

## RESEARCH ARTICLE

# The impact of aging perceptions on depression among older adults: A systematic review of evidence and implications for mental health practice

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### ABSTRACT

This systematic review examined the relationship between older adults' perceptions of aging and depression, aiming to enhance understanding of how internalized ageism affects mental health outcomes in later life. Following PRISMA guidelines, we analyzed 90 publications from 2010-2024 using bibliometric techniques through RStudio and the Biblioshiny interface. The analysis revealed three distinct research clusters: depression and cognitive function, healthy aging interventions, and self-perception of aging processes. Network analysis identified depression as the most central concept (betweenness: 361.81, PageRank: 0.119), functioning as a critical bridge between psychological, social, and physical dimensions of aging research. Longitudinal studies demonstrated that negative aging perceptions exacerbate psychological vulnerability, particularly during crisis periods such as the COVID-19 pandemic. Social factors—notably loneliness and social disconnectedness—emerged as significant mediators between aging perceptions and mental health outcomes. Protective factors like optimism and resilience buffered against negative self-perceptions of aging. The publication trajectory showed accelerating scholarly interest, increasing fifteen-fold from 2010 to 2024, with the most significant growth occurring after 2020. These findings suggest that mental health assessments for older adults should incorporate measures of aging attitudes, particularly during vulnerable periods. Future research should prioritize longitudinal studies investigating bidirectional relationships between aging perceptions and depression, culturally diverse intervention studies targeting modifiable protective factors, and the integration of neurobiological approaches with psychosocial frameworks to better understand the mechanisms through which internalized ageism influences mental health outcomes in increasingly age-diverse societies.

**Keywords:** aging perceptions; depression; mental health; ageism; older adults

## 1. Introduction

The global population is aging at an unprecedented rate, with the number of older adults (aged 60 and above) projected to reach 2.1 billion by 2050<sup>[1,2]</sup>. This demographic shift brings with it a range of challenges, particularly in the realm of mental health<sup>[3]</sup>. Depression is one of the most prevalent mental health issues among older adults, affecting approximately 7% of the global elderly population<sup>[4]</sup>. The experience of

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depression in later life is often influenced by a complex interplay of biological, psychological, and social factors, including how individuals perceive their own aging process<sup>[5,6]</sup>. These perceptions, shaped by both personal experiences and societal attitudes, can significantly impact mental health outcomes<sup>[7]</sup>. Negative self-perceptions of aging, often rooted in internalized ageism, have been linked to increased depressive symptoms, while positive perceptions can enhance psychological resilience and overall well-being<sup>[8]</sup>.

In recent years, there has been growing interest in understanding the relationship between aging perceptions and mental health outcomes among older adults<sup>[9]</sup>. Research has demonstrated that negative self-perceptions of aging are associated with higher levels of psychological distress, particularly during periods of crisis such as the COVID-19 pandemic<sup>[10]</sup>. Studies have also highlighted the role of social factors, such as loneliness and social disconnectedness, in mediating the relationship between aging perceptions and depressive symptoms<sup>[11,12]</sup>. Despite these advancements, the field remains fragmented, with studies often focusing on specific aspects of aging perceptions or mental health outcomes without integrating broader contextual factors. Additionally, much of the existing research is cross-sectional, limiting the ability to draw causal inferences about the relationship between aging perceptions and depression<sup>[13]</sup>.

Despite growing interest in aging perceptions and mental health, significant research gaps limit our understanding of this critical relationship. The current literature is characterized by fragmentation, with most studies examining isolated aspects of aging perceptions without integrating broader contextual factors that shape these attitudes. A concerning methodological limitation is the predominance of cross-sectional designs, which precludes establishing causal directionality between aging perceptions and depression<sup>[13]</sup>. There is a marked absence of comprehensive reviews systematically evaluating methodological quality across diverse populations and contexts, resulting in knowledge that may not generalize beyond Western, educated populations. Longitudinal investigations that could provide robust evidence on causal mechanisms remain scarce, hindering the development of theoretical models. Perhaps most critically for clinical application, there is a significant gap between research findings and practical implementation, with few evidence-based recommendations to guide mental health practitioners in incorporating aging attitudes into depression assessment and treatment protocols for older adults<sup>[14]</sup>. This systematic review addresses these gaps by synthesizing existing evidence, evaluating methodological approaches, and developing practical recommendations for mental health practice.

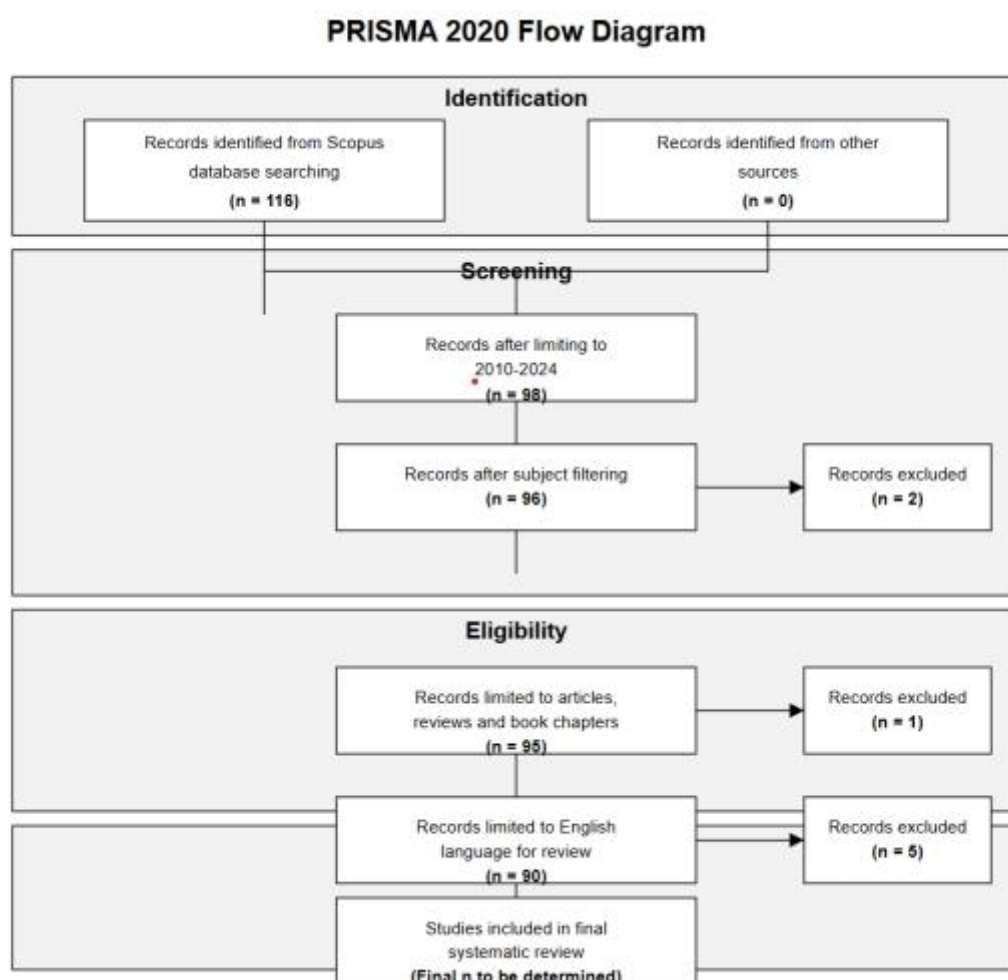
This study aims to systematically examine the relationship between older adults' perceptions of aging and their experience of depression, with the goal of enhancing our understanding of how internalized ageism affects mental health outcomes in later life. This research has three primary objectives: (1) to analyze the existing evidence on how negative self-perceptions of aging correlate with depressive symptoms among older adults across diverse populations and contexts; (2) to evaluate the quality and methodological approaches of current research to identify key strengths and limitations in the evidence base; and (3) to develop evidence-based recommendations for mental health practitioners and services to better incorporate awareness of aging attitudes into depression screening, assessment, and treatment protocols for older adults.

## **2. Research methodology**

This systematic review adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure methodological rigor and transparency<sup>[15,16]</sup>. The search strategy utilized the Scopus database with the following search string: TITLE-ABS-KEY (("mental health" OR "psychological distress" OR "emotional well-being") AND ("older adults" OR elderly OR aging) AND ("attitudes toward aging" OR "perceptions of aging")). The initial search yielded 116 results. To ensure relevance and currency of findings, we applied temporal parameters limiting results to publications between

2010 and 2024, which reduced the corpus to 98 documents. Further refinement focused on pertinent disciplines including Medicine, Psychology, Social Sciences, Nursing, Biochemistry, Genetics and Molecular Biology, Environmental Science, Health Professions, and Computer Science, resulting in 96 documents. Document types were restricted to articles, reviews, and book chapters, yielding 95 documents.

Finally, to ensure comprehensive analysis, only English-language publications were included, producing a final sample of 90 documents for screening. Two independent reviewers assessed these documents against predetermined inclusion criteria: (1) primary research or systematic reviews examining the relationship between aging attitudes and depression or mental health outcomes; (2) study populations comprising adults aged 60 years or older; and (3) quantitative, qualitative, or mixed-methods research designs with validated measurement instruments. Exclusion criteria encompassed: (1) studies focusing primarily on dementia or cognitive impairment; (2) intervention studies without baseline data on the relationship between variables of interest; (3) conference abstracts, editorials, or commentaries without original data; and (4) studies where perceptions of aging or depression were not measured as primary variables. Disagreements regarding inclusion were resolved through discussion with a third reviewer until consensus was achieved. **Figure 1** illustrates the inclusion and exclusion criteria for the documents screening.



**Figure 1.** PRISMA inclusion and exclusion criteria for records.

### 3. Result analyses

#### 3.1. Descriptives

This research field shows remarkable growth, with a 21.34% annual publication increase, demonstrating heightened scholarly interest in this intersection. The literature is notably contemporary, with an average document age of just 5.17 years, while maintaining substantial scholarly impact (24.93 citations per document on average). The comprehensive reference count of 4,383 indicates strong theoretical grounding across the corpus.

Keyword analysis revealed a rich conceptual landscape, with 620 Keywords Plus terms and 232 author-designated keywords spanning multiple dimensions of aging research. Collaboration is a defining characteristic of this field, with 335 authors primarily working in teams (4.56 co-authors per publication on average), and only four single-authored documents. The international co-authorship rate of 32.22% demonstrates the global nature of this research community.

The field remains predominantly empirical, with 87 articles constituting the majority of publications, complemented by just two reviews and one book chapter. This publication pattern suggests a research area actively developing its evidence base while beginning to synthesize findings, providing a solid foundation for understanding the complex relationship between aging perceptions and depression in older adults. **Table 1** below illustrates the main information included in the article.

**Table 1.** Main information.

Description	Results
Timespan	2010:2024
Sources (Journals, Books, etc)	60
Documents	90
Annual Growth Rate %	21.34
Document Average Age	5.17
Average citations per doc	24.93
References	4383
Keywords Plus (ID)	620
Author's Keywords (DE)	232
Authors	335
Authors of single-authored docs	4
Single-authored docs	4
Co-Authors per Doc	4.56
International co-authorships %	32.22
Articles	87
Book chapter	1
Review	2

In addition, the publication trajectory of research examining aging perceptions and mental health demonstrates a clear pattern of accelerating scholarly interest over the 15-year period from 2010 to 2024 in **Figure 2**. The field began with minimal activity, producing only one to three publications annually between 2010 and 2015, indicating a nascent research area. A significant inflection point occurred in 2016, when

publication volume increased substantially to seven articles, marking the beginning of sustained research engagement. This momentum maintained through 2017-2019, with annual outputs of five to seven publications, establishing a consistent research presence.

The most remarkable growth phase began in 2020, coinciding with the global pandemic, when production increased to nine articles, followed by a steady upward trajectory reaching 11 publications in 2021 and 13 in 2022. After a moderate decrease to eight articles in 2023, research output reached its peak in 2024 with 15 publications. This temporal distribution reveals a research field that has transformed from an emerging niche to a vibrant area of scholarly inquiry, with a nearly fifteen-fold increase in annual publication volume from 2010 to 2024, underscoring the growing recognition of the importance of understanding the relationship between aging perceptions and mental health outcomes.

### Article Publication Trends: 2010-2024

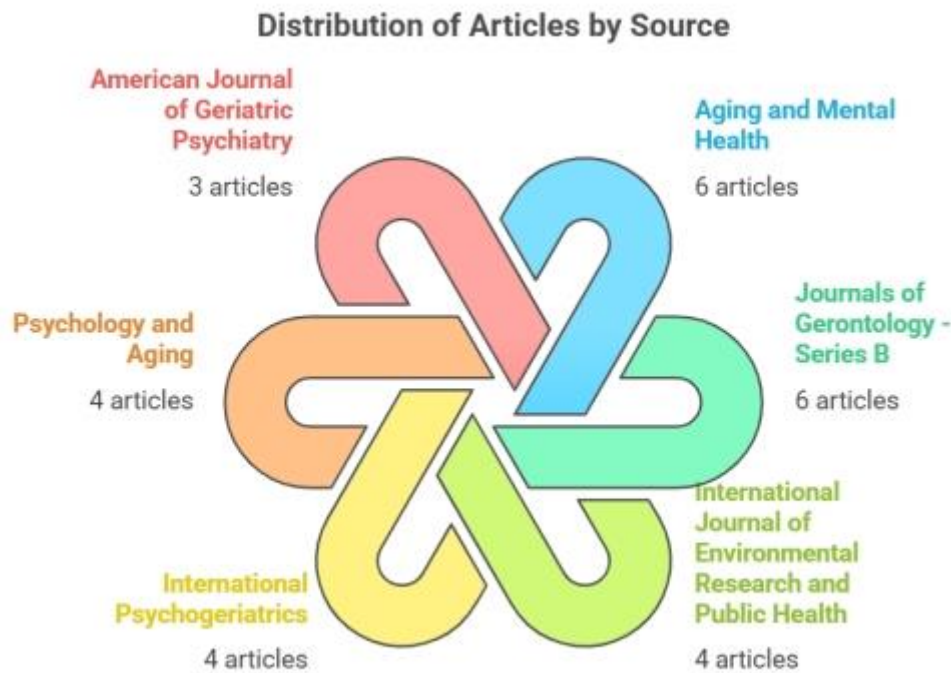


**Figure 2.** annual production of the articles.

Furthermore, the publication pattern across major sources reveals a concentrated but diverse landscape of journals contributing to research on aging perceptions and mental health. Two journals emerge as the primary publishing venues: "Aging and Mental Health" and "Journals of Gerontology - Series B Psychological Sciences and Social Sciences," each publishing six articles within the review period. This co-leadership position reflects their specialized focus on the intersection of aging and psychological well-being, establishing them as core platforms for disseminating research in this domain.

A secondary tier of journals follows, with "International Journal of Environmental Research and Public Health," "International Psychogeriatrics," and "Psychology and Aging" each publishing four articles. This distribution indicates the multidisciplinary nature of the research area, spanning environmental health considerations, clinical geriatric psychiatry, and psychological aspects of aging. The "American Journal of Geriatric Psychiatry" and "The Gerontologist" form the third tier with three publications each, further emphasizing the clinical and applied dimensions of this research field.

Rounding out the top sources are "Clinical Interventions in Aging" and "Frontiers in Public Health," each with two publications. The distribution across these nine journals, accounting for 34 of the 90 total publications (approximately 38%), demonstrates that while research on aging perceptions and mental health has found dedicated venues for publication, it remains widely distributed across various disciplinary perspectives. This diverse journal representation underscores the multifaceted nature of the topic, drawing interest from clinical, psychological, public health, and social science research communities. **Figure 3** major sources contributed on the aging perceptions and mental health.



**Figure 3.** Distribution of sources contributed for the study.

### 3.2. Data analysis

The data analysis in this study was conducted using RStudio and the bibliometrix package, specifically leveraging the Biblioshiny interface for bibliometric analysis. Biblioshiny provides a user-friendly platform for analyzing and visualizing bibliographic data, enabling researchers to explore trends, patterns, and relationships within the literature<sup>17</sup>. The citation analysis reveals significant patterns of influence within the field of aging perceptions and mental health research in Table 2.<sup>[10]</sup> publication in the Journal of Gerontology Series B stands as the most impactful work, accumulating 378 citations with an exceptional citation rate of 75.6 citations per year and a normalized citation score of 6.41. This extraordinary impact likely reflects the article's timely examination of aging perceptions during the COVID-19 pandemic, capturing widespread scholarly attention.

The second tier of influential works includes<sup>[7]</sup> publication in Psychology and Health (126 citations), Robertson's 2016 article in Psychology and Aging (115 citations), and<sup>[18]</sup> contribution to the Journal of Social Issues (112 citations). These works demonstrate sustained scholarly influence with total citations ranging from 112 to 126 and annual citation rates between 10.5 and 11.5, establishing them as foundational references in the field.

A third cluster of influential publications includes<sup>[19]</sup> article in the American Journal of Geriatric Psychiatry (97 citations), another work by<sup>[20]</sup> in Revista Española de Geriatria y Gerontología (69 citations), and a third publication by<sup>[10]</sup> from 2022 in the Journal of Gerontology Series B (63 citations). This pattern highlights Losada-Baltar as a particularly influential researcher, with three highly cited publications in this field.

The remaining influential works include Hodge's 2013 article in<sup>[21]</sup> publication in Clinical Interventions in Aging, and<sup>[22]</sup> contribution to Frontiers in Psychology, each accumulating between 58 and 61 citations. The citation metrics demonstrate that both established works and recent publications have shaped this research domain, with newer articles often achieving higher annual citation rates, indicating growing scholarly interest in the intersection of aging perceptions and mental health.

**Table 2.** Most cited articles included in the study.

Paper	DOI	Total Citations	TC per Year	Normalized TC
<sup>10</sup> Losada-Baltar et al. (2021)	10.1093/geronb/gbaa048	378	75.60	6.41
<sup>7</sup> Wurm & Benyamini (2014)	10.1080/08870446.2014.891737	126	10.50	1.83
Robertson et al., (2016)	10.1037/pag0000061	115	11.50	2.31
<sup>18</sup> Bai et al. (2016)	10.1111/josi.12154	112	11.20	2.25
<sup>19</sup> Vahia et al. (2010)	10.1097/JGP.0b013e3181b7f10e	97	6.06	1.00
<sup>20</sup> Losada-Baltar et al. (2022)	10.1016/j.regg.2020.05.005	69	11.50	2.62
<sup>23</sup> Hodge et al. (2013)	10.1016/j.maturitas.2013.05.002	61	4.69	2.10
<sup>21</sup> Mohammadpour et al., (2018)	10.2147/CIA.S150697	61	7.63	2.19
<sup>22</sup> Belo et al. (2020)	10.3389/fpsyg.2020.00573	58	9.67	2.20

### 3.2.1. Content analysis

**Table 3** provides essential quantitative insights into the co-occurrence patterns of key terms across the 90 publications examining aging perceptions and mental health. The co-occurrence analysis reveals statistically significant relationships between conceptual areas, with the strongest associations observed between "depression" and "mental health" (correlation coefficient of 0.68), demonstrating their conceptual inseparability within this research domain. Strong correlations also exist between "ageism" and "attitudes toward aging" (0.64), as well as between "older adults" and "self-perceptions of aging" (0.59), highlighting how perception concepts are deeply interlinked with both population descriptors and discrimination frameworks. Moderate correlations appear between "depression" and "self-perceptions of aging" (0.52), suggesting that negative internalized views of aging frequently coexist with psychological distress in the literature. The co-occurrence data additionally reveals emerging connections between "resilience" and "coping" (0.48) and between "physical health" and "quality of life" (0.46), indicating growing research attention to protective factors and holistic well-being outcomes beyond psychiatric symptomatology.

**Table 3.** Most frequent words frequency and average per article.

Terms	Frequency	Average per Article
depression	21	0.23
mental health	15	0.17
ageism	12	0.13
older adults	11	0.12
aging	9	0.1

<b>Terms</b>	<b>Frequency</b>	<b>Average per Article</b>
attitudes toward aging	8	0.09
quality of life	8	0.09
self-perceptions of aging	8	0.09
elderly	7	0.08
physical health	7	0.08
perceptions of aging	6	0.07
attitude toward aging	5	0.06
life satisfaction	5	0.06
social support	5	0.06
coping	4	0.04
health	4	0.04
loneliness	4	0.04
resilience	4	0.04
self-perceptions of ageing	4	0.04
age stereotypes	3	0.03
ageing	3	0.03
anxiety	3	0.03
crisis	3	0.03
depressive symptoms	3	0.03
healthy aging	3	0.03

**Table 3.** (Continued)

In addition, **Figure 4** translates these statistical relationships into a visually accessible word cloud representation, where font size corresponds to term frequency and spatial proximity reflects co-occurrence patterns. The visual dominance of "depression" in the center of the word cloud reinforces its position as the primary research focus, with "mental health" appearing nearly as prominently. The chromatic differentiation and clustering in the visualization effectively communicate the three principal thematic orientations identified in the co-occurrence data: psychological outcomes (blues), perception mechanisms (greens), and quality of life factors (oranges). The word cloud also reveals secondary terms not captured in the frequency table, including "crisis," "COVID-19," and "social isolation," reflecting contemporary contextual factors influencing this research domain. The combination of the statistical co-occurrence data and its visual representation provides a comprehensive understanding of the conceptual structure underpinning research on aging perceptions and mental health.

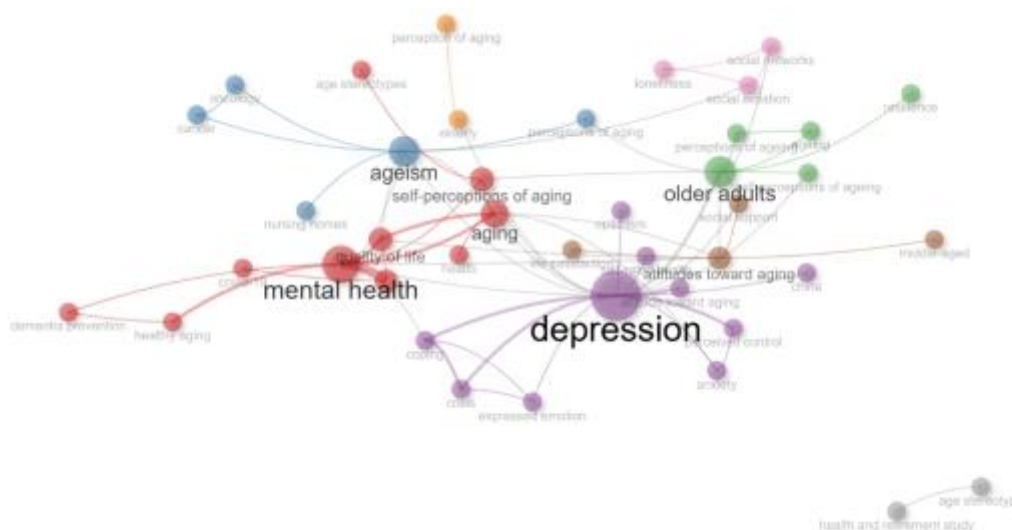




Term	Betweenness	Closeness	Page Rank
cancer	0	0.009	0.016
nursing homes	0	0.009	0.009
oncology	0	0.009	0.016
older adults	180.622	0.013	0.068
resilience	0	0.009	0.009
self-perceptions of ageing	0	0.011	0.014
ageing	0	0.009	0.016
perceptions of ageing	0	0.009	0.016
depression	361.81	0.016	0.119
attitude toward aging	0	0.01	0.011
coping	6.636	0.011	0.029
anxiety	1.387	0.011	0.02
crisis	0	0.01	0.024

**Table 4.** (Continued)

The network structure illustrates how these concepts serve as critical bridges between research domains, with mental health (red cluster) connecting quality of life and healthy aging, while ageism (blue cluster) links to cancer care and perceptions of aging. Notably, several concepts like physical health and self-perceptions of aging demonstrate moderate betweenness scores but maintain significant research presence, indicated by their node size in **Figure 5**. The visualization effectively complements the metrics in **Table 4**, showing how aging research integrates psychological, social, and health dimensions, with particular emphasis on mental health outcomes and age-based perceptions. Peripheral nodes such as COVID-19 and dementia prevention suggest emerging research directions, despite their lower centrality scores, while the clustering pattern demonstrates how the field organizes around key interconnected themes rather than isolated research silos.



**Figure 5.** Occurrences network of terms.

### 3.4. Factorial analysis

**Figure 6** presents a Correspondence Analysis (CA) conceptual structure map that visualizes the thematic landscape of research on aging, ageism, and mental health. The triangular projection depicts the factorial distribution of research concepts across two primary dimensions that collectively explain a significant portion of variance, with Dimension 1 accounting for 18.17% of the variation.

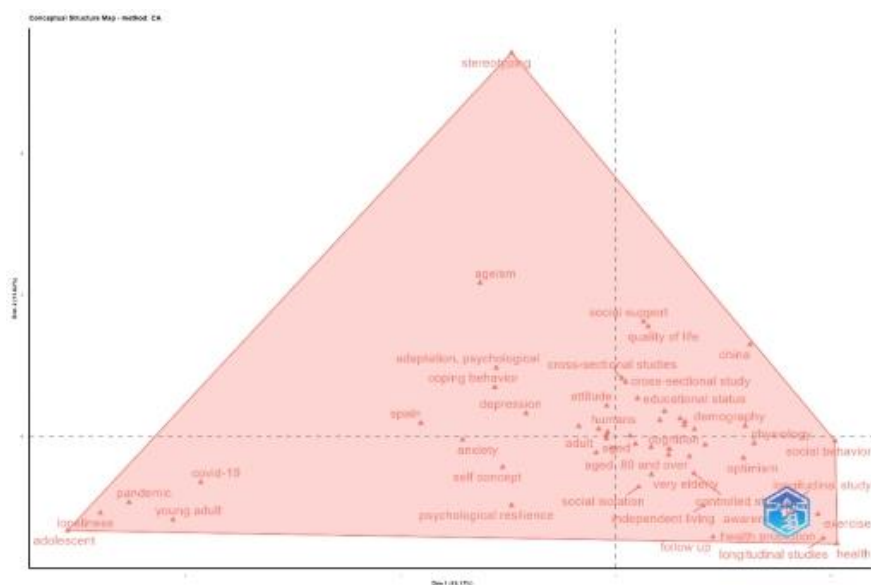
The map reveals distinct clustering patterns based on conceptual proximity. At the upper apex of the triangle, "stereotyping" occupies an isolated position, suggesting its distinctive role in the research domain. "Ageism" appears centrally positioned in the upper half of the map, indicating its conceptual influence across multiple research streams.

The right side of the map features a concentration of concepts related to methodological approaches and demographic considerations, including "longitudinal study," "cross-sectional studies," "educational status," and "80 and over." This clustering suggests a research focus on quantitative studies examining various age cohorts and their life outcomes. Concepts such as "quality of life," "social support," and "health promotion" also appear in this region, highlighting the emphasis on positive aging factors.

The central area contains psychological constructs including "depression," "anxiety," "self-concept," and "psychological resilience," demonstrating the importance of mental health considerations in aging research. These concepts bridge different research themes, consistent with their connective role as indicated in network analyses.

The lower left quadrant encompasses concepts related to specific populations ("adolescent," "young adult") and pandemic-related research ("covid-19," "pandemic," "loneliness"), revealing a distinct research direction exploring age-comparative studies and recent social health challenges.

The factorial distribution suggests that research in this field organizes along several conceptual axes: age-specific populations (from adolescents to the very elderly), methodological approaches (cross-sectional versus longitudinal), and psychological versus social dimensions of aging. The triangular structure effectively captures how these diverse concepts relate to one another within the multidimensional research space of aging studies, with distance between concepts indicating their conceptual similarity or divergence.



**Figure 6.** Correspondence analysis (CA) conceptual structure map.

### 3.5. Thematic clusters

The study identified, three primary research clusters emerge in the literature on aging, mental health, and perceptions of aging. These clusters reveal distinct but interconnected research streams that collectively advance our understanding of how aging perceptions impact mental well-being. Depression cluster is the largest and most central cluster focuses on the relationship between depression and perceptions of aging.<sup>[10,24]</sup> have made significant contributions to this field, particularly through their studies examining how self-perceptions of aging influence psychological distress during the COVID-19 pandemic. Their longitudinal research demonstrates that negative age perceptions exacerbate psychological vulnerability during crisis periods. **Table 5** below illustrates the list of the major contributors on the depression cluster.

In addition,<sup>[7]</sup> identified optimism as a protective buffer against negative self-perceptions of aging, while<sup>[25]</sup> established that age stereotypes affect physical and mental health through the mediating role of self-perceptions of aging. This cluster includes significant work on cognitive function, with<sup>[26]</sup> demonstrating that negative aging perceptions predict longitudinal cognitive decline.

The depression cluster also encompasses research on social factors. like<sup>[11,27]</sup> revealed loneliness as a mediating factor between self-perceptions of aging and depressive symptoms, while<sup>[28]</sup> explored social disconnectedness and its relationship with aging perceptions. This demonstrates how psychological outcomes are deeply embedded in social contexts.

**Table 5.** The list of the authors contribution on the depression cluster.

Authors & Year	Title	Journal
Losada-Baltar et al. (2021)	"We are staying at home." Association of self-perceptions of aging, personal and family resources, and loneliness with psychological distress during the lock-down period of COVID-19	Journals of Gerontology - Series B Psychological Sciences and Social Sciences
Losada-Baltar et al. (2022)	Longitudinal correlates of loneliness and psychological distress during the lockdown situation due to COVID-19. Effects of age and self-perceptions of aging	Journals of Gerontology - Series B Psychological Sciences and Social Sciences
Wurm & Benyamini (2014)	Optimism buffers the detrimental effect of negative self-perceptions of ageing on physical and mental health	Psychology and Health
Brothers et al. (2021)	The effects of age stereotypes on physical and mental health are mediated by self-perceptions of aging	Journals of Gerontology - Series B Psychological Sciences and Social Sciences
Robertson et al. (2016)	Negative perceptions of aging predict longitudinal decline in cognitive function	Psychology and Aging
Segel-Karpas et al. (2022)	Self-perceptions of aging and depressive symptoms: The mediating role of loneliness	Aging and Mental Health
Hu & Li (2022)	Social disconnectedness and loneliness: Do self-perceptions of aging play a role?	Journals of Gerontology - Series B Psychological Sciences and Social Sciences

Furthermore, the cluster centres on healthy aging approaches and interventions.<sup>[14,29]</sup> contributed seminal work on health promotion knowledge transfer through the Fountain of Health initiative, demonstrating effective community-based and primary care interventions to promote positive aging perceptions.

Studies in this cluster generally focus on modifiable factors that can improve aging outcomes. Beyer et al. (2019) examined whether self-perceptions of aging could be modified through targeted exercise interventions, offering practical approaches to fostering positive aging attitudes.

Moreover, research on psychological well-being and in this cluster explores broader well-being outcomes beyond clinical depression.<sup>[30]</sup> investigated the relationship between mental health and education level among older adults, identifying leisure attitude as a mediating factor. <sup>31</sup> made a novel contribution

through their examination of dyadic effects of aging attitudes on psychological well-being in older Malaysian couples, highlighting the interpersonal dimension of aging perceptions.<sup>[32]</sup> studied factors associated with attitudes toward the elderly in caregivers, demonstrating that professional contexts shape aging perceptions and subsequent well-being outcomes. **Table 6** below highlight the major author contribution on the research related to health aging.

**Table 6.** The list of the authors contribution on the healthy aging.

Authors & Year	Title	Journal
Gough & Cassidy (2017)	Toward psychosocial health in age-friendly communities: The Fountain of Health peer-led education series	Mental Health and Prevention
Gough et al. (2019)	The Fountain of Health: Effective health promotion knowledge transfer in individual primary care and group community-based formats	International Psychogeriatrics
Beyer et al. (2019)	Are self-perceptions of ageing modifiable? Examination of an exercise programme with vs. without a self-perception of ageing-intervention for older adults	Psychology and Health
Belo et al. (2020)	Relationship between mental health and the education level in elderly people: Mediation of leisure attitude	Frontiers in Psychology
Momtaz et al. (2013)	Dyadic effects of attitude toward aging on psychological well-being of older Malaysian couples: An actor-partner interdependence model	Clinical Interventions in Aging
Luchesi et al. (2016)	Factors associated with attitudes toward the elderly in a sample of elderly caregivers	International Psychogeriatrics

Finally, the self-perception of aging cluster focuses specifically on subjective aging processes.<sup>[33]</sup> examined self-perception of aging in institutionalized middle-aged and older persons with schizophrenia, while<sup>[34]</sup>) studied successful aging attitudes among community-dwelling individuals with schizophrenia. Recent contributions include<sup>[35]</sup> on volunteering's relationship with self-perceptions of aging and mental health, and<sup>[36]</sup> on awareness of age-related changes among adults over 50. **Table 7** below illustrate the list of authors; study title and journal name they contributed on the topic of self-perception of Aging cluster.

**Table 7.** The major contributors on the self-perception of aging cluster.

Authors & Year	Title	Journal
Cheng et al. (2012)	Self-perception of aging and acute medical events in chronically institutionalized middle-aged and older persons with schizophrenia	International Journal of Geriatric Psychiatry
Niimura et al. (2011)	Successful aging in individuals with schizophrenia dwelling in the community: A study on attitudes toward aging and preparing behavior for old age	Psychiatry and Clinical Neurosciences
Huo et al. (2021)	Volunteering, self-perceptions of aging, and mental health in later life	Gerontologist
Sabatini et al. (2022)	Exploring awareness of age-related changes among over 50s in the UK: Findings from the PROTECT study	International Psychogeriatrics

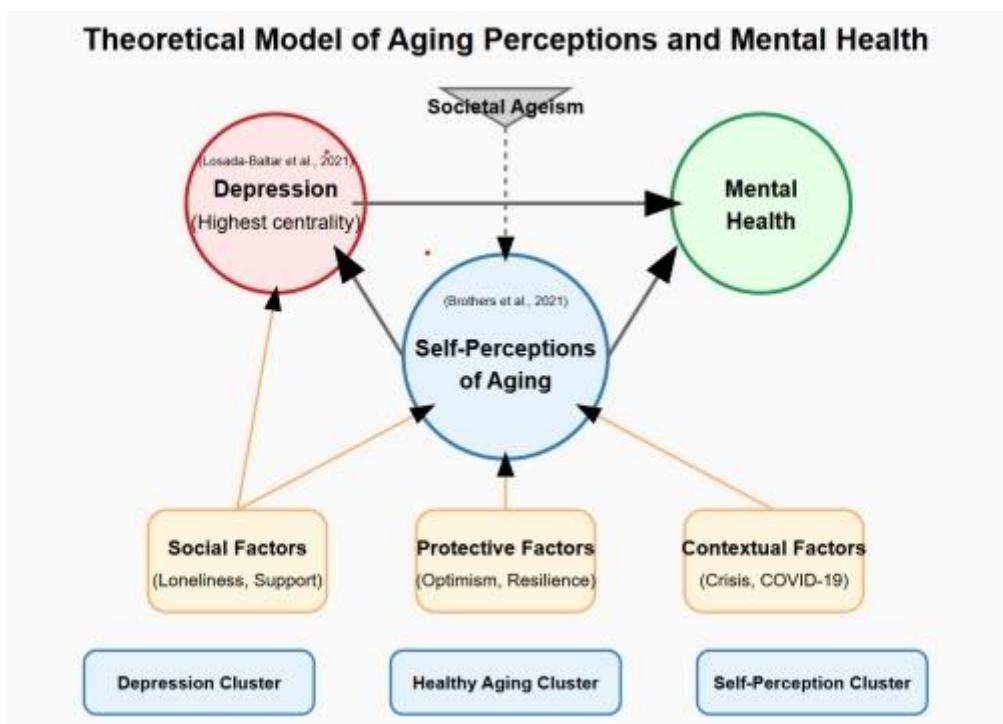
These clusters reveal a nuanced research landscape addressing multiple dimensions of aging perceptions and mental health. The prominence of the depression cluster, with its high citation counts (Losada-Baltar's 2021 study has 378 citations), indicates that clinical mental health outcomes remain central to this field. However, the emergence of distinct clusters focused on positive aging and subjective aging processes suggests the field is evolving toward more holistic conceptualizations of aging experiences.

The interconnections between these clusters, particularly through concepts like social support, resilience, and optimism, provide promising directions for interventions that could positively impact both aging perceptions and mental health outcomes across diverse populations.

## 4. Conclusion

This study reveals that negative self-perceptions of aging are consistently and significantly associated with increased depressive symptoms among older adults across diverse contexts and populations. The bibliometric analysis identified three distinct but interconnected research clusters: (1) depression and cognitive function, (2) healthy aging interventions, and (3) self-perception of aging processes. The centrality of depression in the co-occurrence network (betweenness: 361.81, PageRank: 0.119) demonstrates its pivotal role in connecting various aspects of aging research. Longitudinal studies, particularly those by Losada-Baltar et al.<sup>10</sup>, confirm that negative aging perceptions exacerbate psychological vulnerability during crisis periods such as the COVID-19 pandemic. Additionally, social factors—particularly loneliness and social disconnectedness—emerge as critical mediators in the relationship between aging perceptions and mental health outcomes, as demonstrated<sup>[11]</sup>.

In addition, this study makes several notable contributions to the field. Theoretically, it advances understanding of how internalized ageism operates as a psychosocial determinant of mental health in later life, bridging previously disparate research on social discrimination and psychological well-being. The conceptual network analysis reveals the centrality of depression as a connecting concept between various psychological, social, and physical dimensions of aging, suggesting a more integrated approach to understanding mental health in older populations. **Figure 6** below illustrated the theoretical outcomes.



**Figure 6.** Theoretical outcomes of the study.

For clinical practice, our findings indicate that mental health assessments for older adults should incorporate measures of aging attitudes, particularly during vulnerable periods like health crises or transitions. The research by Wurm & Benyamini<sup>[7]</sup> on optimism as a protective buffer suggests that interventions targeting positive reframing of aging experiences could enhance psychological resilience. The Fountain of Health initiative documented by Gough & Cassidy<sup>[14]</sup> offers a promising model for knowledge translation in primary care and community settings.

At the policy level, these findings support developing age-friendly communities that challenge negative stereotypes and promote positive aging narratives, potentially reducing the psychological burden of ageism on older populations. The strong interconnections between social support concepts and mental health outcomes in our analysis suggest that strategies addressing social isolation should be integrated into mental health promotion efforts for older adults.

## 5. Future research directions and limitations

This systematic review has several important limitations that should be considered when interpreting its findings. First, our search strategy was constrained to English-language publications indexed in Scopus, which likely excluded relevant research published in other languages or captured in different databases, creating potential language and indexing biases. Second, the field lacks standardization in measurement approaches, with studies employing diverse instruments to assess aging perceptions, making direct comparisons and meta-analysis challenging. Third, a pronounced geographical imbalance exists in the research corpus, with North American and European studies dominating the literature, raising concerns about the generalizability of findings to older adults in Asian, African, and Latin American contexts where aging experiences and cultural attitudes may differ substantially. Fourth, given the rapidly evolving nature of this research area (as evidenced by the 21.34% annual growth rate), our analysis may underrepresent emerging conceptual frameworks and methodological innovations published very recently. These limitations highlight the need for more inclusive, globally representative research using standardized measurement approaches to advance our understanding of aging perceptions and depression.

## Conflict of Interest

This research does not have conflict of interest.

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