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**COMPARISON OF NARRATIVE SKILLS IN YOUNG ADULT, MIDDLE AGE ADULT AND
OLDER ADULT**

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INTRODUCTION

Ageing is the time-related deterioration of the physiological functions necessary for survival and reproduction. The phenotypic changes of senescence (which affect all members of the species) are not to be confused with diseases of senescence, such as cancer and heart disease (which affect individuals). Aging is often characterized by changes in cognitive functions which affect the receptive and expressive capabilities of language. Since language plays a significant role in human life (Gilbert, 2000).

Older adults would do worse than younger adults, either because to a lack of attention or working memory that finds it challenging to access and manage narrative elements, or due to a reduced capacity to generate cognitive representations of events and relationships. Because literacy helps compensate for attentional or working memory impairments and is a key factor for the development of metacognitive skills, it would enhance narrative performance, especially in the elderly.

Narrative skills, also known as storytelling skills, are an important part of communication, academic success, and healthy relationships. These skills help us retell events, tell stories, give instructions, comprehend what we read, and more – in organized, efficient, and engaging ways. Narrative skills help us do all of these things in an organized, efficient, and engaging way. Individuals with poor narrative skills may jump all over the place, skip important details, go off on tangents, or go on and on about something. This can have negative consequences. “We need narrative skills to succeed at school or work or in relationships” (Izquierdo, 2019).

The spoken narrative uses the oral language which is mostly used in daily life to establish and maintain social relations while the written narrative employs the written language which is used to decipher and transfer information. Narrative analysis seeks to find the link by analysing and evaluating various parts of the narrative. Spoken language tends to be full of repetitions, incomplete sentences, corrections and interruptions, with the exception of formal speeches and other scripted forms of speech, such as news reports and scripts for plays and films. Having strong narrative capabilities helps construct and analyse comprehension and fluency.

Narrative Analysis is a systematic procedure for the analysis of recording the naturally occurring talk produced in everyday human interaction. Narrative analysis is concerned with the structure, content, and function of stories in written and oral communication (Crossley; 2000, Bamberg; 2012).

John, Veena, George and Rajashekhar (2008) of narrative and procedural discourse in normal young adults and elderly subjects, together with the influence of age, gender and education in the Malayalam speakers provided results which show that the discourse skills alter with the advancing age in all the parameters taken. There was an increase in the number of words, Mean Length of Utterance (MLU). Speaking rate and reduction in the number of the sentences produced in elderly as compared to young adults.

Hegde, Shruthy and Subbarao (2010) evaluated performance of narrative skills in normal young adults and result showed that the repair strategies used were higher in young adults than others.

Thomas and Subbarao (2011) analysed the narrative skills in normal Malayalam speaking geriatrics and middle-aged adults using type token ratio and result showed that as the comparison of trouble sources, repair strategy, type of resolutions and repair sequences geriatrics showed higher scores than middle-aged adults.

Nebu, Thomas, Varghese and Kumaraswamy (2014) analysis of narrative skills in geriatrics and results showed no significant difference between trouble source and type of repair strategies and highly significant difference in repair sequences.

Sunny, Xavier and Kumaraswamy (2015) analysed the repair strategies and trouble sources in geriatrics and results showed highly significant difference between the trouble source, type of repair strategies, repair sequences and resolutions in familiar and unfamiliar task.

Adhikary and Kumaraswamy (2016) did comparison of narrative skills in Bhojpuri speaking geriatrics and young adults. Result showed that as a comparison of trouble sources, repair strategies, type of resolution and repair sequences geriatrics showed higher score than young adults.

Narrative skills analysis refers to a cluster of analytic methods for interpreting texts or visual data that have a storied form. A common assumption of narrative methods is that people tell stories to help organize and make sense of their lives and their storied accounts are functional, and purposeful.

Studies on narrative analysis were conducted in other Indian languages: Kannada (Sruthi & Subbarao, 2011), Malayalam (Thomas & Subbarao, 2011; Nebu & Kumaraswamy, 2012; Sunny & Kumaraswamy, 2014). Previous researches suggest that the ability to comprehend and narrate declines as age advances irrespective of the language used by individuals and there are no differences. Older adults capacity to integrate all narrative elements and to create a mental representation of events and the relations they have between events may decline as age advances. There are only few or limited studies in Malayalam language on narrative skills analysis comparing different age groups of adults. Hence the present study attempts to compare the narrative skills in different age groups of adults ranging from 18- 55 years and above.

REVIEW OF LITERATURE

In humans, Ageing represents the accumulation of changes in a human being overtime and can encompass physical, psychological and social changes. Aging is the process of becoming older, a process that is genetically determined and environmentally modulated (Davis, 2021).

Ageing is a natural phenomenon and is inevitable. As an individual starts aging, there is a gradual wear and tear of one's body systems. Language and communication are no exception to this.

A person's age can be predicted with fair accuracy by speech characteristic including voice tremor, pitch, speaking rate, loudness and fluency (Yorkston, Bougeois & Baylor, 2010).

There is a great deal of variation in the language skills of older adults. The differences are most likely due to the individual's life history, language competence, communication environment, and cognitive abilities.

Some age-related changes in language are due to normal cognitive declines that occur as one grows older, including a decrease in attention, decline in memory, and slower speed of processing information.

A large percentage of older adults at one time or the other will experience problems with word retrieval. They may have difficulty remembering names and may have problems retrieving well-known words.

In general, older adults tend to use simpler sentence structure than younger adults. They tend to use more fragmented sentences in conversation, especially as age increases. Ageing seems to have little or no effect on the manner in which older adults engage in conversation. For the most part, older adults tend to be adept at conversational turn taking, maintaining the topic, and modifying the content of their message depending on the listener's needs.

The majority of older adults maintain basic conversational skills well into the 8th or 9th decade of life unless a pathological condition is present. Aging is a multidimensional process that changes to various extents, in different brain and cognitive functions. Older adults, shows compared to younger ones, shows structural changes in terms of grey and white matter volume reduction or reduced brain connectivity (Montembeault, Doyon, Carrier, Gagnon, Monchi, Lungu, Belleville & Brambati, 2012). These age-related changes are often accompanied by performance decline in additional cognitive processes such as executive function and episodic memory (Gordem & kurczek, 2014).

Narrative Analysis

Narrative skills help us do all of these things in an organized, efficient, and engaging way. Individuals with poor narrative skills may jump all over the place, skip important details, go off on tangents, or go on and on about something. This can have negative consequences. “We need narrative skills to succeed at school or work or in relationships” (Izquierdo, 2019).

Narrative Analysis is a systematic procedure for the analysis of recording the naturally occurring talk produced in everyday human interaction.

Jorgenson and Togher (2009) compared the narrative skills between Traumatic brain injured (TBI) patients and control groups and they found out that, there was a significant difference between participants with and without TBI for all measures in the monologic narrative. In the jointly-produced narrative, there was no significant difference in performance and participation between individuals with TBI and control participants. Participants with TBI demonstrated a significant improvement between the monologic and the jointly-produced task in story grammar and informational content.

In a study of narrative skills in William syndrome (WS) and its neuropsychological correlates, done by Marini, Martellj, Gagliardj, Fabbro and Borgatti (2009) and they compared the narrative skills of WS patient with typical children (TD) and found that WS participants showed visual-spatial deficits but scored within the normal range, according to their mental age, in the linguistic assessment. For the

narrative task, they showed good phonological, lexical and syntactic skills, but their story descriptions were less effective than those produced by the TD group on measures assessing global coherence and lexical informativeness, showing dissociation between macro and micro linguistic abilities.

Conversational Analysis

Conversational Analysis (CA) is a systematic procedure for the analysis of recorded, naturally occurring talk produced in everyday human interaction. The principal aim is to discover how participants understood and responded to one another in their turns at talk and how such turns are organized into sequences of interaction.

CA approach makes use of recording the naturally occurring conversations, which would have taken place even if they had not been recorded. CA occurs in real contexts and is a bottom up, data-driven approach. It aims to describe and explain how the participants displayed their interpretations of each other's talk.

WESTERN STUDIES

Wilkinson (2006) applied conversation analysis to aphasic talk and found that the Conversational Analysis (CA) has been made by researchers drawing on conversation analytic findings into the structure of aspects of ordinary, non-aphasic, talk such as repair organization and turn organization, and indicates some of the ways in which this approach to aphasia has been used within intervention studies and everyday professional practice.

Wetherell, Botting and Ramsden (2007) analysed narrative skills in adolescent subjects with specific language impairment (SLI) and results showed that the group with SLI was poorer on most of the narrative skills.

Feyereisen, Berrewaerts and Hupet (2007) studied the pragmatic skills in beginning stage of Alzheimer's disease (AD) and concluded that person with Dementia of Alzheimer's type (DAT) produced a large quantity of words than manage humans and they benefited from the undertaking repetition.

Beeke, Maxim and Wilkinson (2007) in a study about the usage of conversation analysis (CA) to assess and treat human beings with aphasia introduced about the use of CA as a device for evaluation and remedy in aphasia.

Ramsden (2007) did a study on narratives in adolescents subjects with specific language impairment (SLI) and concluded that the group with SLI was poorer on most aspects of narrative skills.

Taehan, Kanho, Haknoe and Chi (2007) studied conversation analysis for improving nursing dialog and the end result of the find out about provided theoretical backgrounds and simple assumptions of dialog analysis which was influenced by way of ethnomethodology, phenomenology and sociolinguistic. In addition, the traits and evaluation techniques of dialog analysis were illustrated in detail. Finally, how dialog evaluation could assist enhance communication was shown, by examining researches the use of dialog evaluation no longer only for regular conversations however also for tremendous or challenging conversations such as conversations between sufferers with dementia and their professional nurses.

Jorgenson and Togher (2009) investigated the effects of a familiar communication partner on the production of narrative after Traumatic Brain Injury (TBI) and results showed that there were no significant difference participants with and without TBI for all measures in the monologic narrative.

Marini, Martellj, Bagliardj, Fabbro and Bogatti (2009) compared the narrative skills in William syndrome (WS) patient with typical children (TD) and found that WS participants showed visuo-spatial deficits but scored within the normal range, according to their mental age, in the linguistic assessment. For the narrative task, they showed good phonological, lexical and syntactic skills, but their story descriptions were less effective than those produced by the Traumatic disorder group on measures assessing global coherence and lexical informativeness, showing dissociation between macro and micro linguistic abilities.

Murray (2010) studied narrative analysis to distinguish clinical depression(DEP) from early Alzheimer's disease (AD) in elderly people, and they found out significant group differences on the in-formativeness discourse measures. AD participants producing less-informative samples than DEP and control participants. DEP and control groups did not significantly differ on any discourse variable.

Rousseaux, Verigneaux and Kozlowski (2010) analysed the main mechanisms of verbal and non-verbal communication disorders and cognitive relationship with other cognitive difficulties in post-traumatic brain injury (TBI) and concluded that non-verbal communication was impaired by difficulties in using pragmatics and verbal communication correlated with the executive functions, language and behavioural assessment.

Heilmann, Miller, Nockerts and Dunaway (2010) evaluated properties of the narrative scoring scheme (NSS) using narrative retells in young school-age children, the authors concluded that the NSS was significantly correlated with age and each of the microstructural measures.

Ergül (2012) examined the relationship between the complexity of health care needs and language and narrative skills in young children with special health care needs. And the results showed that children with more complex health care needs demonstrated greater weaknesses on expressive language and narrative tasks than children with less complex health care needs and those who were healthy.

Stead, Donovan and Hoffman (2015) investigated the narrative discourse followed a cross time of day on language in healthy aging people and those who with Alzheimer's disease (AD) and result showed that the healthy aging group performed significantly better on cognitive measures across the day than the AD group.

Thomas, Billon and Thomas (2018) studied narrative analysis in Alzheimer's disease (AD) and results showed that the AD patient's proficiency in tests of category fluency and their cultural level effects on narrativity.

INDIAN STUDIES

Mukundan (2006) studied the verbal fluency measure, comparing the performance of younger and older adults. Results suggested that in the situation above 80 years, performance of the task decreased. Because of the time constraint involved.

Mathias (2008) used conversational analysis to study the language characteristics between normal geriatric and middle-aged adult, and her study indicated that geriatrics show increased trouble sources and decreased resolution.

A comparative study done by John, Veena, George and Rajashekhar (2008) of narrative and procedural discourse in normal young adults and elderly subjects, together with of the influence of age, gender and education in the Malayalam speakers provided results which that the discourse skills alter with the advancing age in all the parameters taken. There was an increase in the number of words, mean length of utterance (MLU). Speaking rate and reduction in the number of the sentences produced in elderly as compared to young adults.



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Need for study:

'Older' is a term most often used for people aged 60 plus. Older speakers have larger vocabularies than younger adults. Healthy non-pathological aging is characterized by cognitive and neural decline, and although language is one of the more stable areas of cognition, older people often show deficits in language production, showing word finding failures, increased pauses in speech. Overall, research on language comprehension in older healthy adults show that it is more preserved than language production (Rossi & Diaz, 2017).

Narrative Analysis is a systematic procedure for the analysis of recording the naturally occurring talk produced in everyday human interaction. Studies on narrative skills in geriatric population were conducted in other Indian languages like Kannada (Sruthi & Subbarao, 2011), Malayalam (Nebu & Kumaraswamy, 2012; Sunny & Kumaraswamy; 2014). A study in narrative skills in normal Malayalam speaking geriatrics (60-70 years) and middle-aged adults (40-55 years) was assessed by Thomas and Subbarao (2011). Studies have shown that narrative skills are affected in individuals having neurological disorders, Right hemisphere damage, Dementia, Alzheimer's disease etc. Hence Speech Language Pathologist should be alert and rule out these disorders in older adults.

There are only few or limited research works in narrative skills comparing the performance on narrative skills in young adults, middle aged adults and older adult populations in Malayalam language. Hence the present study compares the narrative skills in three age groups of adults.

METHOD

Aim of study

The aim of the present study is to compare the narrative skills in Native Malayalam speakers:

1. Group I: Young adults (18-35 years),
2. Group II: Middle aged adults (36-54) and
3. Group III: Older adults (55 years and above)

And the study will be two folded

1. To assess and compare the narrative performance among young adults, middle aged adults and older adults for familiar and unfamiliar task
2. To compare narrative performance across group for familiar and unfamiliar task

Participants

60 individuals, whose native language is Malayalam from Kerala and the individuals are divided into three groups.

1. 20 young adults in the age range of 18-35 years
2. 20 middle-aged adults, in the age range of 36-54 years
3. 20 older adults in the age range of 55 years and above

The three groups were matched for age, gender, socio-economic status, education and linguistic background participated in the study. The participants used Malayalam as their native language for communication. Individuals who are having any history of neurological cognitive impairment, speech and language impairment were excluded from the study.

Recording procedure

Test environment:

A quiet room was used for the recoding of speech samples. The participant was seated comfortably on a chair at a distance of one foot from the laptop placed on the table. Participant's speech was recorded using standard laptop (HP NOTEBOOK) with a standard microphone with the help of PRAAT voice recording and analysis software 5.1 version (Boersma & Weenick, 2009). Sampling rate was 44100 Hz and quantization level set at 16 bits.

Narrative sample of 5-10 minutes was recorded for each subject of both familiar & unfamiliar contexts. Familiar contexts involved story narration & past experiences of life (eg: Any traditional festivals, childhood etc.)

Non-familiar contexts involved asking subjects to imagine the specified situation and narrate with respect to different characters/personality.

Data coding and analysis

Obtained data of 5 minutes (hundred utterances were selected) were transcribed and analysed to study types of trouble sources such as phonological, morphological-syntactic, semantic, discourse and also repair strategies such as repetition, unrelated, elaboration, reduction and substitution along with the complexity and success of resolution like most successful, successful and unsuccessful and type token ratio using the systematic procedure (Orange, Lubinski & Higginbotham, 1996).

Analysis of trouble sources, repairs and resolutions

According to the guidelines by Orange, Lubinski and Higginbotham (1996), the data was analysed to study the trouble sources, repairs, along with complexity and success of resolutions. Trouble sources (TS) were divided into phonological, morphological-syntactic, semantic, discourse and other trouble sources. The categories for describing repair types were repetition, elaboration, reduction, substitution and

unrelated. Repair resolutions were analysed as most successful, successful and unsuccessful. Repair complexity was coded as simple or complex.

Analysis of type token ratio

The data was analysed in terms of Type Token Ratio (TTR). Based on the classification given by Yule (2002), open class words (content words) like nouns, verbs and adjectives and closed class words (functional words) like conjunctions, prepositions, articles and pronouns were used.

According to Wren, Martin and Rao (2008) closed and open class words were identified the total number of words; total number of different words and type token ratio of each category were calculated using the ratio:

$$\text{TTR} = \text{Total number of different words} / \text{Total number of words}$$

Statistical analysis

ANOVA test was carried out to determine if there is any significance difference in the average values of:

- a. Repair, Resolution and Trouble source among Familiar and Unfamiliar tasks between three groups
- b. Closed class word and Open class word among Familiar and Unfamiliar tasks between three groups.

RESULTS AND DISCUSSION

The study was to compare the narrative skills in three age groups of adults who are native Malayalam speakers. Using appropriate statistical methods, the mean score values were obtained and are mentioned below:

Table 4.1:

Showing the mean score values of Repair, Resolution and trouble sources on familiar and unfamiliar tasks in young adults, middle aged adults and older adults.

Parameters		Groups	n	Mean	SD	t value	P value	Significance
Young adults	Repair	Familiar	20	6.15	1.81	4.64	<0.001*	HS
		Unfamiliar	20	8	2.08			
	Resolution	Familiar	20	4.9	1.48	4.21	<0.001*	HS
		Unfamiliar	20	6.2	1.64			
	Trouble source	Familiar	20	9.35	1.87	3.8	0.001*	HS
		Unfamiliar	20	11.15	2.43			
Middle age adults	Repair	Familiar	20	6.65	1.87	4.64	<0.001*	HS
		Unfamiliar	20	8.5	1.96			
	Resolution	Familiar	20	4.5	1.79	2.62	0.017*	HS
		Unfamiliar	20	5.9	2.22			
	Trouble source	Familiar	20	9.2	2.65	5.11	<0.001*	HS
		Unfamiliar	20	10.55	3.35			
Older adults	Repair	Familiar	20	7.2	1.54	9.13	<0.001*	HS
		Unfamiliar	20	8.75	1.29			
	Resolution	Familiar	20	5.1	1.59	9	<0.001*	HS
		Unfamiliar	20	6.9	1.25			
	Trouble source	Familiar	20	11.35	2.23	7.62	<0.001*	HS
		Unfamiliar	20	13.15	2.08			

Figure 4. 1:

Showing the mean score values of Repair, Resolution and trouble sources on familiar and unfamiliar tasks in young adults, middle aged adults and older adults.

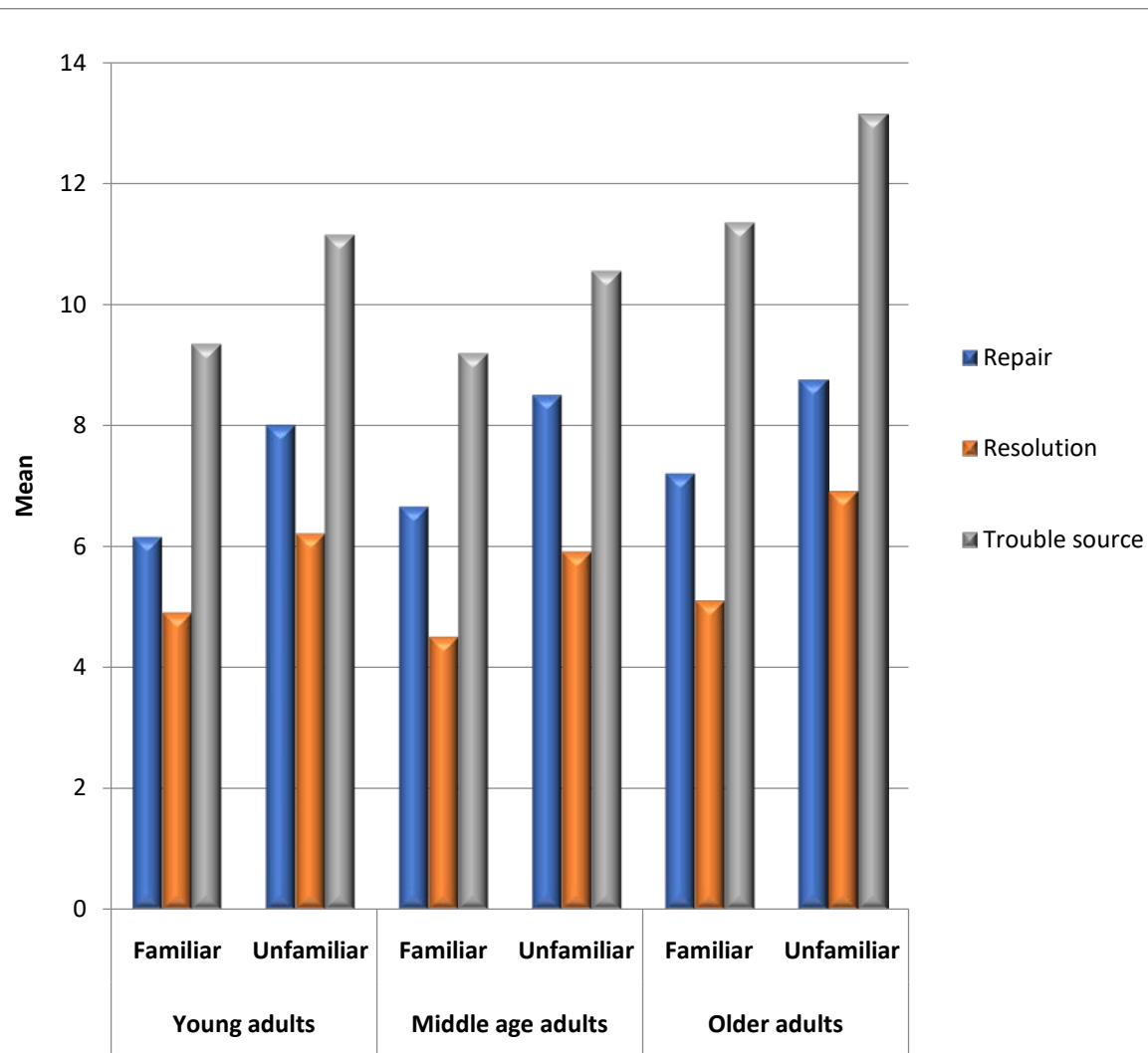


Table 4.1 and figure 4.1 show that there is a highly significant difference ($P = <0.001$) in the performance of young adults, Middle aged adults and older adults for familiar versus unfamiliar task. The three group of adults performed differently on repair, along with the complexity and success of resolution and trouble sources.

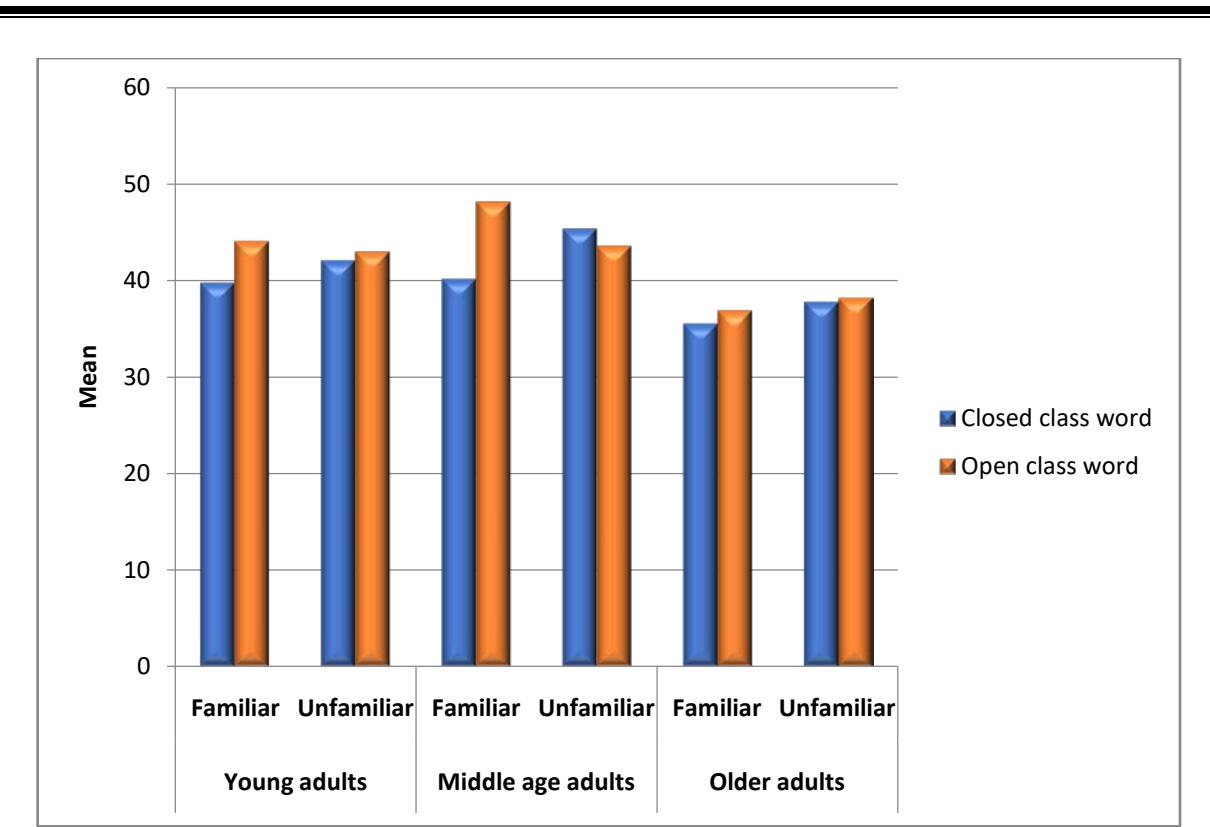
Table 4.2

showing the mean score values of closed class words and open class words for familiar and unfamiliar tasks in young adults, middle aged adults and older adults.

Parameter		Groups	n	Mean	SD	F value	P value	Significance
Closed class word	Familiar	Young adults	20	39.75	4.13	10.185	<0.001*	HS
		Middle age adults	20	40.15	3.47			
		Older adults	20	35.5	3.17			
	Unfamiliar	Young adults	20	42.05	5.53	13.065	<0.001*	HS
		Middle age adults	20	45.35	4.58			
		Older adults	20	37.75	3.89			
Open class word	Familiar	Young adults	20	44.05	5.41	25.069	<0.001*	HS
		Middle age adults	20	48.15	5.64			
		Older adults	20	36.85	4.15			
	Unfamiliar	Young adults	20	42.95	4.29	12.507	<0.001*	HS
		Middle age adults	20	43.55	3.55			
		Older adults	20	38.15	3.33			

Figure 4.2

Showing the mean score values for open verses closed class word in familiar and unfamiliar task in Young adults, middle aged adults and older adults.



On examining the table 4.2 and figure 4.2 it can be inferred that there is highly significant difference in the performance of three groups in familiar and unfamiliar tasks on closed class words verses open class words.

DISCUSSION

At the biological level, ageing results from the impact of the accumulation of a wide variety of molecular and cellular damage over time. This leads to a gradual decrease in physical and mental capacity, a growing risk of disease, and ultimately death. Narrative analysis is no longer the province of literary study alone but it has penetrated all the human sciences, and practicing professions. The various methods reviewed are suited to different kinds of projects and tests, but each provides a way to systematically study personal narratives of experience.

Critics argue that narrative research can reify the interior “self”, pretend to offer an “authentic” voice- unalloyed subjective truth, and idealise individual agency (Bury, 2001).

The result of the present study indicates that the performance of older adults, middle aged adults and younger adult population can be distinguished from one another using narrative skill analysis which is in accordance with the studies in Malayalam language (Thomas & Subbarao, 2009; Nebu & Kumaraswamy, 2012; Sunny & Kumaraswamy; 2014) that Malayalam speaking geriatrics showed higher scores in the number of trouble sources, repair strategies, type of resolution , types of resolutions and repair sequences . The results of the present study is contradicting to the study done in Kannada speakers by Hegde, Sruthy and Subbarao (2010) that the number of trouble sources and repair strategies used were higher in young adults then the middle aged and geriatric population.

The comparison of young adults, middle age adults and older adults using type token ratio revealed that there was highly significant difference in the unfamiliar task of both open and close words in older adults. This is in accordance with the study done by Mahendra & Raksha (1994) indicating less generative naming abilities in aged people.

The technique of narrative analysis provides detailed description which can be clinically used. The values reported in this study are based on hundred consecutive utterances or sentences. It suggested that further studies can be carried out in different language and cultural groups to understand more detail regarding the phenomenon of narration of language.

SUMMARY AND CONCLUSION

The present study was taken with the aim of to investigate the performance of narrative skills in 18-35 years young adults, 36-54 years Middle aged adults and older adults (55 years and above). The individuals were asked to narrate about a familiar topic and an unfamiliar topic. A quite room was selected for recording purpose. Conversational sampled were recorded in PRAAT voice recording software 5.1 Version (Boersma & Weenick, 2009). Obtained data of 5 minutes were transcribed and analysed to study types of trouble sources such as phonological, morphological-syntactic, semantic, discourse and also repair strategies such as repetition unrelated, elaboration, reduction and substitution along with the complexity and success of resolution like most

successful, successful and unsuccessful and type token ratio using the systematic procedure according to the guidelines of Orange, Lubinski and Higginbotham (1996).

The result of the present study reveals that as the comparison of trouble sources, repair strategy and resolution geriatrics showed higher scores than younger adults and middle-aged adults. The comparison of young adult and geriatrics using type token ratio reveals that there is significant difference in the unfamiliar task of both open and close words in adults. The elderly or older adults have more difficulty on narrative skills. Therefore, during assessment and setting therapeutic goals for intervention, their cognitive and linguistic needs have been considered by SLPs.

To conclude, communication problems are highly prevalent in older adult population. These problems will implicate on their quality of life. Probably most of the older population at maximum risk for medical conditions like stroke, Parkinson's disease, Alzheimer's or Dementia. Forgetfulness can be a normal part of ageing too. As people get older, changes occur in all parts of the body, including the brain. As a result, some people may notice that it takes longer to learn new things; they don't remember information as well as they did.

Narrative analysis is a good tool which can be used for both assessment and treatment of language disordered population, irrespective of age group in a diverse culture ranging in differences in languages, education levels, place, geographic location, socio economic status etc., there is a need to understand the narrative skills of the normal elderly in the Indian settings and thus form a normative database for the language disordered population. Analysis of narrative skills can also be used among bilingual communities, as it helps to know the deficits across languages.

Limitations of the study:

- Limited sample size

- The present study attempted to assess narrative skills in one particular dialect in Malayalam language.

Future trends

- Sample size can be increased
- Comparison of narrative skills in children with language disorders with typical children in different age groups.

REFERENCES

Adhikary, A. K., & Kumaraswamy, S. Narrative skills in Bhojpuri speaking geriatric and young adults. *Strength for Today and Bright Hope for Tomorrow*; 20: 6

Babaei, Z., Anaraki,Z G.,& Bakthiari, B.M., (2019). Discourse in aging: Narrative and Persuasive, *Dement Neuropsychol*; 13(4):444-449

Beeke, S., Maxim, J., & Wilkinson, R., (2007). Using Conversation Analysis to Assess and Treat People with Aphasia, *Seminar in Speech and Language*; 28(2), 136-147.

Bernst, R. S., Haendiges, A. N., Mitchum, C. C., & Sandson, J. (1997), Verb retrieval in Aphasia, *Relationship to sentence processing Brain and Language*; 56, 107

Boersma, P., & Weenick, D. (2009). PRAAT

<http://www.soft82.com/download/window/praat/>

Bury, M. (2001) "Illness narratives: Fact or fiction", *Sociology of Health and Illness*; 23(3),263-285.

Busacco, D. (1999). Let's talk, *American Speech and Language Association* ;72, 4950.
Retrieved from <http://www.asha.org/uploadedFiles/publications/archive/0499ashamag.pdf>

Busacco, D. (1999). Cited in Fausti, S. A., Wilmington, D. J., Helt, V. P., Helt, J. W., & Martin, D, K. (2005). Hearing health and care: The need for improved hearing loss prevention and hearing conservation practices, *Journal of rehabilitation research & development*; 42, 45-62.

Davis, C. P. (2021, March 29). *Medical definition of aging*. MedicineNet. Retrieved October 2, 2021, from <https://www.medicinenet.com/aging/definition.htm>.

Dipper, L.T., &Pritchard, M. (2017) Discourse: Assessment and Therapy, *Advances in speech-language Pathology*. 69894

Eme, E., Lacroix, A., & Almecia, Y. (2010). Oral narrative skills in French adults who are functionally illiterate: linguistic features and discourse organization, *Journal of Speech language hearing research*; 5, 1349-1370.

Ergül, C. (2012). Language and Narrative Skills in Young Children with Special Health Care Needs. *Eurasian Journal of Educational Research*, 46, 63-80.

Feyereisen, p., Berrewaerts, j., & Jupet, m. (2007). pragmatic skills in the early stages of Alzheimer's disease: an analysis by means of a referential communication task. *international journal of language & communication disorders*, 42(1), 1-17.

Gilbert, S. F. (2000). An Introduction to Early Developmental Processes. In *Developmental Biology. 6th edition*. Sinauer Associates.

Gordon, J. K., & Kurczek, J. C. (2014). The ageing neighbourhood: phonological density in naming. *Language, Cognition and Neuroscience*, 29(3), 326-344.

Heilmann, J., Miller, J. F., Nockerts, A., & Dunaway, C. (2010). Properties of the narrative scoring scheme using narrative retells in young school-age children.

Izquierdo, M. M., & BabySparks. (1970, February 20). *Narrative skills: What are they & how do they develop?* BabySparks. Retrieved October 2, 2021, from <https://babysparks.com/2019/02/20/narrative-skills-what-are-they-how-do-they-develop/>.

John, S., Veena, K. D., George, A., & Rajashekhar, B. (2008). Spoken Discourse in Normal Young Adults and Elderly: Influence of Age, Gender and Education in Malayalam Speakers. *Paper presented at the ISHA Conference*, Mangalore, February 1-3.

Jorgenson, M., & Togher, L. (2009). Narrative after traumatic brain injury: A comparison of monologic and jointly-produced discourse. *Brain Injury*. 9, 727-740.

Korolija, N. (2000). Coherence-inducing strategies in conversations amongst the aged., *Journal of Pragmatics*; 32, 425-462.

Labov, W. (1972), *Language in the Inner City*; Philadelphia: University of Pennsylvania Press.

Mahendra, N., & Raksha, H. R. (1994). Generative naming in the Elderly: Evidence of an Age-Related Decline, *The Journal of Indian Speech and Hearing Association*; 52-55

Marini, A., Martellj, S., Gagliardj, C, Fabbro, F., & Borgatti, R. (2009). Narrative Language in Williams Syndrome and its neuropsychological correlates, *Journal of Neurolinguistics*; 2, 97-111.

Mathias, C. S. (2008). Conversation analysis: A Comparison between normal geriatrics and middle-aged adults. Unpublished master's Dissertation, Mangalore University, Mangalore.

Mohanlal, S., Sharada, B. A., Fatihi, A. R., Gusain, L., Bayer, J. M., Ravichandran, S. M., & Thirumalai, S. Narrative Skills in Geriatrics Malayalam Speakers.

Montembeault, M., Joubert, S., Doyon, J., Carrier, J., Gagnon, J. F., Monchi, O., & Brambati, S. M. (2012). The impact of aging on grey matter structural covariance networks. *Neuroimage*, 63(2), 754-759.

Mukundan, G. Verbal fluency measures: A comparative study of the performance of young and older English-speaking adults. *Osmania Papers in Linguistics*, 41.

Murray, L. (2010). Bilingual Aphasia: A Theoretical and Clinical Review, *American Journal of Speech-Language Pathology*; 17, 299-317.

Nebu, A., Thomas, D.E., Varghese,J.S., & Kumaraswamy (2014). Narrative skills in geriatrics Malayalam speakers, *Language in india*, 14:4, 131-138

Nicholas, M., Obler, L., Albert, M & Goodglass, H (1985) *cortex*, 21: 4; 595-606

Orange, J. B., Lubinski, R. B., & Higginbotham, D. J. (1996). Conversational Repair by Individuals with Dementia of the Alzheimer's Type. *Journal of Speech and Hearing Research*, 39, 881-895.

Rabidan, O.J. (1996). Narrative speech in the elderly: Effects of age and Education on telling stories, *international journal of Behavioural Development*, 19:3, 669-685

Randall, L. (1999). Narrative intelligence and the novelty of our lives. *Journal of Aging Studies*, 13(1), 8-18.

Rossi, E., & Diaz, M. (2016). How aging and bilingualism influence language processing: theoretical and neural models. *Linguistic approaches to bilingualism*, 6(1-2), 9-42.

Rousseaux, M., Verigneaux, C., & Kozlowski, O. (2010). An analysis of communication in conversation after severe traumatic brain injury, *European Journal of Neurology*; 17 922-929.

Shrinavasacharya. (2008). Form and function of verbal narratives. Unpublished Doctoral Thesis, Central institute of Indian languages, Mysore University, *Language in India*.

Stead, A., Donovan, N., & Hoffman, P. (2015). Effect of time of day on language in healthy ageing and Alzheimer's disease. *Nursing older people*, 27(3).

Sunny, S.V., Xavier, A.M., & Kumaraswamy (2015). Narrative analysis in malayalam speaking geriatrics, *Language in India*. 15(5)

Thomas, P., Billon, R., & Hazif-Thomas, C. (2018). Narrative analysis in Alzheimer's disease. *Psychology in Russia: State of the Art*, 11.

Westby, C. E. (1990). The Role of the Speech-Language Pathologist in Whole Language, *Language, Speech, and Hearing Services in Schools*; 21, 228-237.

Wetherell, D., Botting, N., & Ramsden, G. C. (2007), Narrative in adolescent specific language impairment (SLI): a comparison with peers across two different narrative genres, *International Journal of Language and Communication Disorders*; 5, 583-605.

Wilkinson, R. (2006). Applying conversation analysis to aphasic talk: From Investigation to intervention, *Revue française de linguistique appliquée*; 11, 99

Wren, P. C., Martin, H., & Rao, P. (2008). *High School English Grammar and composition.*;6-106, New Delhi: S. Chand.

Yi. M., & Yih B S. (2006). A conversation analysis of communication between patients with dementia and their professional nurses, *Tachan Kanho Hakhoe Chi*; 36(7), 1253-64.

Yorkston, K. M., Bourgeois, M. S., & Baylor, C. R. (2010). Communication and aging. *Physical Medicine and Rehabilitation Clinics*, 21(2), 309-319.

Yule G. (2002). *The study of language* second edition. Cambridge, UK: Cambridge University Press.

APPENDIX

CONSENT FORM

I hereby give my consent for my participation in the project entitled: “ comparison of Narrative skills in Malayalam speaking young adults, middle-aged adults and older adults”.

"I understand that the person responsible for this project is: Mr.SARATHLAL, under the guidance of Mrs. VINI ABHIJITH GUPTA".

He has explained that these studies are part of a project that has the following objective: to gather voice recordings of narration of a familiar and unfamiliar task. He has explained the procedures to be followed.

It has been explained to me that there are no risks involved in participation of this experiment. Only Mr.SARATHLAL will have access to the data collected for this study; and that all data associated with this study will remain strictly confidential. SARATHLAL, under the guidance of Mrs. VINI ABHIJITH GUPTA, has agreed to answer any enquiries that I may have concerning the procedures.

I understand that I may discontinue this study at any time I choose without penalty.

Signature of Subject: _____ Date: _____

Signature of Project Investigator: _____ Date: _____

Signature of Project Supervisor: _____ Date: _____

Definition of TS, RP, RS and Degree of complexity of RS based on Orange et al., (1996).

Trouble sources (TS): related to speaking, hearing or understanding problems, represent and identity problems in interaction between partners, relate to an incongruence of the intent and the understanding between a speaker and listener and may result from the difficulties in the output of the speaker and may lie with mishearing by the listener, can be related to phonological, morphological/syntactic, lexical, discourse or other disturbances.

Phonological: Problem with mispronunciation “Slip of tongue” and poor knowledge of sound and sound combinations.

Morphological/ Syntactic: Disturbance to the rule system of the grammar and syntax such as problem in time and possession markers, agreement among all constituents and word order problem.

Semantics: Disturbances related to lexical access, word recall and word retrieval and accurate and known word use.

Discourse: Difficulties related to listener's apparent comprehension of topic content (i.e accuracy, initiation,, maintenance and change); shared knowledge (i.e Clarity and relevance); and cohesion (i.e. Referencing problems within and across utterances).

Others: Trouble sources that cannot be unambiguously classified; include abandoned or incomplete utterances, utterances that remain unrepaired, or utterances where there is no indication in the repair initiator of the repair as to nature of the trouble sources also include the repetition of Trouble source as the repair activity.

Repairs (RP): Effort by a speaker or listener to remedy trouble sources; represent collaborative activity where information in prior utterances is repeated or modified; may involve one or multiple turn before they are completed.

Repetition: All of the part of the trouble sources utterance (s) is repeated and where change in form, content, intent and function and prosodic features are not appropriate to the listener.

Unrelated: A participant does not respond to the repair initiator, produces an unintelligible word or utterance(s), or provide a response unrelated in content to the trouble source.

Elaboration: Include additions, specification or expansion of meaning with respect to trouble sources; new information is conveyed.

Reduction: Involve the deletion of meaning that appeared in speaker's trouble sources; include utterances in elliptical form, confirmation and denial responses and utterances that indicate that speaker does not know answer to specific question.

Substitution: Contain element that are similar in meaning to those in trouble sources and include the use of alternate but equivalent form of meaning or change in grammatical/ syntactical form without altered meaning.

Resolution (RS): Outcome measure of the repairing process; two parameter measured on an ordinal scale; (a) the scale of successful repair (b) the simplicity or complexity of repair; degree of success is measured by (a) whether or not the trouble source is repaired, and (b) whether single or multiple repair initiators and repair are used; a trouble source is repaired if partner continue on topic or change or shift topic using a appropriate topic manipulations.

Most successful: Comprises a single trouble sources,, repair initiator, and repair, or a single trouble sources and repair, and no repair initiator,Partner continue with the conversation on topic with conversation governed movement to related or new topic.

Successful: More than one repair initiators and repair are used to successfully repair a single trouble sources.

Unsuccessful: Trouble sources are not repaired with single or multiple repair initiator and repairs.

Complexity level: This is defined according to the presence of embedded or secondary trouble sources in the TSR sequence.

Simple: This contains a single trouble source.

Complex: This contains a primary trouble source and one or more embedded trouble sources; primary and embedded source each have their own associated repair initiators and repairs, embedded trouble source may arise from the production of misperceived or misunderstood repair initiators or repair associated with the primary trouble source.

