peer reviewed articles were searched from the following databases: PubMed, PsychInfo, Science Direct, Medline and Scopus.

VI. Data Analysis

Data extraction table was used to comprehend and study the key theories in each study, including sample size, country where the study was conducted, year in which the research was conducted, methodology used, main outcomes and findings. The findings of each study were thematically analysed.

VII. Results

Authors/Year	Sample	Findings
Hamarat, Thompson, Steele, Matheny and Simons (2002)	98 participants; 45-64 yrs, 65-74 yrs & 75 yrs and above (n=98)	Coping resources and life satisfaction don't change with age. The resilient tend to age successfully
Gattuso (2003)	8 women; narrative study (n=8)	Resilience a cumulative process
O'Rourke (2004)	232 widowed women who remained unmarried (n=232)	Resilience associated with life satisfaction and psychological distress(inversely)
Hardy, Concato and Gill (2004)	546 non-disabled individuals over 70 years (n=546)	Being male, living with others, having a strong grip strength, being self-sufficient in performing the instrumental activities of daily living, few depressive symptoms, good self-rated health linked with resilience
Nakashima and Canda (2005)	16 palliative care patients (n=16)	Adequate caregiving, personal strengths and internal processes drive resilience. Narratives of overcoming past adversities important
Lamond, Depp, Allison, Langer, Reichstadt, Moore, Golshan, Ganiats and Jeste (2008)	1395 community dwelling older women (n=1395)	Predictors of Resilience: <ul style="list-style-type: none"> • Emotional Wellbeing • Optimism • Self-assessed successful ageing • Social support and engagement with others. • Less Cognitive Complaints
Demakakos, Netuveli, Cable and Blane (2008)	7167 individuals (n=7167)	Resist adversity and flourish; fosters longevity. Sex, marital status and social support associated.
Hildon, Smith, Netuveli and Blane (2008)	139 elderly individuals between 70-80 years (n=139)	The resilient draw on social and individual resources during adversity Such as: support from close ones, using tried and tested coping strategies
Costanzo, Ryff and Singer (2009)	398 cancer survivors (n=398)	Survivors function as well as peers in areas of psychosocial functioning
Dorfman, Mendez and Osterhaus (2009)	25 elderly women (n=25)	Informal social support, acceptance of the reality of war, having family and community network aids resilience
Beutel, Glaesmer, Decker, Fischbeck and Braehler (2009)	2144 men between the ages of 51-60 years (n=2144)	Life satisfaction depends upon good income, a partner, religious affiliation, but chiefly resilience
Smith (2009)	158 elderly men and women (n=158)	Level of resilience predicts the willingness to seek medical care for mental illness
Browne, Mokuau and Braun (2009)	Review paper	Resilience as a collective, rather than individual process; grounded in cultural values

Hildon, Montgomery and Blane (2010)	178 elderly English individuals (n=178)	Resilience linked with the characteristics of relationships one has, assimilating and integrating with the community one lives in and coping strategies one possesses.
Hildon, Montgomery, Blane, Wiggins and Netuveli (2010)	174 elderly individuals of the Boyd Orr cohort (n=174)	The resilient individuals report higher quality of life, good relationships, community integration and adaptive coping styles
Beutel, Glaesmer, Wiltink, Marian and Brahler (2010)	2144 German elderly men (n=2144)	Life satisfaction associated with resilience, positive self esteem..
Shen and Zeng(2011)	16566 elderly who participated in the Chinese Longitudinal Healthy Longevity Survey	Reduced mortality risk and enhanced longevity as potential outcomes of resilience even in the oldest-old
Vohora (2011)	Interpretative Phenomenological Analysis on elderly individuals	<ul style="list-style-type: none"> • Coming to terms with loss experienced • Surmounting the demands associated with caring • Recognising the needs which one has • Looking into the future
Clarke and Smith (2011)	Cross-sectional data from two nationally representative surveys of older adults, from United States (HRS) and from England (ELSA)	Problem focused coping refers to engaging in actively in situation analysis and problem solving and is demonstrated when the resilient elderly makes intensive efforts to try and modify their coping strategies in face of adverse circumstances in order to maintain their activity independence
Mertens, Bosma, Groffen and van Eijk (2012)	361 chronically ill and mildly depressed elderly (n=361)	Self-efficacy, having a high level of skills and mastery helps chronically ill elderly individuals to cope with and adjust to their comorbid condition and acts as determinants of resilience
Cheung C-K and Kam P.K. (2012)	15 elderly individuals residing in Hong Kong (n=15)	Resilience characterised by self-reliance, openness and relaxation
Hrostowski and Rehner (2012)	10 individuals above the age of 65 years (n=10)	Major themes of resilience: <ul style="list-style-type: none"> • Discovering subjective satisfaction • Apprehend one's own coping facilities • Cultivating a renewed zest for life.

Gooding, Hurst, Johnson and Tarrier (2012)	60 community dwelling elderly over the age of 60 and 60 students aged between 18-25 years (n=120)	Elderly individuals are found to be have enhanced resilience especially in the areas of regulation of one's emotions and problem solving; while younger individuals make use of social support
Jeste, Savla, Thompson, Vahia, Glorioso, Martin, Palmer, Rock, Golshan, Kraemer and Depp (2013)	1006 community dwelling elderly (n=1006)	Enhancing resilience and reducing depression has as strong an effect on successful aging as reducing physical disability
Manning (2013)	30 in-depth interviews with 6 women participants over the age of 80 (n=6)	Spirituality, a mechanism for handling hardships; a tool to promote resilience, optimism and wellbeing in later life
Kuwert, Knaevelsrud and Pietrzak (2014)	2025 elderly veterans from a nationally representative sample of 3157 US veterans (n=2025)	Loneliness is significantly correlated with resilience
Singh, Deshmukh, Ungratwar, Subramanyam and Kamath (2014)	90 Indian elderly individuals (n=90)	The individuals not suffering from chronic illness found to be most resilient, followed by those suffering from rheumatoid arthritis. Depressive individuals with lowest levels of resilience
Martin, Distelberg, Palmer and Jeste, (2015).	1006 elderly individuals	Adaptive coping styles plays a crucial role in helping the elderly individuals to recover from stressful situations Having low degree of hopelessness is also associated with resilience amongst the elderly individuals (Gooding, Hurst, Johnson & Tarrier, 2012, 2012).
Yang and Wen (2015)	11,112 Chinese older adults	Having higher degree of resilience at the baselines was found to be relates to a diminished risk of developing disability in relation to activities of daily living within a 3-year follow up period. Psychological resilience is thus a protective factor
Hayman, Kerse and Consedine (2016)	Theoretical Review	Maintaining competence and independence the most salient outcomes for the oldest-old Those who are aware of their health changes in a position to influence it
Hassani, Izadi-Avanji, Rakhshan and Majd (2017)	22 elderly individuals interviewed in 24 sessions (n=22)	Salient themes: Overcoming suffering, acceptance, faith, support, deprivation, hope, motivation
Lau, Guerra, Barbosa and Phillips (2018)	1506 elderly individuals between the ages of 65-76 (n=1506)	Resilience is found to play a facilitatory role in enhancing the social and physiological powers of the elderly individuals, which may in turn, play a role in enhancing self-rated health levels and diminish the negative influence of economic adversities faced in early childhood. Thus, it is important to recognise and facilitate the individual strengths and contextual and situational reserves which facilitate resilience and maintain self-rated health

McClain, Gullatt and Lee (2018)	58 older adults (n=58)	Self-efficacy, which is influenced by physical health and social support is a predictor of resilience
Laird, Lavretsky, Paholpak and Vlasova (2019)	337 older adults with Major Depressive Disorder (n=337)	Grit, active coping, accommodative coping, spirituality as strongest correlates of resilience.
Madsen, Ambrens and Ohl (2019)	Theoretical review of 29 peer reviewed journals and industry reports on enhancing resilience in the elderly using interventions	The following themes were found to be recurring: positive revaluations and agency; subjective meaning and intents; being accepted and associating with others. At a community level, the following themes were found to influence cooperative capacity and sharing of resources: empowerment and collectively making decisions on important matters; collective agency; and cooperative governance and management and arrangements.

VIII. Synthesised Findings

The 35 articles were analysed for understanding the overarching themes which were the chief findings of the study. The themes observed could be classified into two groups: resilience and personal reserves and environmental factors promoting resilience. In the former group, having good coping skills, being independent in performing the instrumental activities of daily living, having high self-rated health, personal strengths, being able to effectively utilise the strategies for emotion regulation, being optimistic, being able to accept situations and let go of control in those situations where one cannot effectively exert control, motivation, having high cognitive skills, understanding own needs, self-efficacy, renewed interest in life, spirituality, savouring, creative goal attainment are considered. In the latter group of environmental and external factors which facilitate resilience, the themes of caregiving, narratives of overcoming adversities, social support and engagement, culture that fosters resilience can be considered. Staudinger, Marsiske and Baltes (1993) stated that reserve capacities are internal and external resources available to individuals at any given point of time. Reserve capacity influences the degree of plasticity within an individual. These resources that an individual possesses may change with time, and having reserve capacity along one domain plays an influential role in serving as a reserve capacity in another domain.

Limitations

Some of the key limitations of this research is that research articles published prior to 2002 are not considered in this study, thus, making it a review of current researches done in the field of geriatric resilience. Also, research articles which have not been found in the aforementioned databases as well as researches done in languages other than English have not been considered. Only a few Indian studies have been included in this review, since resilience amongst the geriatric population is an unexplored field in the area of social gerontology in India. With India being a developing nation, it is the need of the hour to explore this particular arena of resilience amongst the elderly population in the earliest. Utilising the technique of thematic analysis for analysing the studies for the purpose of review has its own set of limitations, and we as researchers acknowledge that.

IX. Conclusions

This review paper has been an attempt to chart the recent developments and current literature related to resilience amongst the elderly individuals in order to understand the current status of resilience, identify gaps, if any, and recognise recent trends in the study of geriatric resilience. This review paper will be of vital use for developing interventions for promoting resilience amongst the elderly, as well as conduct exploratory researches.

REFERENCES

- [1] Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes & M. M. Baltes (Eds.), *Successful aging: Perspectives from the behavioral sciences* (pp. 1-34). New York, NY, US: Cambridge University Press. DOI: <http://dx.doi.org/10.1017/CBO9780511665684.003>
- [2] Beutel, M. E., Glaesmer, H., Decker, O., Fischbeck, S., & Brähler, E. (2009). Life satisfaction, distress, and resiliency across the life span of women. *Menopause*, 16(6), 1132–1138. doi: 10.1097/gme.0b013e3181a857f8
- [3] Beutel, M. E., Glaesmer, H., Wiltink, J., Marian, H., & Brähler, E. (2009). Life satisfaction, anxiety, depression and resilience across the life span of men. *The Aging Male*, 13(1), 32–39. doi: 10.3109/13685530903296698
- [4] Bonanno, G. A. (2004). Loss, Trauma, and Human Resilience: Have We Underestimated the Human Capacity to Thrive After Extremely Aversive Events? *American Psychologist*. 59(1), 20–28. doi: 10.1037/0003-066x.59.1.20

- [5] Bonanno, G. A., Galea, S., Bucciarelli, A., & Vlahov, D. (2006). Psychological Resilience After Disaster. *Psychological Science*, 17(3), 181–186. doi: 10.1111/j.1467-9280.2006.01682.x
- [6] Bowling, A., & Dieppe, P. (2005). What is successful ageing and who should define it?. *Nursing Older People*, 18(2), 33–33. doi: 10.7748/nop.18.2.33.s15
- [7] Browne, C. V., Mokuau, N., & Braun, K. L. (2009). Adversity and Resiliency in the Lives of Native Hawaiian Elders. *Social Work*, 54(3), 253–261. doi: 10.1093/sw/54.3.253
- [8] Butt, D. S., & Beiser, M. (1987). Successful aging: A theme for international psychology. *Psychology and Aging*, 2(1), 87-94. <http://dx.doi.org/10.1037/0882-7974.2.1.87>
- [9] Cheung C-K and Kam P K (2012) Resiliency in older Hong Kong Chinese: Using the grounded theory approach to reveal social and spiritual conditions, *Journal of aging studies* 26 (3) : 355-367
- [10] Clarke, P., & Smith, J. (2011). Aging in a Cultural Context: Cross-national Differences in Disability and the Moderating Role of Personal Control Among Older Adults in the United States and England. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 66B(4), 457–467. doi: 10.1093/geronb/gbr054
- [11] Costanzo, E. S., Ryff, C. D., & Singer, B. H. (2009). Psychosocial adjustment among cancer survivors: Findings from a national survey of health and well-being. *Health Psychology*, 28(2), 147–156. doi: 10.1037/a0013221
- [12] Demakakos, P., Netuveli, G., Cable, N., & Blane, D. (2008). Resilience in older age: a depression-related approach.
- [13] Dorfman, L. T., Méndez, E. C., & Osterhaus, J. K. (2009). Stress and Resilience in the Oral Histories of Rural Older Women. *Journal of Women & Aging*, 21(4), 303–316. doi: 10.1080/08952840903285237
- [14] Errol Hamarat, Dennis Thompson, Don Steele, Ken Matheny & Carol Simons (2002) Age Differences in Coping Resources and Satisfaction With Life Among Middle-Aged, Young-Old, and Oldest-Old Adults, *The Journal of Genetic Psychology*, 163:3, 360-367, DOI: [10.1080/00221320209598689](http://dx.doi.org/10.1080/00221320209598689)
- [15] Fontes, A. P., & Neri, A. L. (2015). Resilience in aging: literature review. *Ciência & Saúde Coletiva*, 20(5), 1475–1495. doi: 10.1590/1413-81232015205.00502014
- [16] Fredrickson, B. L., Tugade, M. M., Waugh, C. E., & Larkin, G. R. (2003). What good are positive emotions in crisis? A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2001. *Journal of Personality and Social Psychology*, 84(2), 365-376. <http://dx.doi.org/10.1037/0022-3514.84.2.365>
- [17] Fuller-Iglesias, H., Sellars, B., & Antonucci, T. (2008). Resilience in old age: Social relations as a protective factor. *Research in Human Development*, 5(3), 181–193
- [18] Garmezy, N. (1974). Children at Risk: The Search for the Antecedents of Schizophrenia. Part I. Conceptual Models and Research Methods. *Schizophrenia Bulletin*, 1(8), 14–90. doi: 10.1093/schbul/1.8.14
- [19] Gattuso, S. (2003). Becoming A Wise Old Woman: Resilience and wellness In Later Life. *Health Sociology Review*, 12(2), 346-48
- [20] Gooding P A, Hurst A, Johnson J and Tarrier N (2012) Psychological resilience in young and older adults, *International Journal of Geriatric Psychiatry*, 27 (3), 262-270
- [21] Hardy, S. E., Concato, J., & Gill, T. M. (2004). Resilience of Community-Dwelling Older Persons. *Journal of the American Geriatrics Society*, 52(2), 257–262. doi: 10.1111/j.1532-5415.2004.52065.x
- [22] Hassani, P., Izadi-Avanji, F.-S., Rakhshan, M., & Majd, H. A. (2017). A phenomenological study on resilience of the elderly suffering from chronic disease: a qualitative study. *Psychology Research and Behavior Management, Volume 10*, 59–67. doi: 10.2147/prbm.s121336
- [23] Hayman, K. J., Kerse, N., & Consedine, N. S. (2016). Resilience in context: the special case of advanced age. *Aging & Mental Health*, 21(6), 577–585. doi: 10.1080/13607863.2016.1196336
- [24] Hildon Z, Montgomery SM, Blane D. Examining resilience of quality of life in the face of health – related and psychosocial adversity at older ages: What is “right” about the way we age? *Gerontologist* 2010; 50(1):36-47.
- [25] Hildon Z, Smith G, Netuveli G, Blane D. Understanding adversity and resilience at older ages. *Social Health Illn* 2008; 30(5):726-740.
- [26] Hildon, Z., Montgomery, S. M., Blane, D., Wiggins, R. D., & Netuveli, G. (2009). Examining Resilience of Quality of Life in the Face of Health-Related and Psychosocial Adversity at Older Ages: What is "Right" About the Way We Age? *The Gerontologist*, 50(1), 36–47. doi: 10.1093/geront/gnp067
- [27] Hrostowski S and Rehner T (2012) Five years later : resiliency among older adult survivors of Hurricane Katrina, *Journal of Gerontological Social Work*, vol 55, no 4 55 (4) : 337-351
- [28] Janssen, B. M., Regenmortel, T. V., & Abma, T. A. (2011). Identifying sources of strength: resilience from the perspective of older people receiving long-term community care. *European Journal of Ageing*, 8(3), 145–156. doi: 10.1007/s10433-011-0190-8
- [29] Jeste D V, Savla G N, Thompson W K, Vahia I V, Glorioso D K, Martin A S, Palmer B W, Rock D, Golshan S, Kraemer H C and Depp C A (2013) Association Between Older Age and More Successful Aging: Critical Role of Resilience and Depression, *The American journal of psychiatry* 170 (2) : 188-196
- [30] Kaplan, H. B. (2006). Understanding the concept of resilience. In S. Goldstein & R. B. Brooks (Eds.), *Handbook of resilience in children* (pp. 39–47). New York: Springer Publishing
- [31] Kuwert, P., Knaevelsrud, C., & Pietrzak, R. H. (2014). Loneliness Among Older Veterans in the United States: Results from the National Health and Resilience in Veterans Study. *The American Journal of Geriatric Psychiatry*, 22(6), 564–569. doi: 10.1016/j.jagp.2013.02.013
- [32] Lamond AJ, Deep CA, Allinson M, Langer R, Reichstadt J, Moore DJ, Golshan S, Ganiats TG, Jeste IV. Measurement and predictors of resilience among community- dwelling older women. *J Psychiatr Res* 2008; 43(2):148-154.
- [33] Langer, N., 2004. Resiliency and spirituality: Foundations of strengths perspective counseling with the elderly. *Educational Gerontology*, 30(7), 611–617

- [34] Lau, S. Y. Z., Guerra, R. O., Barbosa, J. F. D. S., & Phillips, S. P. (2018). Impact of resilience on health in older adults: a cross-sectional analysis from the International Mobility in Aging Study (IMIAS). *BMJ Open*, 8(11). doi: 10.1136/bmjopen-2018-023779
- [35] Leibold, B., & Greve, W. (2009). Resilience: A conceptual bridge between coping and development. *European Psychologist*, 14(1), 40–50
- [36] Luthar, S. S. (2015). Resilience in Development: A Synthesis of Research across Five Decades. *Developmental Psychopathology*. 739–795. doi: 10.1002/9780470939406.ch20
- [37] Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: a critical evaluation and guidelines for future work. *Child development*, 71(3), 543–562.
- [38] Magnusson, D., & Ohman, A. (Eds.). (1987). *Psychopathology. An interactional perspective*. Orlando, FL: Academic Press
- [39] Manning, L. K. (2013). Navigating Hardships in Old Age. *Qualitative Health Research*, 23(4), 568–575. doi: 10.1177/1049732312471730
- [40] Martin, A. V. S., Distelberg, B., Palmer, B. W., & Jeste, D. V. (2014). Development of a new multidimensional individual and interpersonal resilience measure for older adults. *Aging & Mental Health*, 19(1), 32–45. doi: 10.1080/13607863.2014.909383
- [41] Martin, Jean. & Meltzer, Howard. & Elliot, David. & Great Britain. Office of Population Censuses and Surveys. Social Survey Division. (1988). *The prevalence of disability among adults*. London : H.M.S.O
- [42] McClain, J., Gullatt, K., & Lee, C. (2018). Resilience and Protective Factors in Older Adults. doi: 10.33015/dominican.edu/2018.ot.11
- [43] Mertens, V.-C., Bosma, H., Groffen, D. A. I., & Eijk, J. T. M. V. (2011). Good friends, high income or resilience? What matters most for elderly patients? *The European Journal of Public Health*, 22(5), 666–671. doi: 10.1093/eurpub/ckr104
- [44] Nakashima, M., & Canda, E. R. (2005). Positive dying and resiliency in later life: A qualitative study. *Journal of Aging Studies*, 19(1), 109–125. doi: 10.1016/j.jaging.2004.02.002
- [45] O'Rourke, N. (2004). Psychological resilience and the well-being of widowed women. *Ageing International*, 29(3), 267–280. doi: 10.1007/s12126-996-1002-x
- [46] Romo, R. D., Wallhagen, M. I., Yourman, L., Yeung, C. C., Eng, C., Micco, G., ... Smith, A. K. (2012). Perceptions of Successful Aging Among Diverse Elders With Late-Life Disability. *The Gerontologist*, 53(6), 939–949. doi: 10.1093/geront/gns160
- [47] Rowe, J. W., & Kahn, R. L. (1997). Successful aging. *The Gerontologist*, 37(4), 433–440.
- [48] Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry*, 17, 316–331
- [49] Rutter, M. (2007). Resilience, competence, and coping. *Child Abuse & Neglect*, 31(3), 205–209
- [50] Rutter, M. (2010, August). *From individual differences to resilience: From traits to processes*. Presented at the 118th Convention of the American Psychological Association, San Diego, CA
- [51] Ryff, C. D., & Singer, B. (2003). Ironies of the human condition: Well-being and health on the way to mortality. In L. G. Aspinwall & U. M. Staudinger (Eds.), *A psychology of human strengths: Fundamental questions and future directions for a positive psychology* (pp. 271–287). Washington, DC, US: American Psychological Association. <http://dx.doi.org/10.1037/10566-019>
- [52] Ryff, C. D., Singer, B., Love, G. D., & Essex, M. J. (1998). Resilience in adulthood and later life: Defining features and dynamic processes. In J. Lomranz (Ed.), *The Plenum series in adult developing and aging. Handbook of aging and mental health: An integrative approach* (pp. 69–96). New York, NY, US: Plenum Press. http://dx.doi.org/10.1007/978-1-4899-0098-2_4
- [53] Shen K., Zeng Y. (2011) The Association Between Resilience and Survival Among Chinese Elderly. In: Resnick B., Gwyther L., Roberto K. (eds) *Resilience in Aging*. Springer, New York, NY
- [54] Siddarth, P., Laird, K., Vlasova, R., Cyr, N. S., Lavretsky, H., Paholpak, P., & Roman, R.M. (2018). Clinical Correlates of Resilience Factors in Geriatric Depression. *The American Journal of Geriatric Psychiatry*, 26(3). doi: 10.1016/j.jagp.2018.01.169
- [55] Singh, S., Deshmukh, P., Ungratwar, A., Subramanyam, A., & Kamath, R. (2014). Does resilience affect illness perception and well-being in the elderly? *Journal of Geriatric Mental Health*, 1(2), 94. doi: 10.4103/2348-9995.152429
- [56] Skerratt S. (2013). Enhancing the Analysis of Rural Community Resilience: Evidence from Community Land Ownership. *Journal of Rural Studies*. 31. 36–46. doi: 10.1016/j.jrurstud.2013.02.003
- [57] Smith PR. Resilience: resistance facto for depressive symptom. *J Psychiatr Ment Health Nurs* 2009; 16(9):829–837.
- [58] Smith, J.L., & Hollinger-Smith, L. (2015). Savoring, Resilience, and Psychological Wellbeing in Older Adults. *Aging and Mental Health*. 19(3). 192–200.
- [59] Southwick, S. M., Bonanno, G. A., Masten, A. S., Panter-Brick, C., & Yehuda, R. (2014). Resilience definitions, theory, and challenges: interdisciplinary perspectives. *European Journal of Psychotraumatology*, 5(1), 25338. doi: 10.3402/ejpt.v5.25338
- [60] Staudinger, U. M., Marsiske, M., & Baltes, P. B. (1993). Resilience and levels of reserve capacity in later adulthood: Perspectives from life-span theory. *Development and Psychopathology*, 5(04), 541. doi:10.1017/s0954579400006155
- [61] Tugade, M. M., Fredrickson, B. L., & Barrett, L. F. (2004). Psychological resilience and positive emotional granularity: examining the benefits of positive emotions on coping and health. *Journal Of Personality*. 72(6), 1161–1190. doi:10.1111/j.1467-6494.2004.00294.x
- [62] Vohora R (2011) *Resilience in later life.*, University of Oxford – Thesis
- [63] Wagnild, G. (2009). A Review of the Resilience Scale. *Journal of Nursing Measurement*, 17(2), 105–113. doi: 10.1891/1061-3749.17.2.105

- [64] Wagnild, G. M. & Young, H. M. (1993). Development and Psychometric Evaluation of the Resilience Scale. *Journal of Nursing Measurement*, 1, 165-178.
- [65] Wright, M. O., & Masten, A. S. (2006). Resilience processes in development: Fostering positive adaptation in the context of adversity. In S. Goldstein & R. B. Brooks (Eds.), *Handbook of resilience in children* (pp. 17–37). New York: Springer Publishing.
- [66] Yang, Y., & Wen, M. (2014). Psychological Resilience and the Onset of Activity of Daily Living Disability Among Older Adults in China: A Nationwide Longitudinal Analysis. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 70(3), 470–480. doi: 10.1093/geronb/gbu068
- [67] Yiqing Yang, Ming Wen, Psychological Resilience and the Onset of Activity of Daily Living Disability Among Older Adults in China: A Nationwide Longitudinal Analysis, *The Journals of Gerontology: Series B*, Volume 70, Issue 3, May 2015, 470–480
- [68] Zimmerman, M. A., & Arunkumar, R. (1994). Resiliency research: Implications for schools and policy. *Society for Research in Child Development*, 8, 1–19.

