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## Comparison of Oral and Written Confrontation Naming in Typical Bilingual Young and Middle Aged Adults

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Abstract: Human communication is a social interaction process. It is an essential part of our daily life. It is a process of creating, exchanging, sharing ideas, information, opinions, facts, feelings and experiences between a sender and a receiver. Language is the most powerful tool of communication. Its function includes communication of ideas, thoughts, opinion, emotional expression, social interaction, using the power of sound, recording facts and expression of identity. Oral and written confrontation is the ability to retrieve words by, which entails showing an object or a line drawing of an object to a patient and requesting the correct verbal and written label. Presently, the lack of data has hinged the knowledge of confrontation naming in Tamil-English bilinguals. Hence, the present study aims to explore oral and written confrontation in typical bilinguals with the objective of analysing the data among these young adults across 18 to 35 years and middle aged adults of 36 to 54 years of age. The results revealed that the written and oral confrontation naming in both English and Tamil languages were better than the middle aged adults .On cross comparison, both young and middle aged adults exhibited more errors in their native language than their non native language and oral confrontation naming was better than written confrontation naming in both the languages for young and middle aged bilingual adults.

Keywords: oral confrontation naming, written confrontation naming, ageing, bilinguals, native and non-native language.

#### I. INTRODUCTION

Communication in general refers to the exchange of ideas with each other through verbal or nonverbal means Lunenberg (2010) agrees with them that communication has its root in Latin from the word communis where 'common', which suggests that there must be a common understanding of the message between the source and the receiver concerning the message being communicated. Language is a means of communication. In the words of Noam Chomsky, language is "a set of (finite or infinite) sentences, each finite in length and constructed out of a finite set of elements."

Language processing is the part of the cognitive ability which is a process of encoding, converting, storing and extracting the input language information. Many studies show that bilinguals have stronger language processing functions than monolinguals. Macnamara (1967) proposes that a bilingual is anyone who possesses a minimal competence in only one of the four language skills, listening comprehension, speaking, reading and writing, in a language other than their mother tongue. For monolinguals, the choice of target words only needs to be made between semantically related words in the same language. For bilinguals, the burden of the target word selection mechanism will be greatly increased. Researchers created a variety of assessments and remedial strategies to assess these challenges and confrontation naming was one of them. This gave rise to management choices for people who struggle with naming.

Confrontation naming is the ability to measure the usage of single-word performance by multifaceted retrieval .The ability to name objects or abstract entities is an essential feature of speech and language, being commonly considered a central component of normal neurologic function. Retrieving the correct word that denotes a specific something relies on an orchestrated sequence of brain processes, ranging from perception of a stimulus to the physical articulation of the sounds used to speak or write its name.

The process of naming most commonly occurs during discourse, when it is constantly required to retrieve abstract concepts to either understand or deliver a message, or by the need to identify an object perceived in the environment. Thus, naming can relate to an object that was seen, smelled, touched, heard, tasted or any combination of these modalities. In addition to the normal visual–perceptual function, successful naming requires effective semantic and phonological processing (Bowles, 1993) functions that are highly indicated in the frontal and temporal regions for memory, retrieval and executive functions.



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Stimulus processing results in the recognition of the stimulus as a familiar entity and involves retrieving words associated with a visual stimulus. This process is conducted in four stages. In the first stage (perceptual), a pictorial image is examined for correct recognition of the stimulus. In the second stage, the semantic representation of the stimulus is activated, followed by label retrieval in the third stage; retrieving the phonological representation that corresponds to the semantic representation. The final stage is motor programming, where the articulatory systems are activated and consequently lead to naming. Confrontation naming tests have numerous advantages, such as easy administration and scoring as well as high test-retest reliability (Herbert et al., 2008; Mayer & Murray, 2003). Tsang and Lee (2003) found the effect of ageing on confrontational naming ability in 30 young age group and 30 to the old age group using Chinese Naming Test (CNT) and the results indicated that younger people performed much better than older people on the test in terms of accuracy as well as response latency which may result from the different rates of selective changes in various cognitive functions among these elderly. No gender difference in performance on the test was observed. The decline in naming ability with ageing may be multifactorial. Thomas et al. (2000) conducted research on how ageing affects written and oral confrontation naming in Kannada and English Speaking individuals. The study includes participants between the ages of 25 and 85, and the findings showed that naming response accuracy often decreased with age. In both the written and spoken forms of naming, semantic errors were more noticeable in the older age groups. Across all age groups, it was found that Kannada written naming was superior to English written naming, highlighting the significance of orthographic regularity in naming. The study also provide evidence for how naming responses vary depending on the modality utilised for an irregular language.

Edmonds and Kiran (2004) researched on confrontation naming and semantic relatedness judgement in 23 Spanish/English bilinguals using confrontation naming task and semantic relatedness questionnaire and concluded that significant differences in naming were seen between groups and semantic relatedness task, no significance was observed.

Laxman (2019) studied oral and written confrontation naming in 40 typical bilinguals, who had Malayalam as native language and English as non-native language results revealed that Malayalam written naming was found to be better than English. Highly significant difference was obtained on cross comparison between both the languages.

#### **II. METHODOLOGY**

#### A. Aim And Objective

The aim of the study was to analyse the effect of aging on the accuracy and type orthographic responses in oral and written naming task in bilingual individuals across age groups. Surprisingly little research has been done to support the efficacy of oral and written confrontation in typical Tamil-English bilingual young and middle-aged adults, effects of aging in native and non-native language. Hence, the need of this study arises.

#### B. Subject

20 individuals with Tamil as native language and English as non-native language were chosen and divided into two groups .

- *1)* 10 young adults in the age range of 18-35 years.
- 2) 10 middle aged adults in the age range of 36-54 years.

All individuals were proficient in using both the languages for 10 years minimum. The study excluded participants who had a history of speech, hearing, neurological, psychological or any other known organic deficits.

#### C. Test Material

Twelve picture cards depicting nouns (black and white) with size  $5^{"} \times 7^{"}$  selected from "Manual on Developing Communication Skills in Mentally Retarded Individuals" by Subbarao (1998) were used to elicit responses from individuals.

#### D. Procedure

There were two methods used to collect the data: 1) In a well-illuminated, soundproof room with minimal interruptions, one picture was shown to an individual at a time. An individual was required to name the picture and identify it verbally in Tamil , their native language, while simultaneously written in English, their second language. 2) Task 1's procedure was followed exactly by switching simultaneous naming of confrontations orally in a non-native language (English) and written in native language (Tamil). A laptop (MacBook Air) and microphone were positioned in front of the subject to record all oral responses. Oral confrontation naming responses were recorded using PRAAT voice recording with analysis software 6.2.17 version (Boersma & Weenick,2022). Sampling rate was 44100 Hz and quantization level set at 16 bits.. Written responses were recorded in a response sheet. The collected responses were transcribed for further analysis.



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#### **III.RESULTS AND DISCUSSION**

The aim of the study was to compare the effect of aging in oral and written confrontation naming in bilingual young and middle aged adults . The results of the study are discussed below:

The individuals across age group exhibited various types of errors such as semantic errors, spelling errors (Grapheme Phoneme Correspondence, GPC) and no responses.

 Table 1. Showing mean , standard deviation and p value of written and oral confrontation naming in English and Tamil for young and middle aged adults .

			n	Mean	S.D.	"t"	p value	Significanc e
English	Written confrontation naming	Young adults	10	10.9	0.9	0.62	0.545	NS
		Middle aged	10	10.6	1.3			
	Oral confrontation	Young adults	10	11.1	0.9	0.79	0.439	NS
	naming	Middle aged	10	10.7	1.3	0.79	0.439	INS
Tamil	Written confrontation naming	Young adults	10	9.4	0.8	0.16	0.877	NS
		Middle aged	10	9.3	1.8			
	Oral confrontation naming	Young adults	10	10.0	0.9	0.67	0.513	NS
		Middle aged	10	9.6	1.6			

Fig.1. Showing effect of aging in oral and written confrontation naming in young and middle aged bilingual adults .



From Table 1 and Fig 1, it is evident that the mean scores of written confrontation naming was 10.9, oral confrontation naming was 11.1 in English and written confrontation naming was 9.4, oral confrontation naming was 10.0 in Tamil for young bilingual adults whereas the mean sores of written confrontation naming was 10.6, oral confrontation naming was 10.7 in English and written confrontation naming was 9.6 in Tamil for middle aged bilingual adults. On cross comparison, young bilingual adults performed better than middle aged bilingual adults, both exhibited more errors in their native language and oral confrontation naming was better for young and middle aged bilingual adults among both the tasks were non significant.



#### A. Discussion

The objective of the present study was to access the effect of aging on the accuracy and type orthographic responses in oral and written naming task in 20 typical Tamil-English bilingual young and middle-aged adults. All individuals were proficient in using both the languages for 10 years minimum. The study excluded participants who had a history of speech, hearing, neurological, psychological or any other known organic deficits.

The results of current study revealed that the young bilingual adults performed better than middle aged bilingual adults in oral and written confrontation naming tasks. The poor performance of the middle aged adults in both the tasks explains the effect of aging. The decrease in performance of Tamil, native language confrontation naming in young and bilingual adults can arise due to effect of increased average word length in Tamil. For example, the English word "pixel" has a specific Tamil translated word i.e., 山上 安国國法医 /p^dattunukku/. Thereby, arising the difficulty to use longer Tamil words more frequently.

Overall both young and middle aged adults exhibited more errors in their native language than their non native language can be attributed to the recent trends in English language usage as a marked feature of cultural, technological and societal demands. The usage of English, non native language as medium of communication, instruction, influence of media by both young and middle aged bilingual adults may have a positive impact on better performance in oral and written confrontation naming tasks than native language . Similar finding were reported by Laxman (2019) in oral and written confrontation naming in typical Malayalam English bilinguals.

From the results, it can be inferred that oral confrontation naming was better than written confrontation naming in both the languages for young and middle aged bilingual adults which is in accordance to the study done by Goswamy (2008).

#### **IV.SUMMARY CONCLUSION**

The purpose of the study was to analyse the effect of aging on the accuracy and type orthographic responses in oral and written naming task in bilingual individuals across age groups. 20 typical Tamil-English bilingual young and middle-aged adults were chosen. All individuals were proficient in using both the languages for 10 years minimum. The study excluded participants who had a history of speech, hearing, neurological, psychological or any other known organic deficits. Twelve picture cards depicting nouns (black and white) with size  $5" \times 7"$  selected from "Manual on Developing Communication Skills in Mentally Retarded Individuals" by Subbarao (1998) were used to elicit written and oral confrontation responses from bilinguals. The collected responses were transcribed for further analysis.

The results of the present study concluded that the young bilingual adults performed better than middle aged bilingual adults in oral and written confrontation naming tasks. The poor performance of the middle aged adults in both the tasks can be due to the effect of ageing .On cross comparison, both young and middle aged adults exhibited more errors in their native language than their non native language and oral confrontation naming was better than written confrontation naming in both the languages for young and middle aged bilingual adults.

The current study provides an insight for speech language pathologists on confrontation naming in normal and disordered population and highlights the importance of factors such as language, effect of aging and influence of media's language during assessment and management. The study concludes its results by emphasizing the importance of an active exposure with active usage of a language rather than an active exposure with passive usage.

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