

Concept Paper

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Concept Paper

# Resilience in the Elderly: A Concept Analysis

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**Abstract:** (1) Background: Resilience has been presented as a potential protective factor to be promoted in difficult experiences in the elderly. However, further clarification of the concept of resilience is needed about this population, as this is of critical interest for nursing care. (2) Aim: To develop the concept of resilience in the elderly to establish the elements that refer to the nursing outcome Personal resilience (1309) from the Nursing Outcomes Classification (NOC), specifically in the elderly. (3) Methods: Concept analysis using Beth Rodgers' evolutionary model. The attributes, antecedents, consequents and empirical elements were described in the integrative review, with searches in PubMed, CINAHL, PsycINFO, LILACS and Embase databases. A total of 2431 citations have been identified and 110 studies were included. (4) Results: The concept of "resilience in the elderly" is composed of two attributes: available resources and positive behaviours and is defined as positive attitudes of older people with the assistance of resources available from experiences of adversity. Conclusion: This analysis and concept development of resilience in the elderly provided sensitive indicators for nursing care in the context of adversity, considering available resources and with positive attitudes during this phase of life span.

**Keywords:** aged; concept formation; geriatric nursing; resilience psychological; standardized nursing terminology

## 1. Introduction

The role of resilience, coping and adaptation in the face of adversity makes critical the understanding of the concept of resilience in health [1]. The development of resilience in different stages of the life span is mainly related to critical experiences, such as illness, disability, living with violence, prejudice and wars [2]. The more resilient, the more adaptive outcomes and less impact on biopsychosocial health [2,3]. Likewise, life experiences in favorable contexts and with adequate social, family, cultural and spiritual structure strengthen the skills of self-control, problem-solving, coping, determination and wisdom [2,4].

Considering the world population, in 2021, the elderly represents 13.5% (1 billion) [5]. Interestingly, the dynamic character of resilience is expressed by more or less adaptive attitudes, facing the complexity of experiences in advanced age [6]. Keeping active, having a purpose in life, managing physical and cognitive limitations, and performing self-care activities, among other adaptation and recovery behaviors, all suggest healthy functioning to the elderly [4,6].

However, research [6,7] highlights the essential role of social support and protection networks, harmonious family relationships, access to health services and social coexistence that enable real conditions of assistance to the demands of the elderly. The consonance of protection mechanisms, life experiences, internal and external resources are configured as the main support strategy for longevity [6,7]. From the perspective of traditional models of human aging, as a continuum, under the influence of environmental, social, individual and lifestyle determinants [5], resilience is remarkable, as it helps the elderly to adapt and recover from vulnerable conditions [8]. Promoting resilience while

considering the heterogeneity of the context of the elderly may drive the advancement of nursing care and particularly of the care for the elderly.

The study of the concepts in nursing corresponds to a greater understanding of the phenomena related to care. The attributes, antecedents, consequents and empirical elements fundamentally contribute to nurses' clinical reasoning [9]. Specifically, for the standardised language systems, concerning nursing taxonomies, the theoretical aspects and conceptual structures are critical in developing a common language and nursing communication [10]. As so, the development of concepts relates to improving nursing knowledge, which is not static but evolutionary, as the characteristics are different over time, such as resilience. This concept has been explored from an ageing perspective. However, in nursing, taxonomies keep incipient, especially in the elderly.

The purpose of this concept analysis is to develop the concept of resilience in the elderly to establish the elements that refer to the nursing outcome Personal resilience (1309) from the Nursing Outcomes Classification (NOC) [11], specifically in the elderly, based on the identification of the attributes, the antecedents, the consequences and the empirical elements found in the literature.

2. Materials and Methods

The evolutionary model of Beth Rodgers [12] of concept analysis was used for the development of "resilience in the elderly". Six steps determine it; (1) identification of the concept of interest and associated terms; (2) selection of the appropriate field for data collection; (3) data collection and identification of the attributes of the concept, considering the interdisciplinary, sociocultural context and temporal variations (antecedent and consequent); (4) analysis of the concepts' characteristics; (5) identification of an example of the concept (if appropriate); (6) identification of implications, hypotheses for future development of the concept [12].

2.1. Identification of the concept of interest and associated terms

In this study, the concept of resilience focusing on ageing is developed under the health care approach for a sensitive outcome to nursing interventions. Thus, the concept of interest was defined as "resilience in the elderly" and as terms associated with psychological resilience, psychological adaptation, and coping.

2.2. Data sources

This concept analysis was based on the procedures as described for conducting an integrative review [13]. In total, five databases were selected: PubMed (National Library of Medicine National Institutes of Health); CINAHL (Cumulative Index to Nursing and Allied Health Literature); PsycINFO (American Psychological Association) considering only PsycArticles; LILACS (Latin American Caribbean Literature on Health Sciences) and Embase®, with their controlled descriptors Medical Subject Headings (MeSH), Health Science Descriptors (DeCS), Entree Thesaurus and uncontrolled (keywords) combined by using the Boolean operators "AND" and "OR" (Table 1).

Table 1. Databases search strategy.

Databases	Search strategy
Pubmed	"aged"[MeSH Terms] OR "aged, 80 and over"[MeSH Terms] OR "older people"[All Fields] OR "oldest old"[All Fields] AND "resilience psychological"[MeSH Terms] OR "resilience"[All Fields] OR "resiliency"[All Fields] AND "adaptation psychological"[MeSH Terms] OR "adaptive capacity"[All Fields] OR "coping"[All Fields] "aging"[MeSH Terms] OR "late life"[All Fields]
Embase	'aged' OR 'very elderly' OR 'elderly' OR 'aged, 80 and over' OR 'very old' AND 'psychological resilience' OR 'resilience' OR 'resiliency' AND 'coping behavior' OR 'coping' OR 'adaptation psychological' OR 'psychologic adaptation' AND 'aging'

Cinahl	MH "aged" OR MH "aged, 80 and over" OR MH "older people" OR "oldest old" AND MH "hardiness" OR "psychological resilience" OR "resilience" OR "resiliency" AND MH "psychological adaptation" OR "adaptive capacity" OR MH "coping" AND MH "aging" OR "late life"
PsycInfo (Psycarticles)	Index Terms: "aged" OR Any Field: "aged, 80 and over" OR "elderly" OR Any Field: "older people" OR Any Field: "oldest old" AND Index Terms: "resilience psychological" OR Any Field: "resilience" OR Any Field: "resiliency" AND Index Terms: "coping behavior" OR Any Field: "coping" OR Any Field: "adaptive capacity" OR Any Field: "adaptation psychological" AND Index Terms: "aging" OR Any Field: "late life"
LILACS	mh:("idoso" OR "aged" OR "anciano" OR "idoso de 80 anos ou mais" OR "aged, 80 and over" OR "anciano de 80 o más años") OR ("pessoa idosa" OR "pessoa de idade" OR "elderly" OR "persona de edad" OR "persona mayor" AND mh:("resiliência psicológica" OR "resilience psychological" OR "resiliencia psicológica") OR ("resiliencia" OR "resiliente" OR "resilience" OR "resiliency") AND ("adaptación psicológica" OR "adaptation, psychological" OR "adaptación psicológica") OR ("enfrentamento" OR "coping") AND mh:("envelhecimento" OR "aging" OR "envejecimiento")

Search in August 2020 and updated in December 2022.

### 2.3. Data collection and identification of attributes, antecedents and consequents of the concept

In order to achieve the objectives, identifying the empirical elements that proposed to evaluate the concept in the context of the elderly was also considered.

Initially, the guiding questions were defined using one of the variations of the acronym PICO (Population: people over 65 years of age; Interest: resilience; Context: ageing). The guiding questions were: What are the conceptual elements of resilience in the elderly? What are the measures that allow the assessment of resilience in the elderly?

As inclusion criteria, primary (experimental, observational, methodological and analytical) and reflective studies were considered, whose authors studied resilient characteristics in the elderly; research published electronically in Portuguese, English or Spanish; using samples of elderly aged 65 and over in any life situation or health condition; and no publication time restriction was considered.

The study selection process (Figure 1) was based on the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analysis) [14]. The studies citations selected in the databases were imported to software (EndnoteWeb®) [15] to remove duplicates. Then, Rayyan® [16] was used to organize the readings of titles, abstracts, and full text, and to screen the studies independently among the reviewers.

In August 2020, a total of 1988 studies were found in the databases, and 202 were removed for duplicates. According to the inclusion criteria, after evaluating the titles and abstracts, 117 studies were selected for full-text reading; 46 studies were excluded (21 did not mention the concept or measure of resilience; 9 did not report elderly; 6 were literature reviews; 2 other languages; 2 congresses' abstract; 2 dissertations; 1 editorial; 1 experimental study with animals; 1 concept analysis; 1 unavailable for reading). After selection, 71 studies were included.

The literature analysis took more time than planned, aligned with the design of the concept of "resilience in the elderly", and the search was updated in December 2022. From August 2020 to December 2022, 443 studies were added, considering the five databases. Proceeded with the removal of 61 duplicate studies that were identified by EndnoteWeb® [15] and Rayyan® [16]. According to the eligibility criteria, 332 studies were excluded after evaluating the titles and abstracts, and 11 studies were excluded in full-text reading eight focus on the variable correlated of resilience: three without concept and resilience assessment). In this update, 39 more studies were included; therefore, for concept development, the total was 110 (Figure 1).

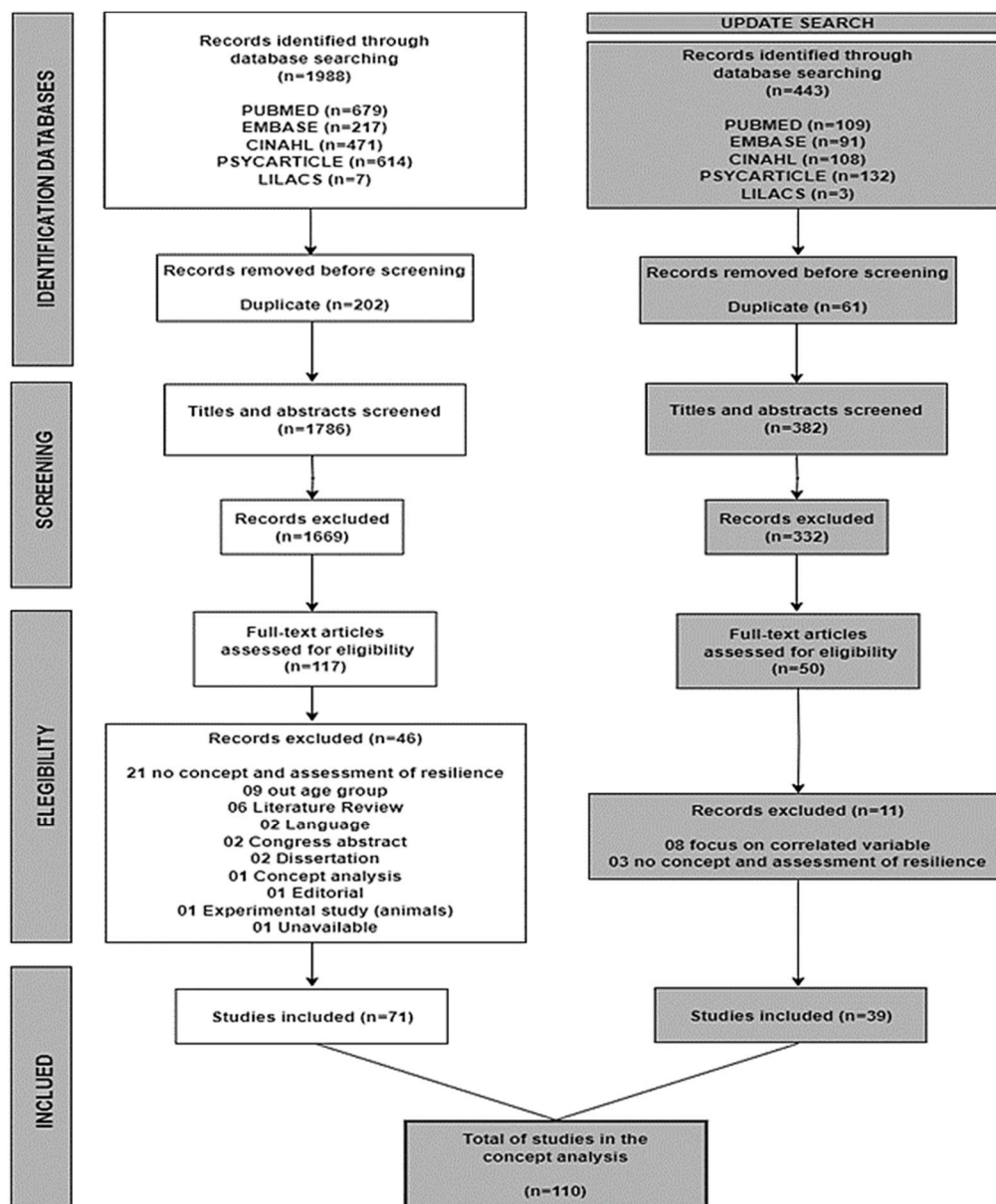


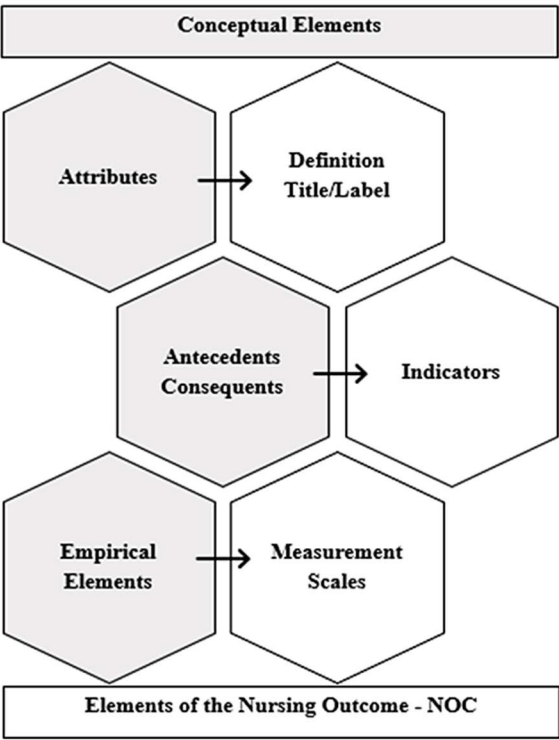
Figure 1. PRISMA flowchart of the study selection process.

#### 2.4. Data analysis

For the analysis and synthesis of the included studies, a spreadsheet was created in Microsoft Office Excel®, containing information regarding the identification of the study (title, authors, year, country, and journal), the descriptors/keywords, the objective of the study, methodological aspects (design, sample characteristics, and study setting), and concept characteristics (substitute/related terms; attributes/definitions; antecedents; consequents; empirical elements).

Considering one of the purposes of the concept development, the attributes, antecedents, consequents, and empirical elements established the elements that make up the nursing outcome in the taxonomy of Nursing Outcomes Classification (NOC) [11]. The correspondence [17] of the elements of the concept analysis with the elements of the taxonomy was considered as follows: the attributes corresponded to the definition and title of the nursing outcome, the antecedents and consequents to the indicators of the nursing outcome, and the empirical elements to the measurement scale (Figure 2).





**Figure 2.** Correspondence between the elements of the concept analysis and Nursing Outcomes Classification (Authors own work).

3. Results

3.1. Characteristics of the studies

A total of 110 were included (Table S1). Most were carried out in the United States of America (n = 37), Canada (n = 12), China (n = 10) and Brazil (n = 9), published between 1990-2022, with the majority (n = 39) between the years 2020-2022. There was a predominance of publications using a quantitative design (n = 66), qualitative (n = 28), cohort (n = 17), methodological (n = 8) and with an approach to the elderly in the context of life in the community (n = 38), in the presence of depressive symptoms (n = 5), under limitations, such as the risk for falls, visual impairment, bone fracture and diagnoses of Dementia and Stroke (n = 5) and in other situations of adversity such as immigrants, widowhood, palliative care, holocaust, and others. After updating the database search, studies were observed that reported resilience of the elderly, in the context of the COVID-19 Pandemic (n = 8). This section may be divided by subheadings. It should provide a concise and precise description of the experimental results, their interpretation, and the experimental conclusions that can be drawn.

3.2. Concept elements

3.2.1. Definition

Different definitions of resilience were found and analyzed according to attributes, which are: Ecological construct;<sup>D2,H1,C2,C3,R3,R13,W1,I1,D6,E8</sup> Dynamic process of lifecycle;<sup>A1,A5,B1,B3,P8,R8,R10,V1,C6,R21</sup> Protective factors;<sup>A4,B2,D1,E1,T3,R7,F1</sup> Perspective positive;<sup>A1,A3,B2,N1,R6,V1,P7,C6,E4,A9,A10</sup> Multidimensional;<sup>B2,M2,V1,G1,R12,H3,M5,M6,S4</sup> Adaptation;<sup>R1,D3,T2,H2,M3,E4</sup> Psychological resources;<sup>E2,P6,N2,W2</sup> Ageing;<sup>B4,R14,V1,E3,A10,D4</sup> Coping;<sup>A3,R4,T4,P7</sup> Self-management;<sup>B1,R11</sup> Innate/Hereditary.<sup>C1</sup>

### 3.2.2. Surrogate and related terms

During the analysis of the studies, other substitute and related terms were identified, which may express similar ideas and characteristics, using different terminologies to represent the concept of interest [12].

With the perspective of coping associated with resilience, the terms “resilient coping patterns”, “coping resilience”, “resilient coping”, “adaptive coping”,<sup>A1,A3,C4,R4,B2,L1,T2,G2</sup> ageing and resilience “resilient ageing” and “resilience elderly”<sup>B4,P1</sup> and psychology and resilience “psychological resilience”, “emotional resilience” and “cognitive resilience”.<sup>D1,E2,R14,D4,P11</sup> Other terms were also found, such as “resilience protective factors”,<sup>C2</sup> “resilience factors”,<sup>R15</sup> “physical resilience”,<sup>R14,R12,I2,R22</sup> “biological resilience”,<sup>R12</sup> “health resilience”,<sup>R14</sup> “resilience of quality of life”,<sup>E3</sup> “resilient reintegration”,<sup>R14</sup> “spiritual resilience”,<sup>E1</sup> “cultural resilience”,<sup>G1</sup> “community resilience”,<sup>G1</sup> “social ecological resilience”,<sup>R18</sup> “family resilience”,<sup>D3,T5</sup> “sustainability”,<sup>S1</sup> “individual and interpersonal resilience”,<sup>D3</sup> “resilient identity”,<sup>E5</sup> “dispositional resilience”,<sup>R14</sup> “resiliency”,<sup>A5</sup> “multimorbidity resilience”,<sup>H3,M5,M6,S4</sup> and “dietary resilience”<sup>N3</sup>

### 3.2.3. Attributes

The attributes constitute the real definition of the concept, which can be represented by situations or words that adequately characterise the concept [12].

As attributes of the concept “resilience in the elderly”, the literature identified resources available and positive behaviors (set of attitudes). Resources available<sup>A3,D3,E1,F1,I1,R1,R14,H3,R22,S3</sup> is characterized in studies as (environmental capital; cultural capital; economic capital; social capital; social relationships; family and friends; love and friendship; having divine support; faith in God; spirituality) and positive behaviors (set of attitudes)<sup>B2,B3,E2,I1,N1,M4,P6,P7,R1,R14,H3,E5,D4,D6,A9,C6,S4</sup> such as (courage and strength; resistance; hardiness; positive sense of self and an optimistic outlook on life; strong positivity demonstrated by identity projects, redemptive sequences and narrative openness; positive comparison with others; interpersonal control; mastery; belief in self; competence; maintaining purpose; determination; sense of purpose; self-determination; strives toward goal achievement; prosocial behavior; expressing gratitude; sense of humor; ability to use humor; problem-solving skills; meaningful work and activities; flexibility; creativity; autonomy; recovery; sustainability; warrior; adaptive; moving-on; self-esteem; esteem; strong self-efficacy).

### 3.2.4. Antecedents

A total of eight antecedents were found in the literature, they are, sociodemographic characteristics;<sup>B1,C5,D1,D2,E3,I1,M3,P4,P8,R2,R3,R9,R10,T1,A9,D4,E6,M5,R17,R20,S2,S3,T6</sup> adversities experiences;<sup>A3,B2,B3,B4,C2,C3,E3,F1,M2,M3,N2,M4,P3,P5,P6,R5,R7,R8,R9,E5,I2,P10,R19,S2</sup> life experiences;<sup>A3,A8,B1,B2,B4,M2,R9,T2,P11</sup> physiology factors;<sup>R12,W2</sup> social context (personal relationships and environmental support);<sup>B2,B3,C2,C4,D3,G1,H1,I1,M1,P8,R5,R8,R13,U1,U2,W1,A9,B5,E4,H4,P12,R20,T6</sup> intrinsic aspects (have purpose or goals; maintenance balance; beliefs);<sup>A8,B2,C4,D3,F1,M2,P6,P7,R1,R2,R5,R8,R9,R15,A9,E4,H4,P12,P13</sup> health conditions (lifestyle and express emotions)<sup>C2,C5,D3,M1,M4,F1,H2,P3,P4,P5,P7,R2,R14,T4,W1,A10,C6,D5,H3,P12,R20,S2</sup> and express self-awareness.<sup>A3,A8,B2,B1,C4,F1,M2,R2,R5,R8,T3</sup> They characterize the antecedents of a concept, events or happenings that occur prior to the phenomenon, including the relationships with its temporal and sociocultural context [12].

### 3.2.5. Consequents

Described as results, manifestations or outcomes of the concept or phenomenon of interest [12], the consequences of resilience in the elderly, according to the literature, comprise the components of mental health (control of symptoms psychological and control of emotions);<sup>A2,A6,B4,C3,C5,D1,D2,L1,P1,P6,P7,R6,R10,R15,S1,T1,V1,W2,A10,P11,M5,E5</sup> positive perspective and experience of ageing (active aging; independence and autonomy; values socialization; personal behavior);<sup>A1,A2,A3,A7,B3,B4,C2,C3,C5,E1,F1,H1,M1,M3,O1,P3,P4,R1,R2,R4,R11,R13,R15,R16,S1,T3,U2,V1,A10,E5,P11,P12,R21,T6,S4,R22,S5,D4,E6,E8,R18,A9,G</sup>

2,E7,E8,C7,F3,H4,S3 grief and loss experience;<sup>B2,D1,P9,R14,E4</sup> coping strategies;<sup>A1,A8,B4,E1,H1,M4,R1,R4,O1,V1,E7,F2,N3,R19</sup> health perspective;<sup>A4,H2,I1,L1,P9,T1,R7,R12,R14,P14,E9</sup> optimistic perspective.<sup>A6,C1,D3,F1,M1,R2,P11,E4,P12,R18,R21</sup>

### 3.2.6. Empirical elements

The empirical elements represent categories or classes related to the essential attributes in which the concept can be observed and that allow its operational definition [12]. Some authors proposed to measure the concept of resilience in the context of life of the elderly, using scales and/or interventions and qualitative assessment.

Among the scales, the Connor Davidson Resilience Scale (Four domains - grit, active coping self-efficacy, accommodative coping self-efficacy, spirituality);<sup>A2,A4,A7,C1,C5,C6,E7,H2,M1,N2,P1,P2,P8,P11,P12,R6,R7,R19,R20,S3,S5,V1,W2</sup> The Resilience Scale (Two domains - personal competence; acceptance of self and life);<sup>A9,E4,E6,F3,G2,P12,S2,M2,I2,R11,B1,R9,T1,T4,E2</sup> Simplified Resilience Score=Leave Behind Questionnaire + Resilience Scale;<sup>D1,F2,P14</sup> Brief Resilient Coping Scale;<sup>A1,A10,B5,C7,H4,N3,P10,R17,R4,T2</sup> Dispositional Resilience Scale;<sup>P6,P7,P8</sup> Groningen Ageing Resilience Inventory;<sup>B2</sup> The Hardy-Gill Resilience Scale;<sup>D2</sup> Resilience in Older Adults Survey;<sup>S1,H3</sup> The Ego-Resilience Scale;<sup>P7</sup> John Henry Active Coping level;<sup>L1</sup> Psychological Resilience Scale for Adults;<sup>D4,D6</sup> Psychological Resilience Against Physical Difficulties Index.<sup>P13</sup>

For studies with a qualitative approach to resilience, it was observed in the objectives of the evaluations, the interest in explore significant life events and experiences;<sup>A3,A5,C2,C4,N1,R2,R5,R21</sup> explore events of adversity and confrontation;<sup>B3,R2,T3,R13</sup> explore resilience;<sup>E1,F1,R3,P3,H1</sup> explore support mechanisms;<sup>C4,T3,R15,M3,R21</sup> measure social support;<sup>C3,C4,R3,T5,E8</sup> measure self-efficacy;<sup>C3</sup> measure self-awareness;<sup>P4,V1,W1</sup> physical and cognitive performance;<sup>E4,T5</sup> explore how is it getting old;<sup>T6,R21</sup> resilient characteristics.<sup>R18,R21,T6</sup> Specifically, in context COVID-19 Pandemic the questions had the focus in explore challenges experienced;<sup>E8</sup> How COVID-19 affected their lives;<sup>E8</sup> What were the changes in that period; social networks and assistance from government agencies or communities during the pandemic;<sup>E8</sup> impact financial hardship during COVID-19; strategies, resources and processes do older adults.<sup>R18</sup>

### 3.2.7. Exemplar case

To demonstrate the application and purposes of clarifying the concept of “resilience in the elderly” [12], an exemplary case was identified in the literature, inserted in the context of the elderly person's life [18].

“...Mrs. W is a 75-year-old, female, widowed, who lives alone in her apartment after her husband died three years ago. She was admitted to a community hospital with chief complaints of falling at home and pain in her left knee. Her three children live in different states and she has a friendship with a female neighbour in her apartment building, and they talk on the telephone at least twice a week. Is graduated from college with a degree in music and enjoys playing the piano at her church. She believes in her strong faith in God and supports from her pastor and church. She does her own errands, and grocery shopping, and enjoys cooking. Her main concerns are falling again, her painful left knee, and being able to resume her walking regimen. Mrs. W said, “I am going to do whatever I can to help myself get back to normal again...” [18].

In this context, surrounding the episode of Mrs. W's fall, the resilience attributes identified were family; friends; church; faith; belief in God; having an apartment (resources available) and “playing the piano”; “prosocial behavior” (positive behaviors). As antecedents: pain, fall, husband died (adversity); and consequents: “I am going to do whatever I can to help myself get back to normal again...” (optimistic perspective); “and being able to resume her walking regimen” (positive perspective and experience of ageing – active ageing); “grocery shopping and enjoys cooking” (positive perspective and experience of ageing – independence and autonomy).

Figure 3 represents the concept of resilience in the elderly, integrating the attributes of the concept and its etiology (antecedents), outcomes (consequents) and empirical elements, as well as the conceptual definition of “positive attitudes of older people with the assistance of resources available from experiences of adversity”.



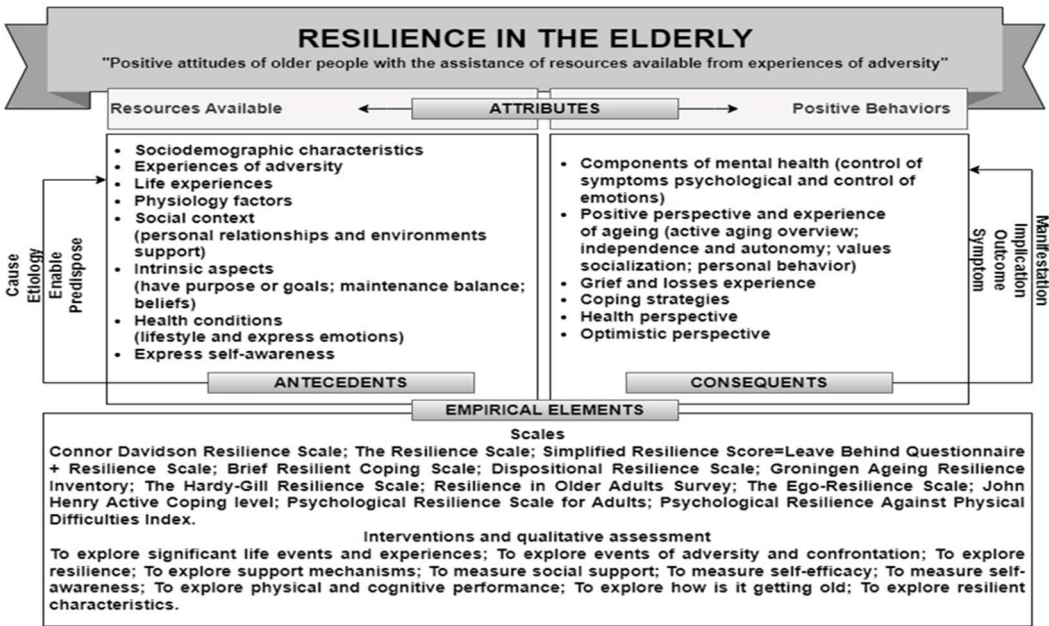


Figure 3. Concept of “Resilience in the elderly”.

4. Discussion

Clarifying the concept of resilience constitutes the development of mechanisms to help the elderly face the challenges of ageing. The concept of “resilience in the elderly” was related to the presence of available resources and to present behaviours that reflect positive attitudes during the experiences of adversity in ageing. Thus, it is proposed as a conceptual definition of “positive attitudes of older people with the assistance of resources available from experiences of adversity”.

Access to resources from social, economic, cultural, family, environmental and spiritual are configured as necessary interface in the face of limitations, weaknesses and a decrease in the vital capacity of the elderly [19]. In a global context, we can witness the expressive increase in longevity through the integrated guarantee of these resources, which support survival and can provide conditions for active ageing with a good quality of life [20,21].

For the elderly, greater resilience in the face of situations of vulnerability is related to daily life, behaviors such as self-efficacy, use of humour, problem-solving skills, and interpersonal control, among others, are critical in strengthening personal perspectives of ageing [22]. Life experiences promote global development and attitudes that facilitate protecting available resources and increase resilient mechanisms related to adaptation and coping [21].

Studies analyzing the concept of resilience associated with cardiovascular disease [23], dementia [24], morality [25], to nurses [26] and genetics [27], in overall literature about nursing care. Establishing the concept, defining its temporal characteristics and exploring motivations and outcomes support nurses' clinical reasoning for more effective care interventions [28].

The etiologic events and characteristics, described as conceptual antecedents were mediated by the elderly person: higher education and income and having a partner;<sup>B1,C5,D1,D2,E3,I1,M3,P4,P8,R2,R3,R9,R10,T1,A9,D4,E6,M5,R17,R20,S2,S3,T6</sup> having experienced adversities (impairment of living conditions, health issues, mental health and social challenges, exposure to trauma and prejudice);<sup>A3,B2,B3,B4,C2,C3,E3,F1,M2,M3,N2,M4,P3,P5,P6,R5,R7,R8,R9,E5,I2,P10,R19,S2</sup> life experiences (satisfaction, reminiscences, wisdom and problem-solving practice);<sup>A3,A8,B1,B2,B4,M2,R9,T2,P11</sup> physiological factors (involving the functions of the autonomic nervous system , interactions of genetic, environmental, molecular and immune system causes);<sup>R12,W2</sup> the social context (participates in family, social, religious relationships, among friends and neighbors; access to social security, community and health services (interacts with art and leisure));<sup>B2,B3,C2,C4,D3,G1,H1,I1,M1,P8,R5,R8,R13,U1,U2,W1,A9,B5,E4,H4,P12,R20,T6</sup> intrinsic aspects (has purpose to move on with life; expresses perseverance, personal control and equanimity; has spiritual

and religious support);<sup>A8,B2,C4,D3,F1,M2,P6,P7,R1,R2,R5,R8,R9,R15,A9,E4,H4,P12,P13</sup> health conditions (lifestyle that involves self-care activities, self-preservation, self-efficacy, independence and autonomy; express emotions through communication, humor, hope, and self-esteem);<sup>C2,C5,D3,M1,M4,F1,H2,P3,P4,P5,P7,R2,R14,T4,W1,A10,C6,D5,H3,P12,R20,S2</sup> expresses self-awareness (demonstrates personal competences of acceptance, adaptation, identity and self-reflection; search for self-improvement).<sup>A3,A8,B2,B1,C4,F1,M2,R2,R5,R8,T3</sup>

For the consequents of “resilience in the elderly”: mental health in the elderly (it presents control of depressive symptoms, apathy and anxiety; control of negative emotions and stress; expresses positive emotions, stability and emotional maturity);<sup>A2,A6,B4,C3,C5,D1,D2,L1,P1,P6,P7,R6,R10,R15,S1,T1,V1,W2,A10,P11,M5,E5</sup> positive perspectives of aging (expresses quality of life and satisfaction, wisdom in coping with vulnerabilities; seeks to remain active; develops strategies for autonomy and independence; social engagement);<sup>A1,A2,A3,A7,B3,B4,C2,C3,C5,E1,F1,H1,M1,M3,O1,P3,P4,R1,R2,R4,R11,R13,R15,R16,S1,T3,U2,V1,A10,E5,P11,P12,R1,T6,S4,R22,S5,D4,E6,E8,R18,A9,G2,E7,E8,C7,F3,H4,S3</sup> experiences of grief and loss (demonstrates recovery and maintains becomes active after the loss; does not express denial);<sup>B2,D1,P9,R14,E4</sup> coping strategies (avoids stressful situations, demonstrates problem-solving skills, develops strategies to alleviate adversity and expresses courage and performance);<sup>A1,A8,B4,E1,H1,M4,R1,R4,O1,V1,E7,F2,N3,R19</sup> health perspectives (positive self-report health; has adequate physical and mental health conditions; demonstrates less impact on illness);<sup>A4,H2,I1,L1,P9,T1,R7,R12,R14,P14,E9</sup> optimistic attitude (demonstrates a positive attitude, gratitude for life, and optimism).<sup>A6,C1,D3,F1,M1,R2,P11,E4,P12,R18,R21</sup>

Regarding the operationalization of nursing care, evaluating human responses in clinical, family, and community situations is essential for clinical reasoning and, later in the stages of the nursing process, to establish care planning, interventions and outcomes assessment [10,11,29].

The empirical elements of “resilience in the elderly” are available in a quantitative approach (scales, inventories, and survey) and in a qualitative approach (interviews, dialogues and guiding questions). In both, the characteristics presented in the Figure 3, are evaluated such as coping,<sup>A2,A4,A7,C1,C5,H2,M1,N2,P1,P2,P8,R6,R7,V1,W2,A1,R4,T2</sup> self-efficacy,<sup>A2,A4,A7,C1,C5,H2,M1,N2,P1,P2,P8,R6,R7,V1,W2,A1,R4,T2</sup> personal competences,<sup>B1,R9,T1,T4,E2,I2,R11,D1,R9,R2,M3,T1</sup> acceptance,<sup>B1,R9,T1,T4,E2,I2,R11</sup> life experiences<sup>A3,A5,B3,C3,C4,P3,R2</sup> and adversities.<sup>A3,B3,H1</sup>

In the search update, eight studies were included with the theme of resilience in the context of the elderly during the pandemic. Situations of greater risk of complications from SARS-CoV-2 virus infection, social isolation, economic risk, imminent grief and family distancing aggravated the vulnerable scenario of the elderly.<sup>A10,C6,E8,F2,M5,N3,R18,S5</sup> Identified, through the resilient dynamics, the presence of attitudes to maintain control in the face of adversity,<sup>C6</sup> self-efficacy in measures to protect against infection,<sup>M5,N3,S5</sup> optimism<sup>A10</sup> and the use of care and social resources<sup>E8,F2,R18</sup> in elderly people with outcomes of greater adaptation during the pandemic.

Included in the NOC taxonomy in 2008, the nursing outcomes Personal resilience (1309) [11], had no review to this date and the main indicators related to childhood and adolescence. This concept analysis proposes, with the conceptual elements and the definition, to develop the phenomenon of resilience from the specific perspective of the elderly.

Presenting in vulnerable contexts, the disposition for resilience, thrives on adaptive coping with positive attitudes, and considering it among the models and nursing classifications that proposes systematized care, based on the expertise and clinical reasoning of nurses.

The aim and review question, which considered all the conceptual and empirical elements of the concept of “resilience in the elderly”, enabled the inclusion of many indexed studies in the databases. The screening and extracting data from the included studies were extensive, considering the rigour of the independent review and discussion of the elements that substantiated the concept.

## 5. Conclusion

The concept of “resilience in the elderly” was defined as the positive attitudes of older people with the assistance of resources available from experiences of adversity. Exploring conceptual elements, predisposing factors, and their manifestations in specific populations and conditions supports greater accuracy in nursing care. Particularly, the NOC relates to constructing and refining

specific and measurable indicators, which are sensitive to nursing interventions and concretely represent the state, behavior or perception. As so, this concept analysis has provided a definition and specific indicators of a new nursing outcome, resilience in the elderly, which is important for nursing care.

**Supplementary Materials:** The following supporting information can be downloaded at the website of this paper posted on Preprints.org. Table S1: Included studies and the attributes, antecedents, consequents and empirical elements of concept analysis.

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