Review and Reflection on Reminiscence Therapy: A Bibliometric-Based Visualization Analysis Approach

Jie SONG[1], Luyao YANG[1], Jiyixi HUA[1], Chengyang LIN[1], Xiangting YANG[2], Yaling SHANG[1], Yunan WU[1], Zheng XU[1,3]✉0000-0001-6821-6711

[1] School of Philosophy and Sociology, Lanzhou University, Lanzhou, China
[2] The 1st School of Clinical Medicine, Lanzhou University, Lanzhou, China
[3] Centre for Evidence-Based Medicine Research, School of Basic Medical Sciences, Lanzhou, China
✉xuzh@lzu.edu.cn

Abstract. This study aims to perform a visual analysis of the literature in the field of reminiscence therapy using bibliometric methods. This study seeks to systematically and comprehensively synthesize the development trends and current state of reminiscence therapy research, thereby providing robust theoretical support and valuable external references for its clinical application. Using keywords “reminiscence therapy” and “life review,” literature was retrieved from PubMed, Embase, PsycINFO, Web of Science, CNKI, and other databases. Bibliometric analysis was conducted via VOSviewer, CiteSpace, and Pajek. Analysis included 935 papers (211 Chinese, 784 English), showing steady annual growth. Internationally, Bolmeijer E.T. from the University of Twente has authored 14 publications and is the most prolific author in this field. In contrast, Ye Junrong's team at Guangzhou Brain Hospital has published 2 papers, which represents the highest domestic output in this area. Keyword clustering revealed global research focuses on elderly mental health interventions, particularly Alzheimer's disease (AD), emphasizing cognitive function and quality-of-life improvements. Domestic studies aligned with international priorities but exhibited narrower scope. Development stages differed: foreign research evolved through theoretical exploration, methodological standardization, and technological integration, whereas Chinese studies progressed from initial adoption to recent “psychology-physiology integration” phases. Furthermore, strategic coordinate analysis identified “positive feelings” as an emerging hotspot. Domestic and international studies have both focused on the intervention effects of reminiscence therapy on the cognitive functions and mental health of the elderly with dementia in terms of themes. However, there are differences in the output quantity and the maturity of methodology. China should refine research designs by integrating global advancements while prioritizing interdisciplinary innovation (e.g., emotion-physiology mechanisms) to strengthen clinical translation. Persistent gaps in cross-regional collaboration and standardized methods warrant further attention.

Keywords. Reminiscence Therapy, Life Review, Bibliometric, Visualization.

A. C. Chan et al. (eds.), *Proceedings of the Positive Psychology 2.0 International Conference 2025 (PP 2.0 2025)*, Atlantis Highlights in Social Sciences, Education and Humanities 44,
https://doi.org/10.2991/978-94-6463-954-4_7

1 Introduction

Reminiscence Therapy (RT), also known as life review therapy, originated within the field of geriatric psychiatry. Formally incorporated into the Nursing Interventions Classification (NIC) system in 1992, RT is defined as a structured process involving the guided recall and discussion of past activities, events, experiences, thoughts, and feelings with another person or group, often utilizing tangible aids such as music, photographs, and memorabilia frequently prepared with caregiver involvement (Cotelli et al., 2012). As a psychosocial intervention, RT aims to enhance well-being, improve quality of life, increase adaptation to the current environment, foster self-awareness, reduce feelings of loss, bolster self-esteem, and promote social integration. Grounded in psychology, social work, rehabilitation, nursing, psychiatry, and related disciplines, RT is widely applied within healthcare settings (Webster et al., 2010).

Reminiscence therapy can be traced back to Butler's "life review" in 1963. Before this, people generally tended to view reminiscence in the elderly as a psychological dysfunction and a precursor to dementia, and had a negative attitude toward "reminiscence″(Butler, 1963). In 1974, Butler formally introduced life review therapy (LRT), pointing out that reminiscence should be used in clinical interventions for individuals or groups(Lewis & Butler, 1974). In 1992, Haight and Burnside clarified the terms reminiscence and life review, arguing that reminiscence is spontaneous, while life review is guided by staff (Burnside & Haight, 1992), and that the two cannot be generalized as the same modality. Since then, the use of the concepts of reminiscence and life review has been blurred until 2010, when Webster explicitly categorized the use of reminiscence therapy in practice into three categories based on the different functions of reminiscence in the intervention process. First, simple reminiscence, which refers to unstructured autobiographical narratives and spontaneous reminiscences, can be practiced in the form of reminiscence groups in nursing homes and can help to enhance social connection and well-being. Second, life review is a structured and assessable form of reminiscence that explores positive or negative life experiences, usually in chronological order, and helps restore a positive self-identity, making it suitable for people with mild psychological distress. Third, life review therapy is a highly structured form of reminiscence for people with severe depression and anxiety, and focuses on promoting coherence and continuity of reminiscence, emphasizing the importance of having relevant information in the form of pertinent reminiscence groups. and continuity, emphasizing the reassessment of negative memories with the help of professionals with relevant skills and the reconstruction of these memories in a more optimistic manner (Webster et al., 2010). Thanks to the categorization proposed by Webster, the distinction between the various concepts of reminiscence therapy has become clearer. As research on reminiscence therapy continued, a fourth type of intervention, life story work, emerged in which individuals are asked to integrate their memories from the past to the present and are expected to create a story about themselves and their identity, based on which they produce a "life story book". Life story book helps to alleviate mental health problems such as depression and anxiety, and improve social adjustment (Abbasi et al., 2025).

Reviewing the existing research results, it is found that there are relatively few studies on the research hotspots and development trends of reminiscence therapy, as

evidenced by bibliometrics. Therefore, this study uses bibliometric methods to visualize and analyze the literature within the research field of reminiscence therapy, and discusses the progress and hotspots of the reminiscence therapy research in terms of the number of publications, authors, and keywords, in the hope that it can summarize the reminiscence therapy development trends and research status systematically and comprehensively, providing theoretical support and extra-territorial reference for clinical application.

2 Methodology

2.1 Data Collection

This study systematically searched PubMed, Embase, PsycINFO, Web of Science, Cochrane Library, China National Knowledge Infrastructure (CNKI), Wanfang Data, VIP Database, and SinoMed. The time limit for the search was from the establishment of the database to March 20, 2025, and the restricted language was English or Chinese. The search terms were "reminiscence therapy", "reminiscence treatment", and "life review". The search strategy was adjusted according to the characteristics of different databases. After the initial search, duplicate records were removed using the NoteExpress software. Subsequently, publications such as dissertations, conference abstracts, news reports, and articles with insufficient information were manually excluded.

2.2 Data Analysis and Visualization

The bibliometric analysis and visualization were conducted using VOSviewer 1.6.20, CiteSpace 6.4.R1, and Pajek 6.01. First, VOSviewer was used to construct and visualize a co-authorship network and a keyword co-occurrence network. Subsequently, CiteSpace was applied to generate keyword cluster maps and to identify citation bursts, highlighting emerging trends. Furthermore, the keyword clusters derived from CiteSpace were analyzed using Pajek to calculate the density and centrality of each cluster. These values were plotted on a strategic diagram to characterize the maturity and importance of the research themes. The integration of these findings allowed for a multifaceted interpretation of the global research landscape in reminiscence therapy, including its publication trends, leading authors, thematic hotspots, and theme evolution.

3 Results

3.1 Literature Screening Results

The initial screening obtained 4604 relevant literatures, 1123 Chinese literatures, and 3481 English literatures, and after screening layer by layer, 995 literatures were finally included, including 211 Chinese literatures and 784 English literatures. The literature screening process and results are shown in Figure 1.

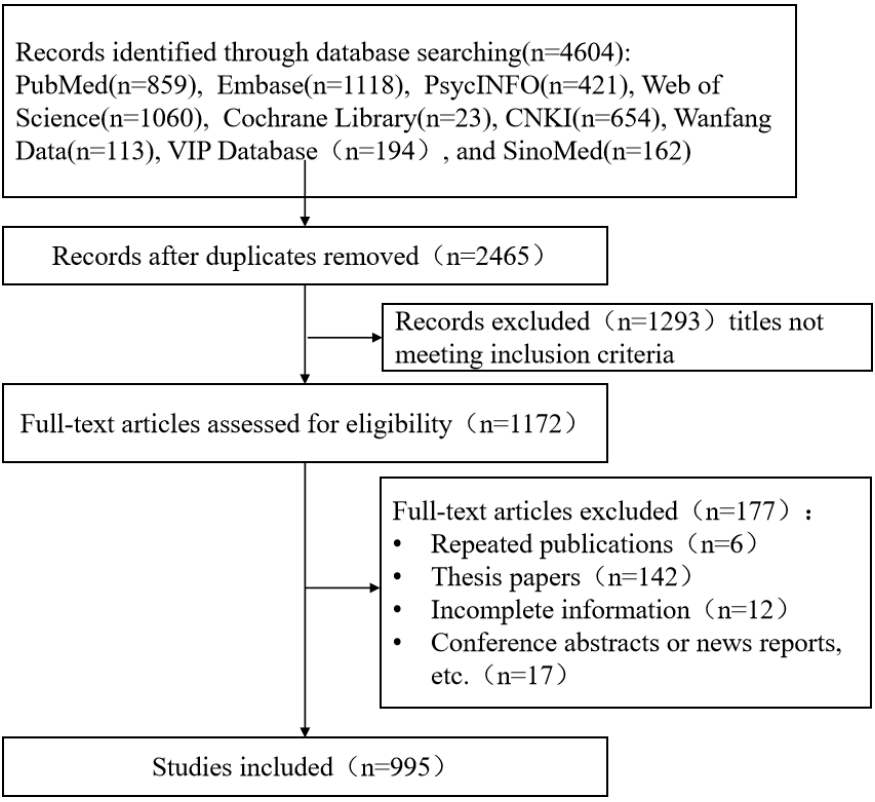

Figure 1: Flowchart of This Study

3.2 Distribution of Publications

As shown in Figure 2, research on reminiscence therapy, both domestic and international, is generally on the rise. International formal research on reminiscence therapy began with the publication of the first English-language literature in 1974, and has been in a steady growth stage since 2000, with the growth rate of the number of publications accelerating after 2018, and reaching the peak of the number of publications in 2024, with a total of 49 publications. Domestic research on reminiscence therapy started later, and after the first relevant study was published in 2007, the growth was slow at the initial stage. The number of relevant domestic studies increased significantly after 2016, and reached a peak in 2021, with a total of 27 articles published, and the number of articles published on reminiscence therapy gradually increased. reminiscence therapy gradually declined, and only 17 articles were published in 2024.

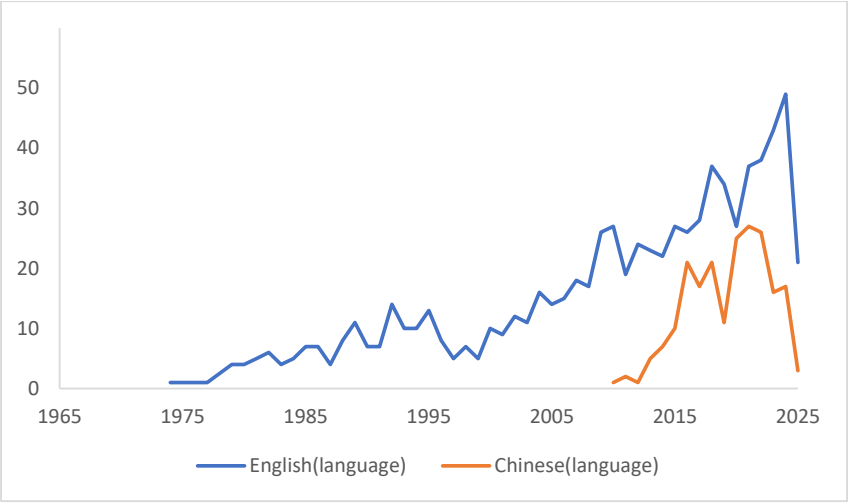

Figure 2: Trends in the Annual Number of Publications

3.3 Co-authors Network

A total of 2549 authors have studied reminiscence therapy. The English language literature involves 1968 authors; the co-occurring network of authors is shown in Figure 3. The top 5 authors in terms of publications are Bohlmeijer, E.T. (14 articles), Westerhof, G.J. (10 articles), Cuijpers, P. (6 articles), and Smit, F. (4 articles).
A core research team has formed in this field, primarily comprised of A. Becker, P. Cuijpers, and I.M. Van der Leeuw from Vrije Universiteit Amsterdam; E.T. Bohlmeijer and G.J. Westerhof from the University of Twente; and A.M. Pot from Erasmus University Rotterdam. Notably, the trio from Vrije Universiteit Amsterdam, include Becker, A., Cuijpers, P., and Leeuw, IMVD, demonstrated a more recent average publication year (between 2015 and 2020), a higher collaborative strength, and a research focus more attuned to the clinical application of reminiscence therapy for specific conditions such as cancer and psychological disorders (Kleijn et al., 2021), indicating a relatively cutting-edge research profile.

In contrast, analysis of Chinese literature identified 581 unique authors. The co-authorship network is presented in Figure 4. Only four authors published more than one paper: Ye Junrong, Xiao Aixiang, and Huang Xingxiao from Guangzhou Brain Hospital, and Wu Chenxin from Guangzhou Medical University, each with two publications. These four authors demonstrated collaborative ties with each other. Their primary publication year was 2022, indicating a very recent average publication year. Their research primarily focuses on interventions using reminiscence therapy for elderly individuals with mental disorders (潘媛馨 et al., 2023).

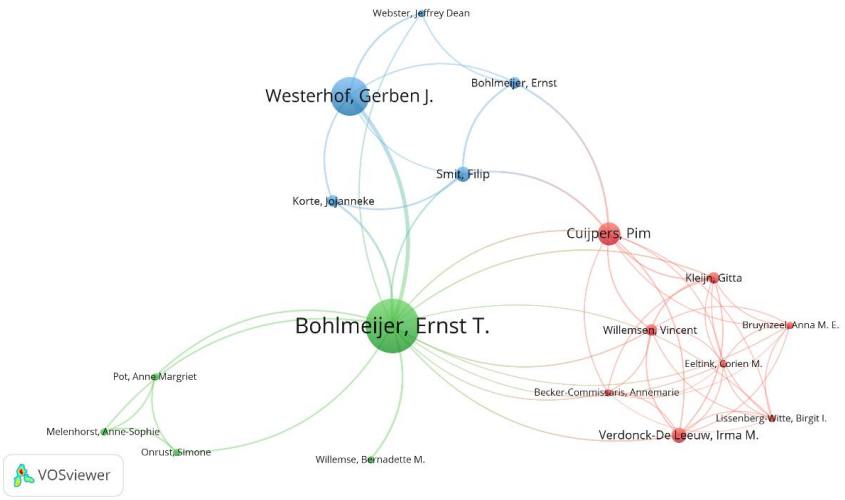

Figure 3: Co-authors Network of English literature

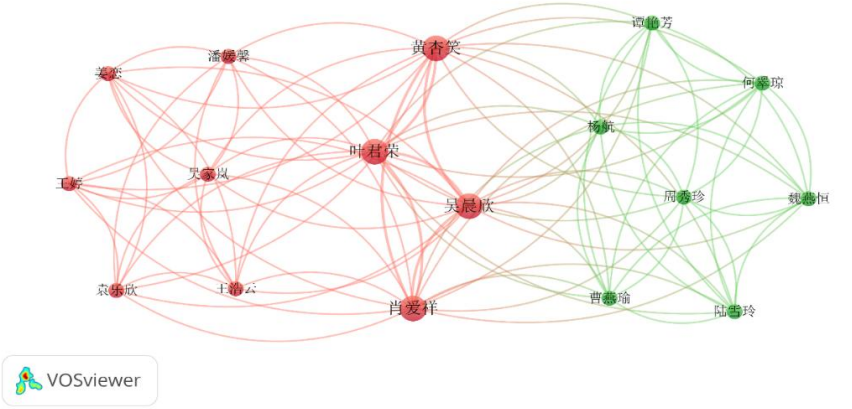

Figure 4: Co-authors Network of Chinese Literature

3.4 Co-occurrence Network of Keywords

Following the merging of synonymous keywords, a keyword co-occurrence analysis was performed using VOSviewer 1.6.20 to visualize the thematic structure of

reminiscence therapy research, both internationally and domestically. The resulting co-occurrence maps are presented in Figures 5 and 6.

The analysis of English literature identified 1,291 keywords. With a minimum occurrence threshold set at 6, a co-occurrence network of 127 nodes was generated. The top 10 keywords by frequency were “life review”, “reminiscence”, “dementia”, “depression”, “reminiscence therapy”, “human”, “memory”, “quality of life”, “aged”, and “female”.

″Reminiscence therapy” emerged as a central node in the network, with 72 occurrences and a total link strength of 179. Notably, its relatively recent average publication year suggests it represents a contemporary core focus. In contrast, “life review” was the most frequent keyword (136 occurrences) but had an earlier average publication year (2008), indicating its enduring influence as a foundational concept within the field; it also possessed the highest total link strength (308), solidifying its role as a primary modality. “Older adults” (38 occurrences, total link strength 99) were identified as the primary target population for the intervention. Furthermore, “quality of life” (54 occurrences, total link strength 287) was highlighted as a core outcome measure and intervention goal.

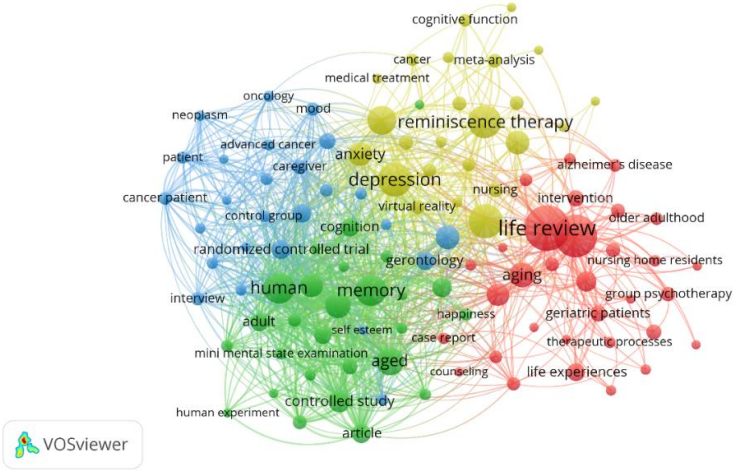

Figure 5: Co-occurrence Network of Keywords in English Literature

Table 1: High-frequency Keywords in English Literature (top 10)

keywords	Frequency	Average year of publication
life review	136	2008
reminiscence	119	2007
dementia	77	2016
depression	76	2018
reminiscence therapy	72	2020
Human	66	2013
Memory	64	2011
quality of life	54	2018
Aged	51	2011
Female	42	2014

The analysis of Chinese-language literature identified 371 keywords in total. With a minimum occurrence threshold set at 3, a co-occurrence network comprising 54 keywords was generated. The top 10 keywords by frequency were “回忆疗法″ (reminiscence therapy), “生活质量″ (quality of life), “人生回顾″ (life review), “痴呆″ (dementia), “认知功能″ (cognitive function), “抑郁″ (depression), “老年人″ (older adults), “阿尔茨海默症″ (Alzheimer's disease), and “团体回忆疗法″ (group reminiscence therapy). The specific data are presented in Table 2. “Reminiscence therapy” emerged as the most frequent keyword, occurring 109 times. It exhibited strong co-occurrence with keywords such as “depression”, “dementia”, and “anxiety”, highlighting its primary application areas in clinical practice. “Life review” appeared 35 times and was predominantly linked to “mental health” (average publication year 2021) and “mind mapping” (average publication year 2023), indicating a recent trend of integrating digital tools into its practical application. Furthermore, the co-occurrence network revealed connections between keywords like “mental health” and “social work” with both “reminiscence therapy” and “life review.” This pattern demonstrates the interdisciplinary nature of reminiscence research, effectively constructing a tripartite intervention framework encompassing the “physiological-psychological-social” dimensions.

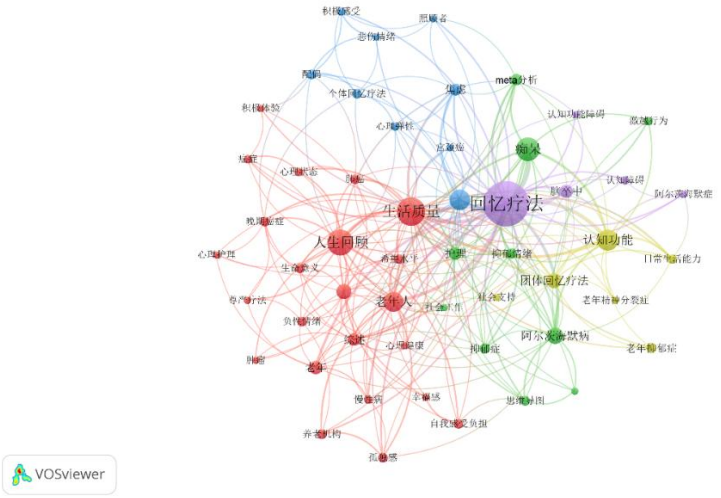

Figure 6: Co-occurrence Network of Keywords in Chinese Literature

Table 2: High-frequency Keywords in Chinese Literature (top 10)

Keywords	Frequency	Average year of publication
“回忆疗法” (reminiscence therapy)	109	2018
“生活质量” (quality of life)	35	2019
“人生回顾” (life review)	33	2019
“痴呆” (dementia)	22	2019
“认知功能” (cognitive function)	21	2017
“抑郁” (depression)	21	2019
“老年人” (older adults)	17	2017
“阿尔茨海默症” (Alzheimer's disease)	14	2020
“团体回忆疗法” (group reminiscence therapy)	13	2017

3.5 Keyword Clustering Map

Cluster analysis of keywords using CiteSpace 6.4.R1 can cluster similar keywords into clusters, revealing current hot topics and concerns in the research field of reminiscence therapy, as shown in Figures 7 and 8.

A total of 10 cluster labels were generated from the English literature. Among them, "life review" is relatively early, with an average publication year of 1994, and the core keywords in this cluster are "life experiences", "reminiscence", "geriatric patients", "nursing homes", and so on. It can be seen that early international studies mainly applied reminiscence therapy to nursing homes and elderly patients, and conducted life review by reviewing life experiences. In contrast, studies on reminiscence therapy were published in 2019, the latest year on average, with the core keywords "cognitive function", "anxiety and depression", "quality of life", and "depressive symptoms". The results show that in recent years, international scholars have paid attention to the intervention of reminiscence therapy on negative emotions, cognitive functions, and quality of life.

A total of eight cluster labels were generated from the Chinese literature, namely "人生回顾" (life review), "回忆疗法" (reminiscence therapy), "老年人" (elderly), "抑郁" (depression), "心理弹性" (psychological resilience), "认知功能" (cognitive function), "积极感受" (positive feelings), and "人生历程" (life course). The largest cluster was "life review", focusing on life review interventions for people with advanced cancer. The relatively new cluster is "psychological resilience", with an average publication year of 2019, which focuses on psychological resilience and sleep quality in cancer patients, signaling the increased attention to improving the quality of life of cancer patients in recent years. Cluster 7, "Life Course," integrates reminiscence therapy in specific populations, such as retired military personnel's self-integration and recollection of past experiences, reflecting the diversity in the application targets of reminiscence therapy (杨国庆 & 刘辉, 2019). Cluster 6, "Positive Feelings," includes keywords such as caregivers, spouses, and positive experiences, indicating that reminiscence therapy can also be applied in interventions targeting family caregivers like spouses, with a focus on enhancing positive experiences and emotions.

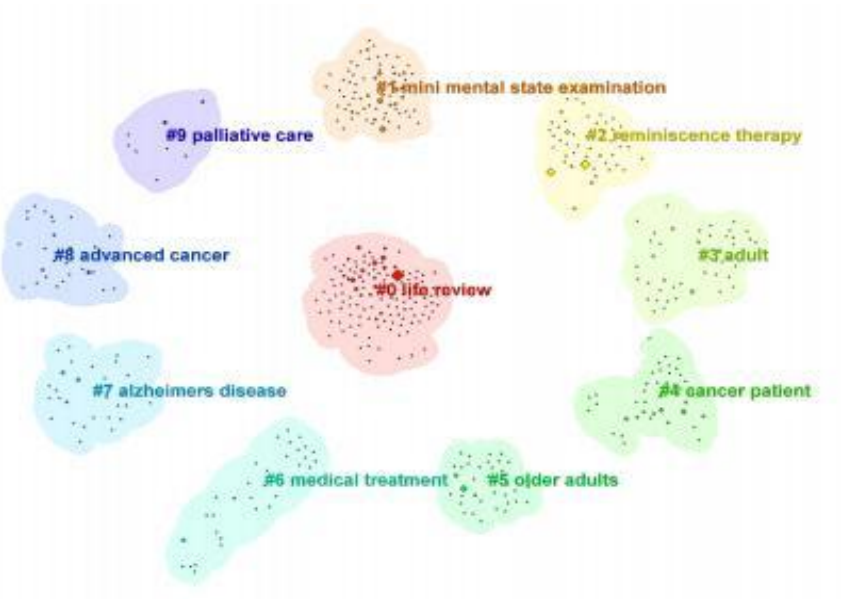

Figure 7: Clustering of Keywords in English Literature

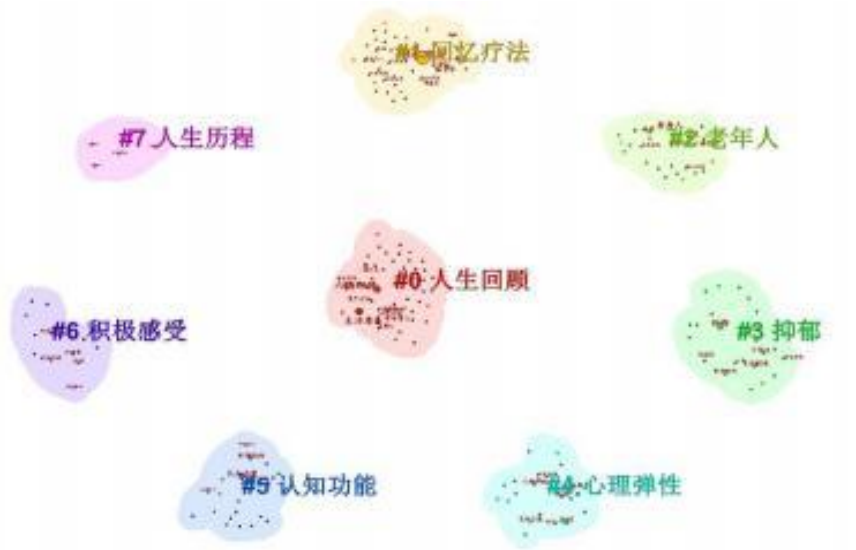

Figure 8: Clustering of Keywords in Chinese Literature

3.6 Strategic Diagram

To clearly understand the research popularity and future trends of various themes, a strategic diagram was constructed based on two dimensions: theme cluster density and centrality (Law et al., 2005). This diagram visually represents the relationships among different themes identified through the clustering process. Density measures the internal association strength within a thematic cluster, indicating the cluster's ability to sustain and develop itself. Centrality gauges how closely a cluster is connected with other themes within the same research field; a higher centrality value suggests that the theme occupies a more central position in the research domain due to its stronger linkages with other topics (赵蓉英 & 吴胜男, 2013).

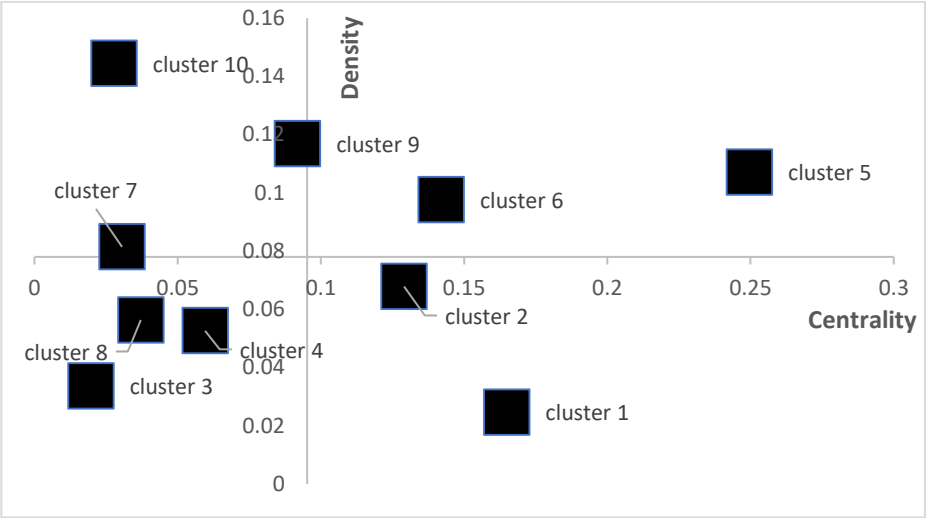

Figure 9: Thematic Strategic Map based on Co-word Analysis

As shown in Figure 9, clusters 5 and 6 are in the first quadrant, with relatively high density and centripetal degree, indicating that the themes are closely related and have strong relationships with other themes. Cluster 5 represents “cancer patients” and cluster 6 represents “older adults”, which shows that the research on reminiscence therapy for cancer patients and older adults is relatively mature.

Clusters 7 and 10 are in the second quadrant, indicating a strong connection within the theme but not with other themes. Cluster 7 stands for “medical treatment” and cluster 10 stands for “palliative care”. This suggests that reminiscence therapy is often used as an intervention in both medical and palliative care, and that there is a wealth of research on the effectiveness of reminiscence therapy in palliative care in particular.

The third quadrant has a lower density and centripetal degree, indicating that the research is still immature and needs to be further developed, and the clusters in the third quadrant are cluster 3, cluster 4, and cluster 8, which represent “reminiscence therapy”, “adult”, and “alzheimers disease”, respectively. This shows that in foreign studies, the concept of “reminiscence therapy” still has a lot of room for development compared with the earlier and more mature “life review”. The concept of reminiscence therapy still has a lot of room for development. Reminiscence therapy has been more often

applied to the elderly and cancer patients, with relatively few interventions for adults, especially the “normal human”.

The fourth quadrant is highly centripetal, suggesting that these clusters are closely related to other themes, but less dense, suggesting that these clusters are internally unstructured. The clusters in the fourth quadrant include cluster 1 and cluster 2, which represent “life review” and “mini-mental state examination” respectively. The former is a core concept of reminiscence therapy and has been widely used in various related studies, while the latter is used to assess cognitive dysfunction and can be used to effectively test the effectiveness of reminiscence therapy interventions.

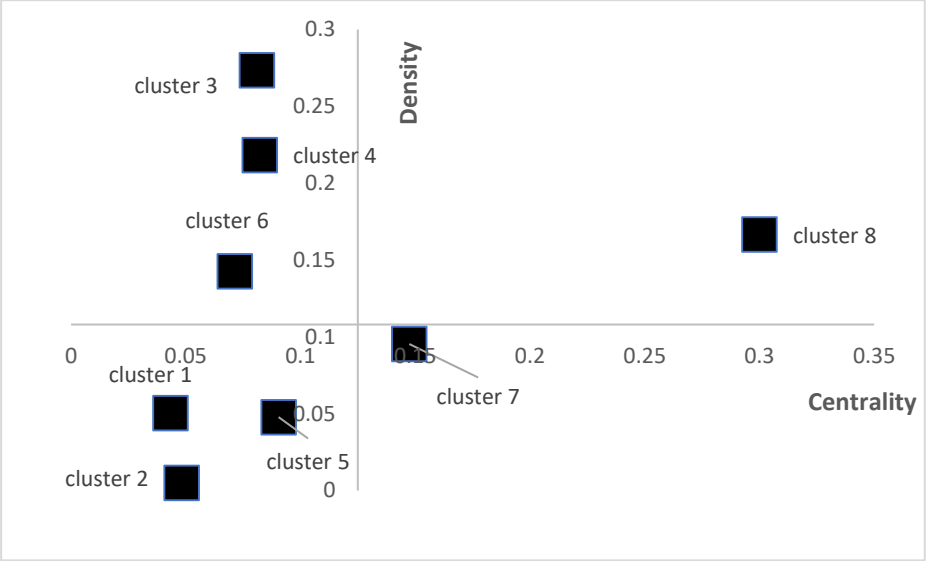

Figure 10: Thematic Strategic Map based on Co-word Analysis

As shown in Figure 10, cluster 8 is in the first quadrant, indicating that “life course”, as the main content recalled during reminiscence therapy interventions, is closely related to the study and has a strong relationship with other research topics. Clusters 3, 4, and 6 are in the second quadrant, indicating that “elderly”, “depression”, and “cognitive function” are important areas of reminiscence therapy research in China, and have formed a mature and relatively independent research field. Clusters 1, 2, and 5 are in the third quadrant, indicating that the concepts of “life review”, “reminiscence therapy”, and “psychological resilience” still have a lot of room for development in domestic research. Cluster 7 is in the fourth quadrant, indicating that domestic research on reminiscence therapy focuses on patients' emotions, especially “positive feelings”, and that the internal structure of the theme is relatively loose, not mature enough, but with a certain potential for development.

3.7 Keywords of Burnstness

CiteSpace6.4.R1 software can reflect the research frontiers and development trends of reminiscence therapy based on the temporal distribution and dynamic change characteristics of keyword appearances, and keyword emergence mapping is generated through the Burnstness function, see Figure11 and 12.

International research on reminiscence therapy can be divided into three phases based on the evolution of keywords.

(1) Theoretical foundations (1970-2000): Research during this period focused on the construction of a grounded theory of reminiscence therapy and the exploration of the psychological mechanisms of reminiscence therapy. The earliest words to appear were "life experiences" and "geriatric patients", indicating that the academic community began to pay attention to the integration of the life experiences of the elderly into non-pharmacological interventions to alleviate their emotional problems, and "psychotherapeutic techniques" followed in 1982 as a hot research topic, signaling the beginning of the exploration of reminiscence as a therapeutic technique, as in Greene's 1982 article, which argued that life Review therapy is a technique that can help visitors clarify family role relationships in adulthood (Greene, 1983). In the 1990s and early 2000s, "life review" was systematically studied as a stand-alone intervention.

(2) Standardization of methods (2000-2020): The keywords "controlled study" and "cognitive therapy" can be seen that during this period, the research methods of reminiscence therapy were standardized, and the concept of "reminiscence therapy" began to become a research hotspot in 2020, which pushed forward the systematic development of reminiscence therapy as a kind of non-pharmacological intervention.

(3) Technology integration (2021-present): During this period, "quality of life" and "cognitive function" began to emerge as research hotspots, reflecting the expansion of research on reminiscence therapy from focusing on patients' mental health to focusing on patients' quality of life and cognitive function training. The emergence of "virtual reality" suggests that reminiscence therapy is responding to the development of the times and combining with cutting-edge technologies, such as a study by the Hong Kong Polytechnic University exploring a conceptual model for developing virtual reality-based reminiscence therapy technology (VR-RT) for patients with dementia (Lau et al., 2025). The technological empowerment enables reminiscence therapy to accomplish interdisciplinary integration from psychology to neuroscience and computer science, and promotes the scenario-based application of AI tools in reminiscence therapy in the future.

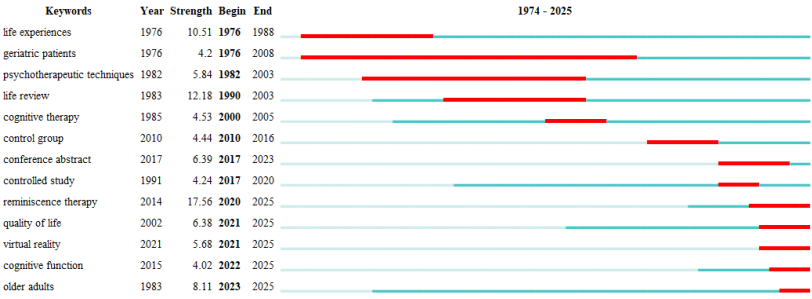

Figure 11: Keywords with the Strongest Citation Bursts

Based on the evolution of keywords, the domestic research on reminiscence therapy can be divided into three stages.

(1) Early stage (2007-2017): Domestic research on reminiscence therapy started from the field of "dementia", especially "Alzheimer's disease", and "spouses" and "nursing institutions" became research hotspots in this stage. For example, the first study on the practice of reminiscence therapy in China explored the effects of reminiscence therapy on the depressed mood of elderly people in elderly care institutions (史蕾 et al., 2007), and the study by Mei Yongxia and other scholars explored the effects of reminiscence therapy on the burden of care and positive experience of spouses of community-aged elderly stroke patients. Spousal Care Burden and Positive Experience Intervention (梅永霞 et al., 2014). This suggests that domestic research focuses on the synergy between institutional care and family support, reflecting the importance of the "family-institutional" model of care in dementia care in the Chinese context, and focusing on the basic application of reminiscence therapy to patients.

(2) Development stage (2017-2020): With further research on reminiscence therapy, words such as "positive feelings" and "quality of survival" have gradually become hot spots of concern in the academic community, and the joint appearance of the term "loneliness" in 2017 can be found. The exploration of reminiscence therapy in China has gradually shifted to the multidimensional intervention of mental health, focusing on the emotional experience and quality of life of patients, from pure symptomatic intervention to the promotion of the overall quality of life. This shift responds to the need to promote mental health and strengthen the construction and standardized management of the mental health service system, as proposed in the 2016 "Healthy China 2030" plan.

（3） Recent period (since 2021): In recent years, the focus of research on reminiscence therapy has shifted towards the construction of psychological resilience. For instance, scholars such as Weng Xiaoqing have conducted studies analyzing the effects of individual reminiscence therapy on elderly patients with chronic diseases, paying attention to psychological resilience indicators and exploring the impact of reminiscence therapy on patients' sleep quality (翁小清 et al., 2024), reflecting the "psycho- physiological" integration of reminiscence therapy in its practical application, highlighting its trend of "treating both mind and body together" in the management of chronic diseases (e.g., dementia, cancer), and responding to the urgent needs of the society for mental health services nowadays.

Overall, domestic research on reminiscence therapy has shown an evolutionary path from disease intervention to whole-person health, and in the future, it can be combined with virtual reality, AI tools, and other technologies to promote the development of reminiscence therapy research and application of digital intelligence.

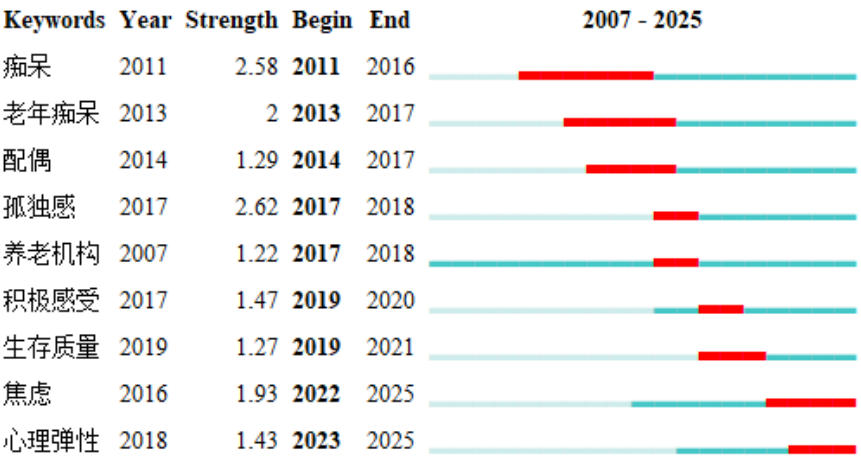

Figure 12: Keywords with the Strongest Citation Bursts

4 Discussion

4.1 Status of Research

In terms of the number of publications per year, both domestic and international research on reminiscence therapy is generally on the rise. Since the publication of the first article on reminiscence therapy in 1974, the number of articles published began to increase steadily, and will reach a peak in 2024, with a total of 49 articles published. In the early years, the focus was on theory construction and improving the methodological system of reminiscence therapy, but in recent years, international research has shown a trend of technology-driven innovation, focusing on the integration of virtual reality technology with the clinical practice of reminiscence therapy, and promoting the interdisciplinary development of reminiscence therapy. Domestic research on reminiscence therapy started relatively late, and the first clinical intervention of reminiscence therapy applied to the depressed mood of the elderly in nursing institutions was published in 2007 (史蕾 et al., 2007), which responded to the social reality of the rising level of aging and the increasing number of "empty-nest" families in our country, and proved that reminiscence therapy could help improve the depressed mood of the elderly. After 2016, the growth rate of domestic research on reminiscence therapy accelerated significantly, reaching a peak in 2021, with 27 articles published. However, the attention paid to reminiscence therapy in China subsequently declined. The focus of research has shifted from "dementia" to "psychological resilience" and "anxiety management", and the research targets and intervention areas have diversified.

In general, international research is clearly technology-oriented, and domestic research related should strengthen the exploration of technology application.

4.2 Research Hotspots

From the high-frequency keywords, keyword clustering, and strategic coordinate mapping, international research hotspots focus on reminiscence therapy's intervention in the mental health of the elderly, especially focusing on groups suffering from dementia, and exploring the role of reminiscence therapy's improvement in cognitive function and quality of life in clinical application. Domestic studies focus on the main groups that overlap with international studies, also focusing on the intervention role of reminiscence therapy in cognitive function and mental health of dementia groups. In addition, in recent years, domestic studies have focused on the psychological resilience and sleep quality of reminiscence therapy for patients with chronic diseases. Psychological elasticity is an important protective factor of mental health, and improving the level of psychological elasticity of patients can help strengthen the recovery effect of patients; Chronic disease patients are prone to sleep disorders because of the worry about the disease and fear of the future, as well as the pain in the process of treatment and the reduction of social interaction (翁小清 et al., 2024), and improving the quality of sleep can help to improve the quality of life of patients. In summary, the research hotspots at home and abroad have similarities, and the research content is oriented towards the development of "psycho-physical" integration, which promotes the trend of "physical and mental treatment together" in the clinical practice of reminiscence therapy.

4.3 Research Trends

From the keyword emergence mapping, it can be concluded that both domestic and international research on reminiscence therapy has roughly gone through three stages. International research on reminiscence therapy began earlier, with the exploration of theories starting in the 1970s, the standardization of reminiscence therapy in the early 21st century, and the integration of reminiscence therapy with cutting-edge technology in the third stage in 2021, which promotes the digitalization of reminiscence therapy. Domestic research began in 2007, in the first stage focusing on the application of reminiscence therapy in the "family-institution" model, focusing on family responsibility and collective care, highlighting the local characteristics of reminiscence therapy research. From 2017 to 2020, to enter the second stage, from disease intervention to whole-person health. In 2021, we will enter the third phase, focusing on the cultivation of mental resilience, integrating physiological, psychological, and social support, and constructing a multidimensional intervention network.

4.4 Future Prospects

4.4.1 Focus on Technology Enablement and Clinical Transformation

Compared to the use of photos and music to trigger memories in traditional reminiscence therapy, with the application of virtual reality and AI tools in the reminiscence therapy intervention process, relevant research may focus on technological empowerment in the future, integrating cutting-edge technology and

personalized needs to help therapists achieve precise and scenario-based intervention programs. Virtual Reality (VR) and Augmented Reality (AR) technologies can build immersive nostalgic scenes to activate and mobilize patients' memories through multi-sensory stimulation (visual, auditory, and tactile). Artificial intelligence can analyze the content of patients' memories to automatically generate personalized nostalgia themes, or combine with generative AI (e.g., ChatGPT) to dynamically adjust the content of conversations and enhance interactivity. For example, Zeng Yingchun and other scholars developed a cognitive assessment and immersive nostalgia therapy rehabilitation system for elderly cancer patients based on virtual reality technology in 2021 (曾迎春 et al., 2021), and Akhter and other scholars published a comparative study of reminiscence therapy websites and non-immersive virtual reality apps in facilitating memories of dementia patients in 2022 (Sun et al., 2022), which can be used to improve memories of dementia patients in the future by combining Chinese local cultural characteristics or collective memory to improve the cultural appropriateness of reminiscence therapy in clinical applications.

4.4.2 Promoting the Diversification of Research Objects and Fields

Reminiscence therapy can help individuals integrate the self, reconstruct conflicts, and promote problem-solving at different stages of life by retracing their life experiences. Theoretically, reminiscence therapy is applicable to the whole lifespan, but current empirical studies are highly focused on elderly patients, and the research target of reminiscence therapy can be expanded to young and middle-aged people in the future. A randomized controlled trial on the improvement of well-being and self-perception in young people by Hallford et al (Hallford & Mellor, 2016). In addition, the current reminiscence therapy focuses on dementia and cancer patients, and there are some studies on AIDS (Erlen et al., 2001), suicide intervention(Hashemi-Aliabadi et al., 2020), and other fields, but the number of studies is relatively small, especially in China in the related fields have not yet been involved in the future research can be expanded to reminiscence therapy application areas. For example, Hellman and other scholars studied the effect of collective memory on depressive symptoms in elderly African Americans (Shellman et al., 2009), and the country can pay attention to the nostalgic needs of ethnic minority older adults exacerbated by the cultural disconnect or the digital divide, and so on.

4.4.3 Building on Interdisciplinary Cooperation

Since Butler's groundbreaking 1963 discourse on life review, “reminiscence” has been the subject of attention and research in a variety of disciplines, including psychology, medicine, anthropology, social work, nursing, anthropology, gerontology, and neuroscience (Webster et al., 2010). Scholars, such as Mo, have explored reminiscence therapy. Combined with virtual life story museums in improving the mental health of older adults, promoting positive aging, and enhancing memory functioning, contributing to a better understanding of the virtual meta-universe in social work practice (Mo, 2024). Burnside discusses the therapeutic effects of reminiscence therapy in practice, pointing out that reminiscence therapy researched in the field of nursing has

been more focused on interventions than in other disciplines (Burnside, 1990). Fry obtained qualitative data through structured interviews and analyzed the relationship between the frequency and pleasantness of reminiscence activities and the personality traits, mental health, and life goals of older adults with the help of the statistical method of multiple linear regression, and explored the mechanism of action of reminiscence therapy from the disciplinary perspective of psychology (Fry, 1991). As can be seen, the theory, research, and practice of reminiscence therapy are multidisciplinary topics related to many types of research and applied issues. Future research and practice of reminiscence therapy should be oriented toward interdisciplinary collaboration, such as integrating with neuroscience to quantify the effects of reminiscence therapy on neuroplasticity, or applying reminiscence therapy to social work practice to enhance older adults' sense of belonging to society, reflecting the concept of "whole-person care".

4.4.4 Promoting Localization

Memories are contextual, memories are triggered, negotiated, and situated within a particular socio-cultural context, from myths and legends and folktales to spin and reminiscence, culture provides the reference (Webster et al., 2010). The cross-cultural background may have an impact on the application of memory therapy (Rueda et al., 2023). Thus, an individual's life story and its recollections are influenced by many interacting factors, of which culture is the most widespread. For example, traditional Chinese culture emphasizes family memory and collective identity, and localized practices need to incorporate elements of "family culture", and the early stages of domestic reminiscence therapy research were influenced by this idea, focusing on the synergistic effect of institutional and family care, which was discussed in a study by Li and other scholars on the effects of reminiscence therapy on cognitive impairment, anxiety, depression, and illness in acute ischemic stroke patients (Li & Liu, 2022), which also reflects the cultural characteristics of reminiscence. Future studies on reminiscence therapy should deeply explore cultural adaptations, differentiated interventions of reminiscence therapy with national cultural characteristics, and promote the local development of reminiscence therapy.

5 Conclusions

In summary, this study visualizes and analyzes the domestic and international studies related to reminiscence therapy based on bibliometric software, and explores the research hotspots and development trends in this field in three dimensions: the number of publications, co-authors, and keywords. Future research on reminiscence therapy may pay more attention to technological empowerment and diversification of research objects. At present, there is an obvious difference between domestic and foreign research development in reminiscence therapy. Foreign research has tended to localize the technological innovation, while domestic research is relatively stuck in the clinical practice of reminiscence therapy research. In the future, the research should be combined with China's national conditions and culture, strengthen the localization of

reminiscence therapy, and promote the multidisciplinary integration and development of reminiscence therapy by drawing on foreign experience.

Funding

This research was funded by the Soft Science Special Project of Gansu Basic Research Plan (Grant No. 23JRZA375) and the "AI-Powered Assessment and Intervention Development for Mild Cognitive Impairment in Older Adults" Lanzhou University "AI+" Philosophy and Social Sciences Research (Grant No. LZUAIYJYB09).

References

Abbasi, M., Radfar, M., Jafarizadeh, H., & Khalkhali, H. (2025). Does life story work based on Erikson's theory enhance psychological well-being in elderly residents of nursing homes? A randomized controlled trial. Geriatric nursing (New York, N.Y.), 61, 140–148.

Burnside I. (1990). Reminiscence: an independent nursing intervention for the elderly. Issues in mental health nursing, 11(1), 33–48.

Burnside, I., & Haight, B. K. (1992). Reminiscence and life review: analysing each concept. Journal of advanced nursing, 17(7), 855–862.

BUTLER R. N. (1963). The life review: an interpretation of reminiscence in the aged. Psychiatry, 26, 65–76.

Cotelli, M., Manenti, R., & Zanetti, O. (2012). Reminiscence therapy in dementia: a review. Maturitas, 72(3), 203–205.

Erlen, J. A., Mellors, M. P., Sereika, S. M., & Cook, C. (2001). The use of life review to enhance quality of life of people living with AIDS: a feasibility study. Quality of life research : an international journal of quality of life aspects of treatment, care and rehabilitation, 10(5), 453–464.

Fry P. S. (1991). Individual differences in reminiscence among older adults: predictors of frequency and pleasantness ratings of reminiscence activity. International journal of aging & human development, 33(4), 311–326.

Hallford, D. J., & Mellor, D. (2016). Brief reminiscence activities improve state well-being and self-concept in young adults: a randomised controlled experiment. Memory (Hove, England), 24(10), 1311–1320.

Hashemi-Aliabadi, S., Jalali, A., Rahmati, M., & Salari, N. (2020). Group reminiscence for hope and resilience in care-seekers who have attempted suicide. Annals of general psychiatry, 19, 4.

Kleijn, G., Lissenberg-Witte, B. I., Bohlmeijer, E. T., Willemsen, V., Becker-Commissaris, A., Eeltink, C. M., Bruynzeel, A. M. E., van der Vorst, M. J., Cuijpers, P., & Verdonck-de Leeuw, I. M. (2021). A randomized controlled trial on the efficacy of life review therapy targeting incurably ill cancer patients: do their informal caregivers benefit?. Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer, 29(3), 1257–1264.

Lau, J. S. Y., Tang, Y. M., Gao, G., Fong, K. N. K., & So, B. C. L. (2025). Development and Usability Testing of Virtual Reality (VR)-Based Reminiscence Therapy for People with Dementia. INFORMATION SYSTEMS FRONTIERS, 27(1), 155–170.

Law, J., Bauin, S., Courtial, J., & Whittaker, J. (2005). Policy and the mapping of scientific change: A co-word analysis of research into environmental acidification.

Lewis, M. I., & Butler, R. N. (1974). Life-review therapy. Putting memories to work in individual and group psychotherapy. Geriatrics, 29(11), 165–173.

Li, A., & Liu, Y. (2022). Reminiscence therapy serves as an optional nursing care strategy in attenuating cognitive impairment, anxiety, and depression in acute ischemic stroke patients. Irish journal of medical science, 191(2), 877–884.

Greene, R.R. (1983). Life Review: A Technique for Clarifying Family Roles in Adulthood. Clinical Gerontologist, 1, 59-68.

Mo, K. Y. (2024). Metaverse Life Story Museum and Reminiscence Group Therapy for Older Adults in Hong Kong. Research on Social Work Practice.

Rueda, A. V., Cabaco, A. S., Mejía-Ramírez, M. A., Afonso, R. M., & Castillo-Riedel, E. (2023). Cross-cultural effects of reminiscence therapy on life satisfaction and autobiographical memory of older adults: a pilot study across Mexico and Spain. Alzheimer's research & therapy, 15(1), 204.

Shellman, J. M., Mokel, M., & Hewitt, N. (2009). The effects of integrative reminiscence on depressive symptoms in older African Americans. Western journal of nursing research, 31(6), 772–786.

Sun, W., Akhter, R., Uribe-Quevedo, A., Presas, D., Liscano, R., & Horsburgh, S. (2022). A Web and Nonimmersive VR Approach for Reminiscence Therapy: A Caregiver Perspective Comparison. 2022 IEEE 10th International Conference on Serious Games and Applications for Health(SeGAH), 1–8.

Webster, J. D., Bohlmeijer, E. T., & Westerhof, G. J. (2010). Mapping the Future of Reminiscence: A Conceptual Guide for Research and Practice. Research on Aging, 32(4), 527–564.

史蕾, 王惠珍, & 赵久波. (2007). 回忆疗法对养老机构老年人抑郁情绪的影响. 护理学杂志, 9, 9–10.

曾迎春, 吕启圆, 朱俊红, 郭金花, & 郑树基. (2021). 基于 VR 的老年癌症患者认知评估和沉浸式怀旧疗法康复系统的设计与应用探索. 中国护理管理, 21(2), 176–180.

杨国庆 & 刘辉. (2019). 军休干部的人生历程与自我整合——一项基于缅怀往事疗法的社会工作介入研究. 南京政治学院学报, 35(2), 31–36.

梅永霞, 张振香, 林蓓蕾, 张艳, 张亚奇, & 谢俊房. (2014). 怀旧疗法对社区老年脑卒中患者配偶照顾负担及积极体验的影响. 中华护理杂志, 49(7), 773–777.

潘媛馨, 肖爱祥, 叶君荣, 吴家岚, 吴晨欣, 王婷, 王浩云, 黄杏笑, 袁乐欣, & 姜恋. (2023). 怀旧疗法在老年精神障碍患者中的应用进展. 中华现代护理杂志, 29(5), 697–700.

翁小清, 姚田欢, & 徐瑛. (2024). 分析个体怀旧疗法应用于老年慢性病患者的效果及对睡眠质量的影响. 世界睡眠医学杂志, 11(6), 1255–1257.

赵蓉英 & 吴胜男. (2013). 基于战略坐标图的我国馆藏资源研究主题分析. 图书与情报, 2, 88–92.