Agnieszka Konieczna* Monika Żak**

AD HOC AND PROACTIVE APPROACHES OF OLDER ADULTS TO DAILY MEMORY PROBLEMS

ABSTRACT: The study focuses on the strategies and resources utilized by older adults in response to everyday memory challenges. A phenomenographic methodology was employed to conduct interviews with 14 community-dwelling older adults, some of whom participated in cognitive or recreational stimulation programs at local senior clubs. The findings indicate that participants used a wide range of compensatory strategies, primarily simple, intuitive memory-supporting methods integrated into their daily lives. However, they rarely sought professional support, and their openness to new approaches was limited. Even those engaged in community-based programs were aware of the theoretical benefits of lifestyle management but implemented these recommendations to a limited extent. The study also discusses challenges related to the adoption of health-promoting strategies and factors influencing seniors' engagement in preventive activities. A key factor was their need to maintain independence and their belief that their existing methods were sufficient. The results highlight the necessity of developing more holistic support strategies that better address the diverse needs of older adults while respecting their desire for agency and autonomy in health-related decision-making. Adopting a lifelong cognitive development approach may contribute to more effective long-term interventions. KEYWORDS: age-associated memory problems, everyday memory, optimization of memory function, participation, memory disorder prevention.

Introduction

Older community-dwelling adults encounter difficulties in their daily lives related to age-related cognitive changes (Parikh et al., 2016). However, memory difficulties, such as forgetting names or planned activities, occur across different age groups, although their frequency and coping strategies may change with age (Hill et al., 2017; Radnan et al., 2023). Nevertheless, many studies have focused on forgetting as an early symptom of dementia, overlooking it as a natural part of everyday functioning (Ossher, Flegal & Lustig, 2013; Mogle et al., 2019; Rotenberg, Sternberg & Maeir, 2020). Although forgetting is common, little attention has been paid to the experiences of forgetting in the healthy adult population, particularly among older adults (Imhof et al., 2006).

The memory problems reported by seniors in daily life include difficulties in learning new names, recalling past events, retrieving a name or specific word in conversation,

^{*} Agnieszka Konieczna – Akademia Pedagogiki Specjalnej, Wydział Nauk Pedagogicznych, Instytut Pedagogiki Specjalnej; e-mail: akonieczna@aps.edu.pl; ORCID: https://orcid.org/0000-0003-3782-8373.

^{**} **Monika Żak** – Akademickie Liceum Ogólnokształcące; e-mail: monikazak43@gmail.com; ORCID: https://orcid.org/0009-0004-1748-9444.

remembering why someone entered a room, and remembering to take medications on time (Farias et al., 2006; Apolinario et al., 2013; Buckley et al., 2015; Parikh et al., 2016; Rotenberg, Sternberg & Maeir, 2020). Additionally, older adults often report issues with misplacing items, difficulty remembering information, and being distracted while performing tasks (Apolinario et al., 2013; Buckley et al., 2015; Parikh et al., 2016; Rotenberg, Sternberg & Maeir, 2020). Studies indicate that they also experienced real difficulties in such aspects of daily life as managing finances and medications or dealing with complex daily tasks (De Vriendt et al., 2012; Buckley et al., 2015; Rotenberg, Sternberg & Maeir, 2020).

Memory decline is a normal part of the aging process (Imhof et al., 2006). Although age-related memory changes are relatively mild and do not cause serious problems in independently performing normal daily activities, coping with memory loss and forgetting in daily life, especially in conjunction with other cognitive changes, poses a significant challenge for older adults (Mol et al., 2007; Ross, Hofbauer & Rodriguez, 2022). At the same time, research suggests that the extent to which forgetting is perceived as a problem may be subjective—while one person may find temporary memory difficulties concerning, another may hardly notice them (Hill et al., 2017).

Research on the personal significance of cognitive problems associated with normal aging indicates that memory decline is particularly challenging because it affects major areas of life, such as leisure, engagement in work activities, and social relationships (Parikh et al., 2016). Older adults describe changes in valued life roles and resulting changes in self-esteem and confidence as significant consequences of memory problems (Buckley et al., 2015; Hill et al., 2017; Rotenberg, Sternberg & Maeir, 2020). The experience of memory failures in healthy older adults causes subjective discomfort and is associated with adverse emotions such as frustration, anxiety, irritation, embarrassment, and shame or guilt (Buckley et al., 2015; Rotenberg, Sternberg & Maeir, 2020; Pearman, 2021), as well as concerns about negative perceptions by others when their memory problems become apparent (Buckley et al., 2015). These emotional reactions suggest that for many people, daily memory failures can be quite devastating (Pearman, 2021). Regardless of the various causes of dementia and memory test results, forgetting is troubling for older adults as a sign of possible cognitive decline and decreased quality of life (Imhof et al., 2006; Mogle et al., 2019; Rotenberg, Sternberg & Maeir, 2020; Carter et al., 2023).

Despite extensive literature on emotions related to memory challenges, little is known about what older adults do in the face of encountered memory problems, how they respond to challenges and memory failures in daily life, and how they cope with age-related changes in the memory domain (Pearman, 2021). Adaptation to these challenges involves compensatory strategies and the development of habits that support

cognitive functioning, including the use of calendars, lists, and notes, as well as internal techniques such as mnemonics and visualizations (Mol et al., 2007; Buckley et al., 2015; Parikh et al., 2016; Hill et al., 2017; Rotenberg, Sternberg & Maeir, 2020; Ge et al., 2022; Ross, Hofbauer & Rodriguez, 2022; Radnan et al., 2023).

External aids facilitate daily information management but do not enhance long-term memory retention abilities. Internal strategies, such as visualizations, help improve focus, while behavioral strategies support emotional regulation and action adjustment according to individual capacities (Buckley et al., 2015; Ross, Hofbauer & Rodriguez, 2022). Combining these approaches has proven to be effective (Rebok, Carlson & Langbaum, 2007; Hertzog et al., 2008; Wu & Rebok, 2020).

Researchers also analyze the effectiveness of health recommendations for memory preservation and various interventions aimed at supporting cognitive abilities. Many studies focus on cognitive training targeting specific functions, such as working memory and attention, as well as cognitively stimulating activities like learning new skills (*e.g.*, photography, playing a musical instrument, language acquisition, or using new technologies) or engaging in complex strategic games (Rebok, Carlson & Langbaum, 2007; Hertzog et al., 2008; Reijnders, van Heugten & van Boxtel, 2013; Wu, Rebok & Lin, 2017; Wu & Rebok, 2020; Ross, Hofbauer & Rodriguez, 2022). A variety of interventions have been developed, ranging from computer-based programs to psychoeducational and metacognitive exercises (Reijnders, van Heugten & van Boxtel, 2013; Ross, Hofbauer & Rodriguez, 2022).

Research suggests that holistic programs combining cognitive training with physical and social activities yield the best results (Reijnders, van Heugten & van Boxtel, 2013; Wu & Rebok, 2020). Additionally, cognitive stimulation diversity appears to be more beneficial than the frequency of a single activity. Modern interventions also provide health-promoting information and practical behavior-change techniques (Wu & Rebok, 2020). Furthermore, evidence suggests that the effectiveness of memory-supporting strategies depends not only on their type but also on environmental and motivational factors that can influence long-term engagement among older adults (Reijnders, van Heugten & van Boxtel, 2013; Wu & Rebok, 2020; Weaver & Jaeggi, 2021).

Studies suggest that some individuals may employ ineffective strategies or utilize their memory resources suboptimally (Buckley et al., 2015; Hertzog et al., 2019). Avoiding difficult situations or attempting to hide their memory problems, can lead to reduced social activity and lack of engagement in the long term (Buckley et al., 2015; Hill et al., 2017; Mol et al., 2007; Rotenberg, Sternberg & Maeir, 2020; Pearman, 2021; Ross, Hofbauer & Rodriguez, 2022). As a result, the preferred approaches and behaviors of older adults in supporting daily memory retention may have a cumulative

impact on their quality of life and health outcomes (Patzelt et al., 2016; Hill et al., 2017; Weaver & Jaeggi, 2021).

The aim of the study is to identify adaptive strategies employed by older adults in daily life. Additionally, it seeks to explore seniors' attitudes toward health recommendations related to memory maintenance and the barriers that may hinder their implementation. While there is evidence supporting the effectiveness of various preventive measures, little is known about how they are actually applied and perceived by older adults (Rotenberg, Sternberg & Maeir, 2020; Wu & Rebok, 2020; Ge et al., 2022).

Providing knowledge about the actual needs of seniors enables the design of better-tailored programs promoting prevention (Patzelt et al., 2016; Wu & Rebok, 2020). This study can provide valuable insights for both cognitive health specialists and policymakers developing support strategies for aging societies (Patzelt et al., 2016; Rotenberg, Sternberg & Maeir, 2020; Ge et al., 2022).

Methods

Participants

Individual interviews were conducted with a purposively selected sample of 14 adults aged 60 and over. This method was chosen to capture subjective experiences and the diverse adaptive strategies used by older adults in the context of memory difficulties. To maximize the diversity of perspectives and experiences, recruitment took place in locations in the central-eastern part of Poland. Most participants were recruited from a senior center that offers lectures and courses for retirees. Potential participants were recruited in several ways. Some individuals responded to flyers posted in participating organizations, inviting them to participate in an interview about their engagement in health prevention. Others were recruited based on recommendations from senior center staff for individuals who might be interested in the study. The selection criteria for participants included age (60 years and older), no formal diagnosis of cognitive impairment, community residency, and consent to participate in the study.

The age of the participants ranged from 60 to 84 years, with an average of 72 years. The majority were women, and 100% of participants identified as White European. The study group was also diverse in terms of education and work experience: 86% had a secondary or higher education; 93% were retired (including two who worked part-time); 43% lived alone, 29% lived in rural or suburban areas. The group included one person engaged exclusively in a cognitive training program, four individuals who combined various cognitive stimulation and recreational activities at local senior centers, and one person who participated exclusively in recreational programs. The remaining

eight participants were not involved in cognitive training or any other program aimed at older adults.

Procedures

A qualitative approach was used in the study to understand seniors' subjective experiences and how they adapt to memory problems. The key research tool was in-depth interviews, conducted as individual conversations with each participant.

Each participant gave informed consent to the study (including audio recording and transcription of the interviews) before participation. Each interview was conducted at the participant's center or home, in a location preferred by them to ensure comfortable conditions. The interviews were conducted according to a pre-prepared set of openended questions, which allowed exploration of personal experiences related to daily forgetfulness, coping with problems, and promoting cognitive health. The predetermined list of questions was developed based on insights gained from a review of the existing literature. Additional questions were asked as needed to obtain more detailed responses. The interviews lasted from 30 to 90 minutes, and the content of each interview was recorded and then transcribed verbatim.

Data Analysis

Data analysis was conducted using thematic analysis according to Virginia Braun and Victoria Clarke's (2006) suggestions. This method was chosen because it allows for the systematic identification of patterns in the data and captures both matches and mismatches between seniors' expectations and available support services, considering the perspectives of both experts and potential clients. This approach enables the identification of gaps and areas for improvement in the services offered.

The analysis process began with independent coding of the transcripts by the project researchers. Researchers familiarized themselves with the interview transcripts by reading them repeatedly to understand the context and content. Segments of the transcripts were assigned codes based on key interview questions or emerging categories or themes. The codes were grouped into broader thematic categories. These themes reflected the main issues that emerged in conversations with participants. In some cases, more than one code could be assigned to the same segment of text. Themes were modified or combined as necessary to better capture the diversity and essence of the data. Coding was iterative, meaning codes were compared, added, or modified as new information emerged when returning to the transcripts to check interpretations against raw data. Discrepancies in coding were resolved through discussions, and the final list of codes was determined by group consensus. The codes were then consolidated into distinct themes, which were re-analyzed and refined until full consensus was achieved.

To ensure qualitative rigor, the research team conducted mutual summaries and reflective weekly discussions at all stages of data collection and analysis to prevent biases resulting from the researchers' personal beliefs. In one case, an external expert was engaged to review and critique our coding and interpretations.

Results

The analysis results are presented in a narrative form, highlighting key themes and illustrating them with quotes from the interviews. These themes reflect the main areas of experiences and adaptive strategies that emerged in conversations with the participants. Anonymous quotes are linked to participant number (*e.g.*, P1) and age (*e.g.*, 60). Seven themes illustrate the diversity of ways seniors adapt to changing cognitive abilities.

Daily Challenges Related to Forgetfulness

Many participants shared their subjective feelings about forgetfulness and changes in daily functioning. Interestingly, even those who denied cognitive decline showed many daily difficulties they had to deal with in the conversations.

One of the most frequently mentioned problems was forgetting items to buy at the store. As one participant noted: "When I go shopping, I often forget to buy something. Or when my children tell me something, ask me to do something, I sometimes forget" (P9, 60). This problem extended to forgetting to handle important matters: "I forget about some important matters to take care of, that I had to do something, go somewhere" (P12, 62).

Another common problem was difficulty remembering where various items were placed, such as keys, lists, or groceries. One participant described: "I mainly have memory problems when it comes to remembering small things, like where I left my keys" (P6, 65); "I can't remember where I put something" (P12, 62). Forgetting often led to frustrating searches, as one respondent indicated: "I have to search for something because I put it somewhere, and then it's hard to find" (P7, 77).

Difficulty remembering names, dates, and places was also commonly reported. Several participants noted: "I lack words, sometimes I can't remember a word" (P12, 62); "Words fly out of my head" (P13, 84) "Sometimes I forget names or places, like being called on to answer, I just can't remember right away" (P1, 84). Another participant added: "There are moments when someone comes to mind, but I forget their surname or first name" (P10, 76).

Forgetting the purpose of an action was another problem affecting seniors' daily lives. One respondent described it as: "When I go to my room to get something... I get distracted, come back, and forget why I went there" (P3, 72).

All participants reported experiencing daily difficulties due to memory problems. These problems are primarily a source of frustration for now but also impact self-esteem.

Coping in Daily Life

Respondents emphasized that compensatory strategies and ad hoc problem-solving play a crucial role in coping with the daily challenges of forgetfulness, supporting them in maintaining independence and efficiency. The participants' statements reveal a small variety of compensatory strategies, indicating that most of them use similar approaches to dealing with difficulties.

Seniors cope with forgetfulness in daily life mainly through external memory aids such as lists, notes, memos, and diaries. Participants often mentioned using shopping lists as one of the most important compensatory strategies. One respondent highlighted the importance of shopping lists: "The shopping list, of course. That's frequent" (P7, 77), underscoring the commonality of this method. Another added: "If there are more purchases and I specifically need something, like for a cake, then I write it down, so I prepare for the shopping" (P12, 62). Another noted: "I take a list for shopping. Oh, and of course, I have to write down doctor appointments on pieces of paper" (P9, 60).

Many respondents reported coping with forgetfulness by marking doctor's appointments on the calendar. As one participant noted, writing down future events helps her remember her commitments: "I don't need a shopping list yet! But doctor appointments... I mark them on the calendar to remember" (P10, 76). One respondent mentioned using calendars and numerous reminder notes as everyday tools to help organize life:

I have a calendar hanging on the wall, it's all written in. Besides that, I have a small calendar that I take to classes. If they give a date for something, like a trip, I write it down, otherwise I won't remember. Now, as I was leaving the clinic, I asked for a card to write down my appointment so I wouldn't forget. I have lots of various notes here, folded, and I throw away those that are outdated. They help me not miss things. (P2, 72)

One participant emphasized focusing on one task at a time as a strategy to cope with forgetfulness: "I focus. Not doing something like washing or vacuuming while someone is talking to me... When someone says something, I think and concentrate, not looking left and right" (P13, 84).

Another common strategy was putting things in the same places to avoid problems finding them. As one participant noted: "I try to put certain things always in the same places, where they should be. For example, I throw documents into one drawer so they can't get lost and end up in another place" (P12, 62). Another stressed the importance of fixed places:

Most importantly, [I need to] put everything in its place, so I know I'll find it there. The worst is putting something in a different place, then it's a problem, you have to search for it. If everything has its place, there's no problem. (P7, 77)

It is worth noting that many respondents rely on basic methods that are easy to apply and widely known, without resorting to more advanced memory techniques. Respondents emphasized that using such compensatory strategies helps them in daily functioning and maintaining independence. Despite the limited variety of these strategies, their effectiveness comes from regular use and adaptation to individual needs and preferences.

Only one participant delegated the responsibility for reminders to her husband and child, showing the rarity of this approach: "I usually try to use shopping lists or notes to avoid forgetting something. My children and husband also help a lot. They remind me earlier that someone will have a birthday or that I have a doctor's appointment" (P6, 65).

Seniors' Beliefs about Effective Memory Maintenance Methods and their Attitudes Toward Prevention

Beliefs about effective methods for maintaining memory and actively seeking information on this topic are crucial factors influencing the health-promoting behaviors of seniors. The statements of the study participants reveal diverse attitudes towards health solutions, including activities that support healthy aging and participation in structured cognitive interventions.

Regular engagement in informal cognitive activities, such as solving crosswords, reading, or watching television, is considered by respondents to be a significant part of strategies that support brain health and prevent cognitive decline. For instance, one respondent emphasizes the importance of crosswords: "You need to solve a lot of crosswords, I also advise others to do so, it helps with memory" (P1, 84). Another adds: "Regular mental exercises can improve memory" (P6, 65).

However, there were also comments revealing negative attitudes towards structured cognitive interventions. Many individuals highlighted the "superiority" of informal cognitive activities over educational offerings. One participant stated that self-directed activities could bring more benefits than participating in cognitive training sessions:

No, I have never been a participant in such classes. I haven't taken part. I exercise on my own, solve crosswords, read, watch interesting programs (...) Such meetings never really appealed to me. I try to exercise on my own. I solve crosswords, read a lot. Maybe it's interesting. I won't say it's not, but I never got interested in it, and I believe I'd rather be in an open space, be with people, read a lot and talk with young people, because young people engage the elderly more and you can learn more from them than in those courses. (P7, 77)

A healthy lifestyle, including diet, exercise, and sleep, also frequently appeared in respondents' statements as methods of supporting memory. As one person noted: "I think, for example, regular mental exercises and also a healthy lifestyle can improve memory (...) I've heard that nuts are good for memory, but I'm not an expert" (P6, 65). Respondents also emphasized the importance of social activity in maintaining cognitive functions: "Being among people, friends. Long conversations, reminiscing" (P8, 73). There were also unconventional tips: "[you need to] Get enough sleep! So that, as they say, the head is rested. And then you function better" (P10, 76).

Only one participant mentioned pharmacology as a method of supporting memory: "Well, there are memory drugs. I even heard on TV today that there is some memory drug because an old man was talking about it on TV. No, I don't take it. I take other medications, but not for memory" (P13, 84). She also pointed to other methods of supporting memory, such as a healthy diet and physical activity: "I think that maybe sports, getting out a bit, walking, looking at the weather, getting some fresh air, reading a nice book. Eating good fruits, some variety, that also helps" (P13, 84).

The participant who was an advocate of the "you can exercise on your own" strategy listed the most ways to improve memory and memory-enhancing activities:

Well, I suppose that traveling also helps people. When you travel, you see different things, but also read a lot, be interested in many interesting things, stories, history, geography. That also broadens horizons (...) You can exercise on your own. You can talk to people who also help with memory because they tell a lot of stories. Then you assimilate it, and it's also a solution (...) Because you also need to learn poems, learn languages, that also helps somehow. (P7, 77)

In summary, seniors' beliefs and attitudes towards memory support methods are varied. Many prefer informal cognitive activities such as crosswords, reading, or watching television over structured cognitive interventions. Participants mention that simple daily activities play a significant role in supporting brain health. Therefore, they do not perceive prevention as an additional effort or a search for opportunities to be active and engaged.

Some participants expressed a desire for more information on methods of supporting memory. One of them emphasized that she would like to have specific guidelines in courses: "I would like someone to tell me what is good for me. Someone said that crosswords are good. But there were cases where someone who did crosswords also got dementia" (P1, 84).

Regularly Undertaken Cognitive Activities

When discussing strategies that can positively impact memory, participants often expressed the belief that certain activities can help but did not necessarily relate this to their own engagement in these activities. Therefore, the statements of participants

indicating their approach to implementing and regularly practicing memory-supporting activities was analyzed separately.

When asked what they do to take care of their memory, participants primarily pointed to activities such as reading and watching television. Examples of statements include: "I read, and above all, I watch such interesting programs on TV (...) It helps a lot" (P7, 77); "I read. I read a lot. My neighbor works at the city library, and she brings me some new books every now and then" (P4, 68). Other respondents indicated limiting themselves to solving crosswords: "Apart from these activities [at the senior club], I also solve crosswords at home. More than that, I don't do anything" (P5, 75); "I mainly solve crosswords and read newspapers" (P14, 74); [daily] "No, I don't do anything besides reading and crosswords... That's all" (P10, 76).

It is worth noting that the range of activities implemented is quite limited compared to those recommended. Respondents often treat ordinary daily activities as their contribution to stimulating memory, not seeing the need to implement more advanced preventive measures. As expressed by one participant, this is completely sufficient: "Well, as I said, I solve crosswords, read, and above all, watch such interesting programs on TV about history, geography, where they show different countries, different curiosities, and that also helps a lot" (P7, 77). Another person emphasized that they constantly undertake various cognitive activities: "It depends on the season. When it's warm, I spend a lot of time outdoors, planting and watering flowers in the garden. In winter, I mainly stay at home and solve crosswords. Of course, I also attend classes at the senior club" (P14, 74).

The term "sometimes" also does not indicate a high intensity of memory-stimulating activities, especially if there is an expressed helplessness: "Sometimes I exercise my mind by solving crosswords or sudoku. In general, I don't know what else I could do. I've never received more guidelines or ideas on this topic, so I don't know..." (P6, 65).

Healthy eating and exercise were also mentioned by participants as important elements of active memory support. However, participants understand these activities as daily actions, as evidenced by one respondent's statement: "But some sport or something, no. I get normal daily exercise" (P12, 62). Another respondent said:

Well, I try to exercise. I have a dog, so I have to go out, so I log steps, so there's some movement. And I also try to eat healthily, a lot of vegetables. Well, work certainly helps me because you have to be focused a lot, so somehow the memory exercises itself. (P9, 60)

Participation in Educational Programs as an Opportunity for Cognitive Stimulation

Participation in intervention programs is perceived by seniors as both an opportunity for cognitive stimulation and a chance to gain other benefits, such as emotional

well-being and companionship. Only one respondent, who participated in memory training, presented cognitive benefits as the most important gains from participation: "First of all, my memory has improved" (P5, 75). Some considering cognitive training pointed to potential cognitive benefits, saying: "Surely it would be useful for memory development, speech development, for better learning" (P11, 61). Others were less enthusiastic about cognitive activities, emphasizing that only practical activities would attract them: "I think it could be something nice and interesting... if only it would help in daily functioning" (P6, 65).

Participants also mentioned benefits such as social activation: "People can meet, get to know each other, exchange views on various topics, make friends" (P8, 73). It is worth noting that the need for companionship was the main reason for most participants to enroll in cognitive training: "I had depression for various reasons, but I pulled myself together and signed up to be among people" (P3, 72). Another participant described her motivation to join a senior club after the loss of her husband:

When my husband died, I fell into a terrible depression... [Then I told myself] 'I'll go among people and that will cheer me up.' And I always say that they put me back on my feet, I came back to life. (...) I needed people, and they put me back on my feet, and I am grateful to them. (P2, 72)

Another participant also emphasized that memory stimulation was not his main goal:

I've been attending memory improvement classes for seniors for quite a while, for 2 years. I found out about them quite by chance because my wife found a leaflet in the mailbox, and we decided to go there. And we liked it so much that we still go. Because we don't like to be bored, we liked it. (...) [the reason was] I'll tell you, I can't sit at home. Half a year into retirement, I dug up the garden again. I need some activity, to go out among people... because just going to the store or the doctor, a person could go crazy at home. My wife liked it, she could watch that screen all day. But I'm the head of the family, and I told her that we need to find some activities... and she found a leaflet about the classes. (P4, 68).

Participants emphasized that these programs are not only a way to stimulate cognition but also to avoid social isolation: "Definitely, because you know, when a person sits at home locked up and only looks out the window or at the TV, they deteriorate quickly, so to speak" (P3, 72). Other quotes also confirm this perception of the classes: "I would recommend it for the opportunity to meet other seniors, or just to spend free time pleasantly" (P6, 65), "People can meet, get to know each other, exchange views on various topics, and make friends" (P8, 73).

In summary, participation in educational and intervention programs is seen in different ways by seniors. For some, the main goal is cognitive stimulation, but for the majority, social and emotional benefits are the most important.

Conversations with Relatives and Using Support

Regular conversations with relatives and using their support, both emotional and practical, are not commonly practiced by the participants of our study. Seniors clearly distance themselves from this way of dealing with memory problems.

When asked about the willingness to talk to someone about noticeable memory problems and their concerns about memory, respondents often stated that this is not a topic for conversation. For example, one participant said: "No, no, because it's not that bad for me [to talk about it]" (P9, 60), and another added: "Such topics are not discussed" (P10, 76). Another response indicates a lack of openness to discussing memory problems even among peers: "When I meet with those like me, at this age, with such a friend, we don't talk about such topics... we don't go into [such topics]" (P10, 76). According to our respondents, the negative aspects of aging are not a topic for conversation, as emphasized by another statement:

No, I haven't talked to anyone. I realize that many people have memory problems, but somehow people are reluctant to talk about it. Everyone likes to talk about good things, the bad things are somehow not mentioned so willingly. (P7, 77)

Only one respondent admitted that she jokingly talks with friends about memory problems: "Sometimes with friends, we just exchange funny stories related to memory" (P6, 65).

Seeking Diagnosis and the Need for Informational Support in Memory Management

In the study, only one participant reported that actively seeking a diagnosis and relying on professional advice played an important role in managing memory problems and planning appropriate actions. This participant emphasized the importance of early recognition of memory problems and consulting professionals, which is a different approach from the rest of the group.

The remaining participants usually avoided diagnosis and professional advice for various reasons, such as fear of confirming health problems. One respondent said: "I haven't talked to anyone. I mean... not to any doctor" (P6, 65), suggesting a lack of initiative in seeking professional help.

Some seniors, although they notice their memory problems, do not take steps toward diagnosis or treatment. One of them admitted: "You know, I'm 72 years old, I'm starting to have memory problems, so it would be good for someone to advise me a little on what to do about it" (P3, 72).

There are also voices indicating the need for better informational and organizational support. Many respondents expect guidance from third parties. One participant

emphasized that she would not know how to enroll in classes: "I would probably need some tips. Some explanation" (P11, 61). Another participant described how she was guided by the facility manager and emphasized that she would not have been able to do it on her own: "No, because I wouldn't know how, where to find it even. But here we are well-off, even Mrs. Anetka [manager] arranged transportation for us, the bus picks us all up" (P1, 84). At another point in the conversation, this participant emphasized that she relied on the authority both in signing up: "Mrs. Anetka insisted. So I thought, nobody will bite me if I go there," and regarding the content of the classes: "Someone smart came up with it, and I have no objections. After all, some smarter group determined it, so memory exercises for seniors are probably needed".

One participant emphasized that she would like the courses to include specific guidelines: "It would be best if someone told us how to live beautifully, how to experience it beautifully" (P1, 84) or for the teacher to offer practical contacts to ensure full access to these programs and help overcome any barriers: "to guide those seniors somewhere..., propose some additional things, guide someone, *e.g.*, to the University of the Third Age" (P12, 62).

Discussion

This qualitative study focuses on identifying and explaining the actions taken by older adults in response to daily memory difficulties and perceived changes in cognitive functioning. For healthy older individuals living in the community, experiences related to memory decline and a gradual decrease in the ability to perform daily activities are not only frustrating (Hill et al., 2017; Rotenberg, Sternberg & Maeir, 2020) but also very worrying and can lead to changes in self-identity (Buckley et al., 2015). This anxiety is reinforced not only by the subjective feeling of losing control over one's own functioning but also by social factors, including concerns about becoming a burden to loved ones or a diminished sense of self-worth in the eyes of others (Hill et al., 2017; Carter et al., 2023).

Adaptation processes to everyday forgetting require not only developing new skills and routines but also making conscious choices regarding actions and health solutions. Previous studies have described these adaptations as an active process of managing changes aimed at optimizing functioning and quality of life, including health and well-being (Reichstadt et al., 2007; Ge et al., 2022). Our study advances this line of analysis by focusing on what seniors themselves consider crucial for adapting to deteriorating memory due to aging. Additionally, our study provides a rich picture of seniors' motivations for participating in preventive services and their perceptions of health-promoting activities.

Two overarching and seemingly opposing themes that emerged from the data are a practical approach and the approach focused on long-term cognitive health as key to coping with age-related changes in memory abilities. The practical approach refers to strategies used in response to specific memory challenges in daily life, such as difficulties in locating objects, recalling names, or remembering appointments (Radnan et al., 2023). This approach is ad hoc and reactive, relying on compensatory strategies that help maintain independence and effectively perform everyday tasks (e.g., Ossher, Flegal & Lustig, 2013; Buckley et al., 2015; Parikh et al., 2016; Rotenberg, Sternberg & Maeir, 2020). Coping with age-related cognitive changes also involves accepting experiences, along with realistic self-assessment or normalizing cognitive changes, as previous studies have shown (Imhof et al., 2006; Parikh et al., 2016; Rotenberg, Sternberg & Maeir, 2020). On the other hand, the health-promoting approach involved proactive actions and long-term efforts to improve and maintain memory. This approach includes engaging in cognitive interventions, participating in training programs, and adopting a brain-healthy lifestyle, such as physical activity, a balanced diet, and regular involvement in cognitively demanding activities (Reijnders, van Heugten & van Boxtel, 2013; Wu & Rebok, 2020).

A key finding of our study is that older adults integrate these approaches in a way that suits their individual needs – they employ practical strategies in everyday situations while simultaneously engaging in health-oriented efforts over the long term. The balance between these two approaches is perceived by older adults as key to successful aging, as also demonstrated in another study (Reichstadt et al., 2007).

The increased use of memory strategies is well-documented (*e.g.*, Buckley et al., 2015; Parikh et al., 2016; Hertzog et al., 2019; Ge et al., 2022; Ross, Hofbauer & Rodriguez, 2022; Ross & Rodriguez, 2023). We found that external strategies, such as using calendars, lists, and notes, were crucial for coping with memory failures. Participants also used routines, such as placing items in visible or fixed locations and maintaining order to support memory. However, there was no flexible approach to trying new strategies, such as visualizing and verbalizing task steps, doing one thing at a time to reduce task complexity, as reported in other studies (Imhof et al., 2006; Pearman, 2021; Ross & Rodriguez, 2023).

It is surprising that participants did not mention social media or the use of modern digital tools, such as electronic reminders or smartphone settings, despite research indicating their increasing use by older generations (Wu, Rebok & Lin, 2017; Radnan et al., 2023). This may suggest the presence of barriers to using such technologies, such as lack of access, knowledge, or trust in this type of support, highlighting the need for further research on how digital technologies can be more effectively integrated into the daily cognitive functioning of seniors.

Few participants used family assistance to manage their calendars and locate lost items. Requests for support in managing daily tasks were reported relatively infrequently, which is consistent with previous studies (Rotenberg, Sternberg & Maeir, 2020). Moreover, most participants felt that the strategies they used met their needs well and did not seek better solutions and tools. Even when strategies failed, they believed their memory failures were not so destructive that behavior change was urgent.

One of the significant findings of this study is the ambivalence reported by seniors toward sharing memory problems with loved ones as a coping mechanism. In a similar way to accepting support from loved ones, having open conversations about forgetting and dementia can validate experiences and allow for social negotiations on practical solutions, which can have an emotionally reassuring effect (Ge et al., 2022; Ross, Hofbauer & Rodriguez, 2022; Carter et al., 2023). However, only two participants benefited from discussing memory problems, while others avoided the topic, suggesting a need for further exploration of communication barriers and their impact on cognitive health. Other studies have indicated that reasons may include fears of being a burden, lack of awareness about how to seek help, or concerns about whether the environment will respond to their memory problems in a non-threatening manner (e.g., Hill et al., 2017; Rosenberg et al., 2020; Pearman, 2021; Ge et al., 2022). This study revealed that avoiding the "topic" of memory failures in social and family interactions can be understood as an expression of resistance to aging and a belief that such conversations are an unnecessary focus on the negative aspects of aging.

Although the main emphasis was on the pragmatic ability to cope with daily challenges, some participants also emphasized the importance of trying new solutions and implementing preventive strategies to prevent further memory decline. This suggests that the motivation to care for cognitive health is not limited solely to older adults with noticeable difficulties, but also includes those who aim to maintain their cognitive functions at a high level. The study thus confirms that some older adults are motivated to maintain cognitive health, and many utilize the opportunities provided by social support services and use information about improving cognitive health. It is noteworthy that participants mentioned a wide range of programs, from artistic activities to yoga, dance classes, cooking lessons, and book clubs. Many participants considered joining additional recreational activities or wanted such activities to be available in their area.

In the literature, the use of health prevention opportunities, leading a healthy lifestyle, and undergoing medical evaluation in response to changing cognitive abilities are indicated as key positive coping strategies aimed at gaining knowledge and control (Friedman et al., 2009; Buckley et al., 2015; Rosenberg et al., 2020; Srisuwan et al., 2020). Although some participants did not know whether or how memory could be helped, some were able to mention certain factors as important for protecting cognitive health, such as memory training, a healthy diet, regular walks and physical exercises, taking supplements, and maintaining an active social life, similar to other studies (Buckley et al., 2015; Smith, Ali & Quach, 2015; Rosenberg et al., 2020; Rotenberg, Sternberg & Maeir, 2020; Ge et al., 2022; Ross, Hofbauer & Rodriguez, 2022).

Participants primarily preferred less structured activities (puzzles, quizzes, card games, watching movies, and reading), which reflects their need for autonomy in managing their actions (Hill et al., 2017). Seniors regarded these activities as easy to implement and well-suited to their daily lives, as they did not require supervision and allowed them to maintain a sense of control over memory-related issues. However, they were not convinced of their effectiveness or the necessity of regular engagement. This suggests the need for better alignment of health recommendations with seniors' perceptions and more effective communication of the benefits of more structured cognitive interventions and physical activities.

In addition to the mentioned barriers, some participants were reluctant to implement such health-promoting activities as exercise because they did not like them or were still considering their implementation. Participants' beliefs about "brain health" reflect media influence but also indicate a limited scope of the impact of this information on actual behavior changes. Other studies also indicate that seniors find information about diets and health confusing and contradictory, which discourages them from implementing recommendations (Friedman et al., 2009; Rosenberg et al., 2020). Moreover, media messages are often not relevant to them or do not consider their ideas and attitudes about disease risks and prevention. In the context of health education, it is essential to develop consistent informational strategies that are tailored to the needs of seniors, taking into account their prior experiences as well as their skepticism toward changing health recommendations (Friedman et al., 2009).

In line with findings from previous research, our participants confirmed that local communities, including churches, were considered sources of information about health prevention and available local services (Patzelt et al., 2016). This indicates the potential of utilizing existing social structures to promote activities supporting cognitive health and highlights the need to engage community leaders in educational campaigns targeted at seniors.

Fewer participants reported taking actions to improve brain health than those who expressed intentions to do so. Some participants were reluctant to engage in self-organized health-promoting activities or did so irregularly, while others gave very evasive answers, citing various barriers. It is surprising that almost none of our participants, aside from those walking their dogs, reported engaging in regular physical activity, despite numerous studies highlighting its importance for cognitive health (Reijnders, van Heugten & van Boxtel, 2013; Wu & Rebok, 2020). In light of the proposed stages

of health behavior change during interventions (Prochaska, Redding & Evers, 2008), performing an activity and planning to start a practice in the near future can differ from inactivity and not thinking about increasing activity (André & Agbangla, 2020). Thus, a participant who has started practicing but has not yet reached the required level (*e.g.*, does not exercise regularly) is active but insufficiently so, while another participant in the decision-making stage may be aware of the problem and seriously considering solving it but has not yet committed to taking action in the near future. Therefore, thinking about engaging in health-promoting activities later in life cannot be considered an intention to make a change (Smith, Ali & Quach, 2015; André & Agbangla, 2020). These results suggest that mere awareness of the need for action does not always translate into actual behavior change, which may stem from both psychological and structural factors, such as the availability of appropriate services and support (Wu & Rebok, 2020).

Research by Christiane Patzelt et al. (2016) suggests that some seniors associate preventive measures solely with disease and services typical of secondary and tertiary prevention. As long as they feel well, they are not interested in primary prevention services focused on health promotion. Similarly, Anna Rosenberg et al. (2020) demonstrated that seniors' knowledge about cognitive impairment risk factors and prevention was limited and superficial, stemming from family histories of dementia, and many people doubted the possibility of prevention, particularly in relation to primary prevention.

An important aspect is also the way seniors perceive healthcare services. Older adults do not necessarily want a diagnosis that might alter their perception of themselves (Henley et al., 2023). In their view, the healthcare system is difficult to access and overloaded, and it is primarily targeted at those with more severe needs. Furthermore, the belief that there are few effective treatment options weakens the motivation to seek a diagnosis and intervention. Additionally, avoiding formal services does not necessarily mean ignoring the problem but may be a conscious coping strategy, relying on informal social support and aiming to maintain normalcy (Imhof et al., 2006; Schrauf & Iris, 2012; Carter et al., 2023). Participants in this study also preferred autonomy and everyday coping strategies that they could manage independently. They described a strong desire to maintain the status quo, which seems to reflect active coping choices rather than avoidance of the problem (Henley et al., 2023).

Although seniors often rely on their own coping methods and strive to maintain independence, this does not mean a complete rejection of external support. Authorities play a significant role in decisions about potential changes, especially in situations where seniors feel uncertain about the effectiveness of their own actions. It is worth noting that clergy and doctors are perceived by participants in this sample as individuals who can inspire them to make changes. Participants expect not only information but also suggestions on what they can do, and they are willing to implement preventive

measures recommended by specialists. Reliance on experts demonstrated in this study is a key factor that brought most of our participants to community centers offering cognitive training. However, participation in group interventions does not necessarily provide evidence of a proactive approach among older adults, as it does not always lead to engagement in lifestyle modifications. Additionally, seniors in this study had some reservations about memory training and critically viewed new memory strategies, which, according to the participants, had limited usefulness for performing daily tasks and did not take their individual realities into account.

Moreover, our findings are consistent with other studies that emphasize the importance of engaging in new and meaningful activities, such as intergenerational interactions, being useful, and participating in social life (Reichstadt et al., 2007). Some of our participants felt that they led active lives resulting from being embedded in family life and regularly performing duties or participating in group programs. Social gatherings, having fun, and enjoying daily or recreational activities were associated with health protection by our participants, with brain activity seen as an additional benefit. This indicates the need for a broader perspective on the concept of cognitive health and its support.

Numerous concepts promoting successful aging indicate the multidimensionality of this lifelong process (Patzelt et al., 2016; Radnan et al., 2023). Criticisms of these concepts highlight the lack of consideration of the subjective views of older adults and the need for diverse approaches that do not stigmatize aging or impose specific models of "success." These concepts can undermine the identity of aging individuals who feel compelled to meet societal standards of success, productivity, or independence and personal responsibility (Martinson & Berridge, 2015). This study provides evidence that it is important to create environments that allow seniors to define their own needs and develop on their own terms, rather than conforming to external societal expectations (Martinson & Berridge, 2015).

Limitations

Regarding the study's limitations, it is possible that our data includes experiences of seniors who are ostensibly healthy without known cognitive disorders. Since memory performance was not assessed using any formal test, it cannot be ruled out that some participants may have been experiencing early, undiagnosed signs of memory decline. A heterogeneous group of healthy older adults should be considered to include both those experiencing changes associated with normal aging and those with preclinical, yet undiagnosed, dementia (Buckley et al., 2015).

Furthermore, a limitation of this study is the small and relatively homogeneous sample, which may affect the generalizability of the findings. Most participants were recruited from a senior center, meaning the study group may have consisted of individuals who were more active and interested in cognitive health. Seniors who were less engaged in health-promoting activities or lacked access to similar programs may have been underrepresented, potentially influencing the results.

Although this study included basic demographic data, future research would benefit from purposive sampling based on additional factors such as education, socioeconomic status, comorbidities, disabilities, lifestyle, or level of social support, as these may significantly influence adaptive strategies and cognitive prevention approaches. Finally, decision-making about engaging in specific preventive activities is a multi-step process. It might be worthwhile for future research to trace the process of changing behavioral patterns or it could focus on analyzing the dynamic changes in seniors' motivation and attitudes toward preventive recommendations.

Conclusions

This qualitative study provides new insights into seniors' adaptive strategies in response to cognitive changes, including memory issues, and their approaches to managing daily challenges arising from these changes.

Participants employed various approaches that can be categorized into practical and health-promoting strategies. Compensatory strategies played a key role, as they allowed seniors to maintain independence and effectively manage daily tasks. Internal strategies, such as visualization or mnemonic techniques, were used less frequently, suggesting the need for further research on the effectiveness of different compensation methods.

Although most seniors reported being aware of preventive actions supporting cognitive health, they rarely implemented these strategies systematically and often approached them with skepticism. While they emphasized the importance of maintaining memory and brain health, they seldom sought professional support, which may be attributed to both individual beliefs and systemic barriers.

The study reveals that many seniors do not feel the need to share their memory problems with loved ones, which may limit emotional support and joint problem-solving.

These conclusions suggest the necessity of creating comprehensive health policies and support programs that consider how different preventive strategies can be best integrated into daily life, as well as enabling seniors to actively participate in defining their health needs and goals.

Future research should focus on the mechanisms supporting cognitive functions that take into account both the perspectives of seniors and experts. It is also crucial to

adapt the care system: instead of a reactive model focused on deficits, a holistic approach is needed that supports cognitive health throughout life (Wu, Rebok & Lin, 2017).

This change also requires transforming the relationship between seniors and experts – their role should not be limited to imposing ready-made solutions but to co-developing strategies that are perceived as useful, feasible, and aligned with seniors' values. Moreover, experts working in senior health should better understand the changing generations of seniors, who have adapted over decades to dynamic social and technological changes and have different needs from previous generations.

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