Published in final edited form as:

J Appl Gerontol. 2021 November ; 40(11): 1601–1610. doi:10.1177/0733464820970065.

The Interpersonal Context of Memory Complaints

Ann Pearman

Georgia Institute of Technology, J.S. Coon Building – 654 Cherry Street, Atlanta, GA 30332-0170

Abstract

This mixed methods study was designed to investigate the interpersonal experience of having memory problems using a community-dwelling sample of 94 adults over the age of 50 (M age = 72.35, SD = 10.51). Participants were asked a series of open-ended questions about their reactions to memory problems and completed questionnaires about memory, personality, and health. Qualitative findings suggest a few clear patterns of response (e.g., admitting the problem, ignoring the problem) to memory failures. In addition, endorsing avoidance of talking to certain people was related to worry and memory anxiety. Correlations showed subjective memory related to conscientiousness, neuroticism, depression, and worry which replicates previous studies about memory complaints. This study adds to the subjective memory literature by enhancing what we know about what people do when they are confronted with a memory challenge as well as to whom they will or will not speak about their complaints.

Understanding how people experience everyday memory failures has potential to lead to a better understanding of the advent of memory complaints and intervention strategies for those issues. Niederehe (1998) suggested a model in which trait, state, objective memory, health, and contextual variables are involved in the presentation of memory complaints in older adults. Research to date has indeed shown variables such as anxiety, personality, depression, and objective memory performance to be related to memory complaints (e.g., Hertzog & Pearman, 2014; Hülür, Hertzog, Pearman, Ram, & Gerstorf, 2014; Pearman & Storandt, 2004). However, even with the strong quantitative research that has been conducted to enhance our understanding of memory complaints, there has not yet been a systematic investigation on the context in which memory concerns may occur. With his model, Niederehe (1998) posed that ...

there is clearly an interpersonal aspect to complaining about anything. Complaints generally occur within the context of an expectation that the recipient of the complaint should respond in some fashion. However, we have essentially no empirical data on the interpersonal contexts in which memory complaints initially arise, how they are responded to and what functional contingencies may contribute to their genesis and maintenance. Researchers have yet to clearly differentiate,

ann.pearman@psych.gatech.edu .

Conflict of Interest:

The author declares no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

IRB protocol:

This protocol was approved by Washington University in St. Louis IRB (#E-142-00).

either conceptually or methodologically, the interpersonal dimensions from the purely cognitive aspects of self-reports. (p. 429)

While this call for exploring the interpersonal and contextual aspects of memory complaints was long ago, research to date has only skimmed the potential contexts in which people forget and do or do not complain about their memory. Based on their qualitative study which compared spontaneous memory complaints to forced response questionnaires, Burmester and colleagues (2015) suggested more work is needed that captures the actual experiences of older adults in memory challenging situations. The current knowledge of what people do in memory failure situations, particularly those involving other people, has not been explored. Understanding the actual experience of having memory failures and how they relate to subjective memory evaluations can serve to bolster our understanding of how these memory complaints develop and are sustained over time.

What is known about memory complaints, particularly in healthy older adults, is that they often have a fairly low correlation with actual memory performance (Hertzog, Hülür, Gerstorff, & Pearman, 2018; Niederehe, 1998). Variables more commonly associated with memory complaints include current illnesses and somatic complaints (Aarts et al., 2011), depression (Brailean et al., 2019), anxiety and worry (Berk, Hotterbeekx, van Os, & van Boxtel, 2017) as well as personality, specifically neuroticism, and conscientiousness (Luchetti, Terracciano, Stephan, & Sutin, 2016; Pearman & Storandt, 2004). Understanding how these underlying factors might relate to subjective experiences during memory failures is a major goal of this study.

In their review article, Buckley and colleagues (2015) extracted several themes in the literature regarding older adults' experiences of dealing with cognitive changes and becoming forgetful. Some of the main themes included anxiety and worry about negative perceptions of others regarding their possible decline. Although subjective memory questionnaires can capture some of the concern people may face regarding age-related cognitive changes, they leave out the more interpersonal nature of both experiencing memory failures and voicing complaints. Previous work has shown that memory complaints are related to self-consciousness (Pearman & Storandt, 2005). This suggests that the experience of having memory failures in front of others or being concerned about what others think about one's memory may play a role in level of complaint and, perhaps, how older people might feel about themselves.

Only a few studies to date have tried to examine the phenomenological experience of older adults in situations where they have memory failures. A recent qualitative study by Rotenberg, Sternberg, and Maeir (2019) asked attendees of a memory clinic to discuss their memory issues and their experiences and found that people reported forgetting names and words as particularly challenging. This is in line with other studies that have found that forgetting names and forgetting words are two of the most common memory incidents reported among older adults (Abrams & Davis, 2016; Burmester et al., 2015). What remains unknown is what people do in these situations. To examine this issue, the current study has an open-ended component asking participants to describe what they do and/or feel when they are in these types of memory challenging situations. These reports are then

compared with subjective memory ratings as well as some of the known predictors of memory complaints (e.g., personality, worry) to try to enhance our understanding of how memory behaviors and experiences may relate to subjective memory evaluations.

The current mixed methods study includes a series of open-ended questions alongside traditional measures of both memory complaint and predictors of memory complaint as a way of exploring memory complaints in a contextual framework as suggested by Niederehe (1998) and Burmester and colleagues (2015). That is, how do people react when they have a memory problem and what types of responses do they hope to receive when they voice complaints? This descriptive study serves two primary purposes: (1) to allow people to describe their own experiences in terms of everyday memory failures and memory complaints as a way of bettering our understanding of the real life experience of memory challenges, and (2) to examine potential individual differences in the response patterns when memory failures occur. To address the first study goal, a series of open-ended questions were developed by the primary investigator to capture some of the potential experiences of both having a memory failure in everyday life and of voicing memory complaints including the interpersonal expectations therein. The specific questions of interest include what actions do people report doing when they encounter a memory failure in daily life, what sort of responses do they expect in memory complaint situations, and to whom do they converse or not converse about memory issues. To address the second goal of the study, reports were qualitatively coded and analyzed using subjective memory, personality, and mental and physical health variables as potential covariates.

Method

Participants

The sample was comprised of 94 cognitively-intact community-dwelling adult volunteers from an existing volunteer research pool at a Midwestern university. Participants in the pool were those who had expressed interest in participating in studies about lifespan psychology. The study was approved by the university's Institutional Review Board (IRB#E-142-00). After verbal consent was obtained, interviewers screened the participants by telephone to determine eligibility and to collect basic demographic information. Participants were administered the Short Portable Mental Status Questionnaire (SPMSQ; Pfeiffer, 1975), which is commonly used as an initial assessment of cognitive functioning. People missing more than one item on this 10-item test were excluded from the study. This cutoff was chosen to detect pronounced cognitive impairment, as the study questions were tailored for cognitively-intact participants. Eligible participants were mailed a packet of questionnaires, a written informed consent form to sign and return, and a self-addressed stamped return envelope. Included in the packet was \$5 for participation in the study.

One hundred people were mailed questionnaires. If the questionnaires were not returned in 2 weeks, participants received one reminder phone call. Ninety-seven participants returned the forms and 94 filled out the context questions of interest. The mean age of the final 94 participants was 72.35 years ($SD=10.51$) with a range of 50 to 94. The mean years of education was 14.34 ($SD=2.79$). The sample was 69% female.

Measures

Qualitative

Memory Context Questionnaire.—Participants were given a questionnaire with three yes/no questions along with several open-ended questions about their experiences with memory issues. The questionnaire was prefaced with the following explanation: *Everyone has “memory blips” – those temporary moments of forgetting someone’s name, a word or where they put something. We are interested in finding out what you do and how you feel when this happens to you.* The term “memory blip” was used here to normalize the experience and remove the negativity associated with the term “failure.” The questionnaire was also written with the assumption that everyone, regardless of age, has memory challenges in their daily life. This questionnaire was developed by the author to explore what people do and feel when they have a memory failure or voice a memory complaint. Topics on the questionnaire include reactions and actions taken during memory failures as well as identifying with whom people discuss or do not discuss their memory issues (see Table 1 for all items). Participants were encouraged to write as many answers to each question as was appropriate for them.

Quantitative

Subjective Memory.—Four subscales from Metamemory in Adulthood Questionnaire (MIA; Dixon, Hultsch, & Hertzog, 1988) were used to assess subjective memory (Capacity, Change, Locus, Anxiety). The MIA was developed to measure adults’ beliefs about and knowledge of their own memory. Participants respond to a series of statements about their memory on 5-point Likert scales. Means of each of the first three subscales were combined to reflect memory self-efficacy (MIA-MSE; Hertzog, Dixon, & Hultsch, 1990) with higher scores indicating higher memory self-efficacy. In addition, the 14-item Anxiety subscale was used to identify memory-related anxieties.

Personality.—Because of the known relationship between personality and subjective memory (see Hertzog & Pearman, 2014 for review), the self-rated NEO-Five Factor Inventory (NEO-FFI; Costa & McCrae, 1992) was used as a measure of personality. Participants rate themselves on a series of statements (e.g., Once I find the right way to do something, I stick to it) on a rating scale of 1 (*strongly disagree*) to 5 (*strongly agree*). The five personality domains measured with the NEO-FFI include Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. Each domain score is reported as a sum of the individual items which have been coded so that higher scores on each scale indicate higher levels of that particular trait. Coefficient alphas ranged from .59 on the Openness scale to .81 on Agreeableness.

Depression.—Participants were administered the 15-item Geriatric Depression Scale (GDS; Sheikh & Yesavage, 1986) to identify depressive symptomatology. Participants respond to 15 yes/no questions about their mood over the past 2 weeks. This scale has been validated for use with young, middle-aged, and older adults (see Guerin et al., 2018; Sheikh & Yesavage, 1986). Scores can range from 0 to 15 with higher scores suggesting higher levels of depression.

Worry.—The Worry Scale (Wisocki, Handen, & Morse, 1986) is a 35-item self-report questionnaire which addresses financial, health, and social concerns that are often associated with aging. Participants rate how often they worry about a variety of items (e.g., I worry that as I get older I will have a serious illness or accident) on a 0 (*never*) to 4 (*more than 2 times per day*) scale. This scale is designed to detect concerns about aging in adults. For this study, the overall composite sum score is reported with higher scores suggesting higher levels of worry (Cronbach's $\alpha = .97$).

Physical health.—Two items from the Multilevel Assessment Instrument (MAI) were administered to measure participants' health (Lawton, Moss, Fulcomer, & Kleban, 1982). The subjective health question used here was "How would you rate your overall health at the present time?" which the participants rated on a 4-point scale from 1 (*poor*) to 4 (*excellent*). Participants also indicated any illnesses they currently have from a list of 22 items (e.g., diabetes, emphysema, arthritis). These items were summed to form a composite with higher scores indicating more current illnesses.

Analyses

Qualitative.—The primary investigator read through all of the qualitative responses to identify thematic categories and then created a coding scheme for each question based on those responses. The open-ended responses were then sorted into these categories by two independent raters. When the original raters disagreed, the consensus was reached through team discussion. Frequency counts are reported for each coded category. Participants were allowed to enter more than one response per question so percentages do not add up to one hundred percent. Interrater reliabilities are reported for initial coding in Table 2.

Quantitative.—Correlations between the quantitative variables were analyzed and described. The yes/no contextual questionnaire items were then used to examine potential group differences between the covariates using *t*-tests. Hedges' *g* is reported for effect size due to the different sample sizes and *p*-values for unequal variances. In addition, zero-order correlations between the qualitatively coded variable endorsements and quantitative covariates are reported.

Results

Qualitative Analyses

Question 1: What do you do when you bump into someone you know fairly well but temporarily cannot remember their name?—Four categories were identified and individual responses were then coded into these categories by the raters (see Table 2). The first category (*admit it*) included themes such as asking for the name or making a joke about it. This category fits with previous findings (e.g., Parikh et al., 2016) that suggest that in adults with normal cognition, the sharing of memory errors can often result in a certain connectedness. The next coded category (*keep going*) included asking a leading question, using a non-specific name, or just keep talking. As with the previous category, this is a fairly adaptive response. The next category (*avoid*) involved participants saying they would avoid the person or leave the conversation. This category, although

not frequently-endorsed, highlights the potential for social isolation that may come with increased memory problems (Mol et al., 2007; Parikh et al., 2016). The final category (*emotionality*) included responses such as crying or getting frustrated. This emotional responses described by a few participants suggest that for a certain segment of middle-age and older adults, experiencing memory failures can be quite devastating (Adams-Price & Gonzales, 2005) and may explain the relationship often found between depression and memory complaints (Hülür et al., 2014).

Question 2: If you are in a conversation and cannot remember a word, what do you do?—Five people responded that this type of memory issue does not happen to them. The other responses to this question fell into similar thematic categories as forgetting a name, including admit it, keep going, leave conversation, and/or become emotional (see Table 2 for examples). The themes here suggest that many people deal with tip-of-the-tongue (TOT) states in a straightforward manner. However, there appears to be a small proportion of people who may respond with more negative coping responses, such as leaving the conversation or becoming emotional. Finding positive coping responses to TOTs may be particularly useful as people age.

Question 3: What other sorts of things have you done when you encountered memory blips? Please list all of the types of things you do or have done in the past.—Several thematic categories were identified and coded (see Table 2). The first two categories encompassed the use of memory strategies including internal strategies, such as retracing one's steps or using associative strategies, and external strategies, such as consulting a planner or asking a spouse to remember. Intentional increased use of memory strategies is a common finding in the compensation literature (Hertzog et al., 2019; Parikh et al., 2016). Similar to forgetting names and words, there was also a category for admitting the issue which included making jokes and just admitting it. This theme is consistent in this study and suggests a certain engagement and commitment to social connectedness which can be conceived as important ways of coping with memory challenges. There were also separate categories for less adaptive coping strategies such as ignoring the issue or doing nothing, trying to hide the issue, and becoming emotional.

Question 4: If you voice a memory complaint, what sort of response do you hope for?—Four of the participants said that they do not have memory complaints, and 5 said that they did not know what type of response they expected. Of the remaining responses, 4 categories emerged in the answers (see Table 2). The first two themes were compassion and humor which again highlight the importance of social connectedness even (or perhaps, especially) in response to memory problems (Moorman, Greenfield, & Lee, 2020). People want to feel that they are seen and heard and have a sense of camaraderie (Parikh et al., 2016). The next theme was wanting help from the person in terms of actually solving the memory problem (e.g., help finding keys). This theme suggests a practicality and problem-solving mentality that has potential to be positive in terms of coping with issues and may also suggest a place for intervention by teaching proactive coping skills. The final theme was denial of the problem and is similar to the avoidance themes of the previous questions.

Question 5: Do you discuss your memory blips with anyone? If yes, with whom?—Sixty people (64%) endorsed talking about their memory issues with someone in their lives, including family only (32%), friends only (25%), family and friends (25%), and miscellaneous and/or multiple others, which included physicians and acquaintances (18%). People tended to choose to talk to family and/or friends when confronted with memory concerns.

Question 6. Are there people with whom you would not or do not talk about your memory blips? If yes, with whom and why?—Twenty-four of the participants (26%) responded “yes” to this question with answers including friends and/or family ($n=8$, 9%) and miscellaneous others ($n=16$, 17%). For the participants who listed family members, the majority said they would not talk to their adult children about their memory failures, with only one participant also mentioning their mother (i.e., no other family members were mentioned). The miscellaneous others category was a combination of coworkers, acquaintances, and so forth.

The next follow-up question asked why people were unwilling to share with the people they listed. Responses to this item were limited and the only theme emerging from the responses received on this question was labeled “privacy”. As can be seen from the examples listed in Table 2, this category revolved around not wanting other people’s opinions (miscellaneous others) or interference (adult children).

Quantitative Analyses

The correlation table with the quantitative variables is detailed in Table 3. Significant positive correlations with MIA – MSE included extraversion and conscientiousness and negative correlations included neuroticism and depressive symptoms. Significant positive correlations with MIA – Anxiety included neuroticism, depression, and worry and negative correlations included extraversion and conscientiousness.

Independent *t*-tests were then used to examine mean differences on the quantitative study variables between the two yes/no interpersonal variables (see Table 4). For the “Do you discuss your memory blips with anyone?” question, two significant differences were found (conscientiousness and MSE). Participants who endorsed not talking to anyone about their memory scored higher on conscientiousness and higher memory self-efficacy. The second yes/no question was “Are there people with whom you would not or do not talk about your memory blips?” and yielded three significant differences, including number of chronic illnesses, worry, and memory anxiety. Participants who endorsed having at least one person with whom they avoided talking had more chronic conditions, higher worry scores and greater memory anxiety than people who said there was no one specific with whom they would avoid speaking about their memory problems.

Correlational analyses were also conducted with the coded variables that had 15% or more of the sample reporting the category (see Table 5). There were only a few significant ($p < .05$) correlations. The report of admitting a word finding difficulty while in conversation was positively correlated with subjective health and negatively correlated with age. That

is, older participants and persons with worse subjective health were less likely to report using admission as a strategy than people with better subjective health and people who were younger. The report of using an internal mnemonic was also significantly correlated with age, such that younger participants were more likely to report using internal mnemonic strategies. Openness was related to two categories of other responses to memory blips. Specifically, participants who reported using internal mnemonic strategies and/or external memory aids scored higher on openness to experience. Participants with more depressive symptoms were less likely to report using internal strategies.

Discussion

This mixed methods cross-sectional study is unique in its effort to expand the understanding of how people respond to memory failures in daily life, particularly in interpersonal situations. Although there is a large body of literature focused on predictors of memory complaints in older adults, there has been only a modicum of work on the context and social situations in which memory problems occur and how people actually cope with them (Buckley et al., 2015; Burmester et al., 2015; Mol et al., 2007; Parikh et al., 2016). This study adds to the memory complaint literature by enhancing what we know about what people actually do when they are confronted with a memory problem as well as to whom they will or will not speak about their complaints.

One major finding regarding the self-reported behaviors involved in coping with memory lapses in social situations (i.e., forgetting a name and forgetting a word) was that participants reported being most likely in both circumstances to just admit their memory lapse and continue forward with the interaction. This strategy was highly reported and was unrelated to any of the covariates which suggests that admitting the lapse is a fairly universal strategy for dealing with an at-the-moment name and word memory failure. This strategy is adaptive in that it allows people to remain engaged in the conversation and maintain connections with people. There were several participants, however, who reported some extreme emotions (e.g., “I get upset and cry”) which suggests that there may be some people who have very negative reactions to common everyday memory failures. This is in line with work that shows the relationship between memory complaints and both anxiety and depression (Hülür et al., 2014). While the number of people responding with emotionality to memory failures was too low in this study to warrant additional complex analyses, future studies should focus on trying to increase our understanding of how memory failures in everyday life may lead to increases in actual complaints and/or emotional distress with certain situations or personality types. This type of distress has the potential to lead to decreased social activity and disengagement (Hill et al., 2018). Another major finding from the memory blip questions is that older participants were less likely to report using admission as a strategy than participants who were younger. This may suggest that with age, people are more likely to try to keep memory slips from being noticed which may stem from age-related stereotypes or concerns about others’ attributions and interferences (Bouazzaoui et al., 2016; Vandermorris et al., 2017). Studies designed to improve how people cope with in-the-moment memory failures may be an interesting addition to the memory intervention literature.

Responses to the open-ended question about the expected response for participants who complain about their memory also had interesting results. Specifically, people mainly reported that they complain about their memory either as a means of receiving compassionate social support or to increase social relatedness. This finding suggests that people may use memory complaints as a way of connecting with peers, receiving social support, and normalizing their experience. Trying to disentangle when a memory complaint is actually diagnostic of memory decline (Niederehe, 1998), when it is a touchstone for this sort of camaraderie with peers (e.g., Parikh et al., 2016), and when it is a representation of memory beliefs (e.g., Hertzog & Pearman, 2014) is an important future direction for this work.

Interesting patterns also emerged on the questions regarding the interpersonal aspects of discussing memory problems. People who were lower in MSE were more likely to report discussing their memory problems with others. This could mean that those with lower self-efficacy were reaching out more to persons in their lives as a way of bolstering their confidence or providing themselves with external support. At first glance, this finding may seem like a positive coping mechanism (i.e., reaching out to others for support), but further research is needed to gain a better understanding into the circumstances in which people reach out to others. That is, reaching out to others to complain about one's memory may be a very different experience than reaching out to others for concrete help or social support.

A second slightly different question asked participants if they had people with whom they were reticent to discuss memory issues. People who endorsed this question were more likely to also report higher worry scores as well as higher scores on memory-related anxiety. Both of these variables also have a clear connection to the reasons people gave for their reticence to share their memory-related issues with certain people. That is, the majority of responses to the "why" of this question were about privacy and not wanting others to get involved or to know their business, including children and friends. This suggests that there may be additional individual differences in this group of people who could shed light on why some people with memory complaints never present to their doctor or to memory clinics (Hurt, Burns, Brown, & Barrowclough, 2012) or why adult children often seem to be the last to know about their parents' memory issues (Nogueras, Postma, & Son, 2016; Roberto, Blieszner, McCann, & McPherson, 2011).

This study has a few limitations. The first limitation is that the open-ended responses were written and not oral. There is certainly a chance that a face-to-face qualitative interview would provide richer results than asking people to handwrite responses. However, Klein and Boals (2010) found that written accounts may be preferable when asking questions that may be perceived as stressful, such as memory failures. Second, the memory failures listed in the questionnaire were not comprehensive and other situational contexts might be included in future studies (e.g., forgetting a newly introduced name, forgetting appointments). Third, these participants were not specifically targeted because of memory complaints, which means this sample could be different than samples in studies focused exclusively on people who have sought help at memory clinics. However, reaching a broader swath of the population is important because many people, even those with memory problems, do not seek help at memory clinics (Hurt et al., 2012). Fourth, the participants for this study were

recruited from an existing volunteer database which is a highly engaged sample which may not be representative of all adults over 55. In addition, samples from recruitment databases such as this tend also toward White and high income but this descriptive information was not collected and, therefore, cannot be analyzed. Exploring these encounters and responses with diverse samples is an important future direction. Finally, the data from this project were collected in the early 2000s. However, there is no scientific evidence that answers to questions like the ones presented here should have changed in the last 20 years. Relevantly, Hertzog and colleagues (2019) found no cohort differences in a longitudinal study of the MIA. In addition, the majority of subjective memory instruments, including the MIA, were developed in the 1980s and 1990s. Therefore, the author suggests that this study provides a still relevant foundation for a next set of questions to be answered in the current day.

Conclusion

This study provides an excellent initial foray into the contextual experiences of memory challenges in daily life. Participants provided a variety of responses which could be viewed as either active (e.g., asking for help) or passive (e.g., avoiding situations). Given the social aspect of memory complaining is one that has only been lightly touched upon in the scientific literature, these findings provide a stepping stone for continued exploration into the advent and care of memory complaints in older adults. Understanding what older adults do when confronted with memory challenge situations has great potential to aid in the development of everyday memory interventions that are focused on real life situations and identifying effective ways to handle memory failures as well as cope with them. Persons reporting not having tools for dealing with everyday memory failures may be at risk for developing sustained memory complaints as well as reducing social contact because of concerns about embarrassment or frustration in these types of situations. Helping older adults find ways to actively deal with in-the-moment memory challenges in daily life, as opposed to more esoteric mnemonic techniques, is clearly an important goal for memory interventionists (e.g., Rodakowski et al., 2018).

Acknowledgements:

The author would like to thank MacKenzie Hughes (Georgia Tech) and Shevaun Neupert (North Carolina State University) for their helpful comments on this paper.

Funding:

This research was supported in part by Training Grant T32 AG00030 from the National Institute on Aging.

References

- Aarts S, van den Akker M, Hajema KJ, van Ingen AM, Metsemakers JFM, Verhey FRJ, & van Boxtel MPJ (2011). Multimorbidity and its relation to subjective memory complaints in a large general population of older adults. *International Psychogeriatrics*, 23(4), 616–624. doi:10.1017/s1041610210002024 [PubMed: 21044401]
- Abrams L, & Davis DK (2016). The tip-of-the-tongue phenomenon: Who, what, and why. In Wright HH (Ed.), *Cognition, language and aging*. (pp. 13–53). Amsterdam: John Benjamins Publishing Company.

- Adams-Price CE, & Gonzales C (2005). The Memory Failure Cause Recall Interview: A Phenomenological Study of Memory Failures in Younger and Older Adults. *Cognitive Technology*, 10(2), 33–39.
- Berk L, Hotterbeekx R, van Os J, & van Boxtel M (2017). Mindfulness-based stress reduction in middle-aged and older adults with memory complaints: a mixed-methods study. *Aging & Mental Health*, 1–8. doi:10.1080/13607863.2017.1347142
- Bouazzaoui B, Follenfant A, Ric F, Fay S, Croizet J-C, Atzeni T, & Taconnat L (2016). Ageing-related stereotypes in memory: When the beliefs come true. *Memory*, 24(5), 659–668. doi:10.1080/09658211.2015.1040802 [PubMed: 26057336]
- Brailean A, Steptoe A, Batty GD, Zaninotto P, & Llewellyn DJ (2019). Are subjective memory complaints indicative of objective cognitive decline or depressive symptoms? Findings from the English Longitudinal Study of Ageing. *Journal of Psychiatric Research*, 110, 143–151. doi:10.1016/j.jpsychires.2018.12.005 [PubMed: 30639919]
- Buckley RF, Saling MM, Frommann I, Wolfsgruber S, & Wagner M (2015). Subjective Cognitive Decline from a Phenomenological Perspective: A Review of the Qualitative Literature. *J Alzheimers Dis*, 48 Suppl 1, S125–140. doi:10.3233/jad-150095 [PubMed: 26402078]
- Burmester B, Leathem J, & Merrick P (2015). Assessing subjective memory complaints: A comparison of spontaneous reports and structured questionnaire methods. *International Psychogeriatrics*, 27(1), 61–77. doi:10.1017/S1041610214001161 [PubMed: 24989800]
- Costa PTJ, & McCrae RR (1992). Professional manual: Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI). Odessa, FL: Psychological Assessment Resources.
- Dixon RA, Hultsch DF, & Hertzog C (1988). The Metamemory In Adulthood (MIA) Questionnaire. *Psychopharmacology Bulletin*, 24(4), 671–688. [PubMed: 3249770]
- Guerin JM, Copersino ML, & Schretlen DJ (2018). Clinical utility of the 15-item geriatric depression scale (GDS-15) for use with young and middle-aged adults. *Journal of Affective Disorders*, 241, 59–62. doi:10.1016/j.jad.2018.07.038 [PubMed: 30096593]
- Hertzog C, Dixon RA, & Hultsch DF (1990). Metamemory in adulthood: Differentiating knowledge, belief, and behavior. In Hess TM (Ed.), *Aging and cognition: Knowledge organization and utilization*. (pp. 161–212). North-Holland. doi:10.1016/S0166-4115(08)60158-2
- Hertzog C, Hülür G, Gerstorf D, & Pearman AM (2018). Is subjective memory change in old age based on accurate monitoring of age-related memory change? Evidence from two longitudinal studies. *Psychology and Aging*, 33(2), 273–287. doi:10.1037/pag0000232 [PubMed: 29658747]
- Hertzog C, Lustig E, Waris A, & Pearman A (2019). Behaviors and strategies supporting everyday memory in older adults. *Gerontology*. doi:10.1159/000495910
- Hertzog C, & Pearman AM (2014). Memory complaints in adulthood and old age. In Perfect TJ & Lindsay DS (Eds.), *Handbook of Applied Memory* (pp. 423–443). London, England: SAGE Publications.
- Hertzog C, Small BJ, McFall GP, & Dixon RA (2019). Age, cohort, and period effects on metamemory beliefs. *Psychology and Aging*, 34(8), 1077–1089. doi:10.1037/pag0000384 [PubMed: 31804113]
- Hill N, Mogle J, Kitko L, Gilmore-Bykovskiy A, Wion R, Kitt-Lewis E, & Kolanowski A (2018). Incongruence of subjective memory impairment ratings and the experience of memory problems in older adults without dementia: A mixed methods study. *Aging & Mental Health*, 22(8), 978–985. doi:10.1080/13607863.2017.1337715
- Hülür G, Hertzog C, Pearman A, Ram N, & Gerstorf D (2014). Longitudinal associations of subjective memory with memory performance and depressive symptoms: Between-person and within-person perspectives. *Psychology and Aging*, 29(4), 814–827. doi:10.1037/a0037619 [PubMed: 25244464]
- Hurt CS, Burns A, Brown RG, & Barrowclough C (2012). Why don't older adults with subjective memory complaints seek help? *International Journal of Geriatric Psychiatry*, 27(4), 394–400. doi:10.1002/gps.2731 [PubMed: 21560161]
- Klein K, & Boals A (2010). Coherence and narrative structure in personal accounts of stressful experiences. *Journal of Social and Clinical Psychology*, 29(3), 256–280. doi:10.1521/jscp.2010.29.3.256

- Lawton MP, & Lawrence RH (1994). Assessing health. In Lawton MP & Teresi JA (Eds.), *Focus on Assessment Techniques: Annual Review of Gerontology and Geriatrics* (Vol. 14). New York: Springer Publishing Company.
- Lawton MP, Moss MS, Fulcomer M, & Kleban MH (1982). A research and service oriented multilevel assessment instrument. *Journal of Gerontology*, 37(1), 91–99. doi:10.1093/geronj/37.1.91 [PubMed: 7053405]
- Luchetti M, Terracciano A, Stephan Y, & Sutin AR (2016). Personality and cognitive decline in older adults: Data from a longitudinal sample and meta-analysis. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 71(4), 591–601. doi:10.1093/geronb/gbu184
- Mol M, Carpay M, Ramakers I, Rozendaal N, Verhey F, & Jolles J (2007). The effect of perceived forgetfulness on quality of life in older adults: A qualitative review. *International Journal of Geriatric Psychiatry*, 22(5), 393–400. doi:10.1002/gps.1686 [PubMed: 17044138]
- Moorman SM, Greenfield EA, & Lee CSH (2020). Perceived hearing Loss, social disengagement, and declines in memory. *Journal of Applied Gerontology*. 10.1177/0733464820909244
- Niederehe G (1998). The significance of memory complaints in later life: Methodological and theoretical considerations. In Loran J (Ed.), *Handbook of Aging and Mental Health: An Integrative Approach* (pp. 417–434). New York: Plenum Press.
- Nogueras DJ, Postma J, & Son C (2016). Why didn't I know? Perspectives from adult children of elderly parents with dementia. *Journal of the American Association of Nurse Practitioners*, 28(12), 668–674. doi:10.1002/2327-6924.12382 [PubMed: 27221639]
- Parikh PK, Troyer AK, Maione AM, & Murphy KJ (2016). The impact of memory change on daily life in normal aging and mild cognitive impairment. *The Gerontologist*, 56(5), 877–885. doi:10.1093/geront/gnv030 [PubMed: 26035897]
- Pearman A, Hertzog C, & Gerstorf D (2014). Little evidence for links between memory complaints and memory performance in very old age: Longitudinal analyses from the Berlin Aging Study. *Psychology and Aging*, 29(4), 828–842. doi:10.1037/a0037141 [PubMed: 25089853]
- Pearman A, & Storandt M (2004). Predictors of subjective memory in older adults. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 59B(1), P4–P6. doi:10.1093/geronb/59.1.P4
- Pearman A, & Storandt M (2005). Self-discipline and self-consciousness predict subjective memory in older adults. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 60B(3), P153–P157. doi:10.1093/geronb/60.3.P153
- Pfeiffer E (1975). A short portable mental status questionnaire for the assessment of organic brain deficit in elderly patients. *Journal of the American Geriatrics Society*, 23(10), 433–441. doi:10.1111/j.1532-5415.1975.tb00927.x [PubMed: 1159263]
- Roberto KA, Blieszner R, McCann BR, & McPherson MC (2011). Family triad perceptions of mild cognitive impairment. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 66(6), 756–768. doi:10.1093/geronb/gbr107
- Rodakowski J, Reynolds CF, Lopez OL, Butters MA, Dew MA, & Skidmore ER (2018). Developing a non-pharmacological intervention for individuals with mild cognitive impairment. *Journal of Applied Gerontology*, 37(5), 665–676. 10.1177/0733464816645808 [PubMed: 27106884]
- Rotenberg S, Sternberg S, & Maeir A (2019). Where did I put my glasses? The lived experience of older adults seeking medical help for perceived memory problems. *Disability and Rehabilitation*, 1–8. doi:10.1080/09638288.2019.1602849
- Sheikh JI, & Yesavage JA (1986). Geriatric Depression Scale (GDS): Recent evidence and development of a shorter version. *Clinical Gerontologist*, 5(1–2), 165–173. doi:10.1300/J018v05n01_09
- Stanley MA, Beck JG, & Zebb BJ (1996). Psychometric properties of four anxiety measures in older adults. *Behaviour Research and Therapy*, 34(10), 827–838. doi:10.1016/0005-7967(96)00064-2 [PubMed: 8952126]
- Vandermorris S, Davidson S, Au A, Sue J, Fallah S, & Troyer AK (2017). “Accepting where I’m at” - a qualitative study of the mechanisms, benefits, and impact of a behavioral memory intervention for community-dwelling older adults. *Aging & Mental Health*, 21(9), 895–901. doi:10.1080/13607863.2016.1181709 [PubMed: 27376167]

Wisocki PA, Handen B, & Morse CK (1986). The worry scale as a measure of anxiety among homebound and community active elderly. *Behavior Therapist*, 9(5), 91–95.

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Table 1.

Memory Context Questionnaire: Items and response types

Items	Response type
What do you do when you bump into someone whom you know fairly well but cannot remember their name?	Open-ended, qualitatively coded
If you are in a conversation and cannot remember a word, what do you do?	Open-ended, qualitatively coded
List all of the types of things you do when you encounter a memory blip?	Open-ended, qualitatively coded
When/if you voice a memory complaint, what sort of response do you hope for?	Open-ended, qualitatively coded
Do you discuss your “memory blips” with anyone?	Yes/No, quantitatively analyzed
If yes, with whom?	Open-ended, qualitatively coded
Are there people with whom you would not or do not discuss your “memory blips”?	Yes/No, quantitatively analyzed
If yes, whom?	Open-ended, qualitatively coded
Why?	Open-ended, qualitatively coded

Table 2.

Example responses and percent endorsements for qualitatively coded open-ended questions about memory issues

Category	% endorsed	Exemplars
What do you do when you bump into someone whom you know fairly well but temporarily cannot remember their name? (<i>interrater reliability</i> = .86)		
Admit it	49%	Most times, I will just ask for their name. I laugh and call it a "senior moment."
Keep going	47%	Keep the conversation going until my memory kicks in Ask question to see if I can get them to say their name Call them "honey" Sometimes, I'll continue on, not saying I forgot. Keep talking and don't use name.
Avoidance	3%	I just ignore them or pretend I don't see them.
Emotionality	4%	I feel inadequate and embarrassed.
If you are in a conversation and cannot remember a word, what do you do? (<i>interrater reliability</i> = .96)		
Admit it	52%	Try to get someone I'm talking to help with the word. Joke about the aging process I say "Help me out here."
Keep going	47%	Change the subject Just keep talking Think of a word like it.
Avoidance	4%	Leave the conversation Mumble a couple of times and then leave the conversation. Attempt to change the subject.
Emotionality	2%	Smile and feel stupid.
Not happen	5%	That doesn't happen to me I can't recall ever having that experience.
What other sorts of things have you done when you encountered "memory blips"? Please list all of the types of things you do or have done in the past. (<i>interrater reliability</i> of .96)		
Internal strategy	18%	Make a word association I'll retrace my steps in my head. Go through the alphabet.
External strategy	35%	Consult planner Ask my husband if he knows where it [lost item] is. Look it up.
Admit it	28%	Discuss it freely Talk about "senior moments" Apologize
Avoidance	12%	Pretend I am not lost. Cover it up. Keep my mouth shut
Emotionality	3%	Get angry. Cussed a little.
Nothing	30%	Nothing specific. Just wait for the memory to come back to me.
If you voice a memory complaint, what sort of response do you hope for? (<i>interrater reliability</i> = .89)		
Compassion	50%	Consideration of my peers "Don't worry about it." Understanding "At our age, we all have memory blips." Patience
Help	26%	Help remembering
Humor	11%	Laugh and call it a "senior moment" Laughter

Category	% endorsed	Exemplars
Denial	2%	Denial that there is a problem
Other	11%	I don't really anticipate a response, I just complain. I don't have many complaints.
Are there people with whom you would not or do not discuss your "memory blips"? If yes, why?		
Privacy	5%	It's none of their [anyone] business I don't believe in sharing info that they [coworkers] could use against me. Because they [children] would become concerned about my mental state

Table 3.

Correlation correlations for quantitative study variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age													
2. Sex (1, female; 0, male)	-.16												
3. Education	-.25*	-.15											
4. MIA – Self-Efficacy	-.06	.16	.11										
5) MIA – Anxiety	-.01	.05	-.20	-.47**									
6) Neuroticism	-.19	.11	-.23*	-.21*	.55**								
7) Extraversion	-.02	.10	.26*	.21*	-.23*	-.39**							
8) Openness	-.32	.13	.38**	.08	-.07	-.02	.17						
9) Agreeableness	.05	.16	.37**	.14	-.14	-.39**	.41*	.05					
10) Conscientiousness	.01	-.04	.21*	.34**	-.32**	-.49**	.32**	.10	.44**				
11) Depressive symptoms	-.04	-.02	-.21*	-.30**	.36**	.64**	-.43**	.06	-.39**	-.51**			
12) Worry Scale total	.02	-.07	-.26*	-.16	.37**	.64**	-.35**	-.05	-.48**	-.46**	.59**		
13) Subjective health	-.10	-.04	.41**	.20	-.15	-.39**	.32**	-.06	.37**	.30**	-.40**	-.37**	
14) Number of illnesses	.22*	-.04	-.39**	-.14	.16	.25*	-.27**	-.03	-.15	-.20	.34**	.29**	-.49**

Note: MIA = Metamemory in Adulthood Scale.

*
p < .05;**
p < .01.

Table 4.

Significant covariate differences on interpersonal questions

<i>Do you discuss your memory blips with anyone?</i>							
Variable	<u>No (n = 34)</u>		<u>Yes (n = 60)</u>		<i>t</i> -test	<i>p</i> [*]	Hedges' <i>g</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Conscientiousness	48.32	7.20	44.45	7.25	2.50	.02	.54
MIA-MSE	3.22	.43	2.97	.44	2.72	.01	.57
<i>Are there people with whom you would not or do not discuss your memory blips?</i>							
Variable	<u>No (n = 70)</u>		<u>Yes (n = 24)</u>		<i>t</i> -test	<i>p</i> [*]	Hedges' <i>g</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Number of illnesses	2.20	1.77	3.00	1.47	-2.18	.04	.47
Worry Scale total	21.67	18.96	35.42	29.18	-2.16	.04	.63
MIA-Anxiety	2.98	.60	3.27	.62	-2.02	.05	.48

Note: MIA-MSE = Metamemory in Adulthood scale – Memory Self-Efficacy composite. MIA-Anxiety = Metamemory in Adulthood scale – Anxiety scale.

* *p*-values calculated with equal variances not assumed.

Table 5.

Correlation coefficients between coded answers and study covariates (N = 94)

Coded category ^a	Age	Sex	Educ	MIA-MSE	MIA-Anxiety	N	E	O	A	C	GDS	Worry	Health	Illness
<i>Forgetting a name actions</i>														
Admit it	.07	.06	.06	.07	-.12	-.12	-.05	.06	-.05	-.14	.00	-.07	.13	-.06
Keep going	-.19	.12	.01	-.09	.09	.03	.00	.07	.18	.12	-.02	-.08	.15	.03
<i>Forgetting a word actions</i>														
Admit it	-.23*	.12	.09	-.04	.20	.02	.03	.07	.10	-.10	.04	.00	.21*	-.15
Keep going	-.14	.05	.03	-.16	-.06	.01	.01	-.01	.12	.07	-.07	.00	.02	-.04
<i>Other memory blip actions</i>														
Internal	-.32*	.07	.19	.01	-.19	-.04	.06	.23*	.11	.002	-.21*	-.03	.04	.02
External	-.06	.11	.10	-.11	-.03	.001	-.08	.30*	.04	-.09	.08	.12	-.02	.01
Admit it	.04	-.10	-.05	-.06	.12	.12	.01	.04	-.22*	-.19	.12	.16	-.03	-.15
Ignore	.07	-.17	.01	.02	.00	-.13	-.10	-.03	.04	-.02	-.15	-.11	.03	.06
<i>Hoped for response when voicing a memory complaint</i>														
Compassion	.04	.04	.17	-.19	.01	-.08	-.05	.05	.20	.05	-.14	.11	.05	.00
Help	-.05	.15	.03	.02	.10	.08	-.05	-.01	.03	-.07	.10	.26*	-.08	.16

Note: Educ = years of education. MIA = Metamemory in Adulthood scale. MSE = Memory Self-Efficacy. N = Neuroticism. E = Extraversion. O = Openness. A = Agreeableness. C = Conscientiousness. GDS = Geriatric Depression Scale – 15. Worry = Worry Scale total. Health = Subjective health. Illness = number of endorsed conditions.

^aResponses are coded Yes = 1, No = 0 as to whether the person mentioned that category.

* p .05.