The International Journal of Indian Psychology
ISSN 2348-5396 (Online) | ISSN: 2349-3429 (Print)
Volume 12, Issue 4, October - December, 2024
DIP: 18.01.017.20241204, DOI: 10.25215/1204.017
https://www.ijip.in

Research Paper

Elder Abuse and its Impact on Cognitive Functioning

Bimlesh Kushwaha[1]*, Prof. Sushma Pandey[2]

ABSTRACT

The study examined the impact of age, gender and elder abuse on cognitive functioning of elderly. A total of 162 elderly people were selected from Gorakhpur and Maharajganj, districts of Utter Pradesh. Stratified random sampling technique was used to select the area and purposive sampling technique was used for their participation in the study. Elder Abuse Checklist was used to assess various forms of abuse and Addenbrooke's Cognitive Examination-III (ACE-III) was administered to assess cognitive functioning related to attention, memory, fluency, language and visuospatial ability in elderly. Univariate analysis technique was used for data analysis. ANOVA results revealed that cognitive functions were significantly influenced by age, gender and level of abuse. More specifically, younger elderly exhibited superior cognitive functioning as compared to older group. The significant influence of gender on cognitive functions also indicates that male elderly have displayed better cognitive functioning as compared to female counterparts. Despite this, elder abuse caused adverse impact on cognitive functions of elderly. Specifically, high abused elderly displayed poor attention, memory, language, fluency, visuospatial ability and cognitive functioning (as a whole) as compared to low abused counterparts. Findings are discussed.

Keywords: *Elder Abuse, Age, Gender, Cognitive Function*

Aging is a global phenomenon and India is facing continuous change in the age structure of the population due to increasing life expectancy and decreasing levels of fertility. The rapid social and economic changes resulting in a new pattern of marriage, increased cohabitation and divorces, continued rural-to-urban migration of the population, moral and value erosion among youth and preference for nuclear families are reshaping the context in which older persons live. The size and composition of their households and living arrangements have changed and elderly are also confronting problems in getting financial, physical and psychological supports which may lead to elder abuse.

Elder abuse is considered as public health issue and violation of fundamental human right, the right to a life free from violence. Elder maltreatment is defined, 'as a single or repeated act or lack of appropriate action, occurring within any relationship in which there is an expectation of trust, that causes harm or distress to older people' (WHO, 2011). According to United Nations (2009), elder abuse is considered a fundamental violation of human rights and takes multiple forms, including physical, sexual, psychological, emotional, financial, or

[1]Assistant Professor, Departments of Psychology, D.A.V.P.G. College, Gorakhpur U.P., India
[2]Professor and ICSSR Fellow, Department of Psychology, D.D.U. Gorakhpur University Gorakhpur, U.P., India
*Corresponding Author

Received: October 07, 2024; Revision Received: October 10, 2024; Accepted: October 14, 2024

material abuse, neglect, or serious loss of dignity and respect. Thus, elder abuse is a major global problem that is deeply rooted in cultural, economic and social practices and occurs in a variety of ways and reasons. Various factors, such as gender, education, financial status, living arrangement, residence, physical and worsening cognitive functions, have been found associated with abusive behavior (Samanta et al., 2015; Seth et al., 2019; Skirbekk & James, 2014). A recent report using data from the Longitudinal Ageing Study in India (LASI) indicated that older adults who lived alone, and had been hospitalized in the past year and had functional limitations, were more likely to experience abuse (Bloom, Sekher, & Lee, 2021; Maurya, Chattopadhyay, Rao, & Sharma, 2024). Elder abuse has severe consequences on individuals and society, including long term outcomes related to physical and mental health, risk of hospitalization, and even death.

Lachs, Williams, Hurst and Horwitz (1997) conducted a longitudinal study and found that poverty, minority status, functional disability, and worsening cognitive impairment were risk factors for reported elder mistreatment. Earlier, Kausler (1989) conducted research on cognitive aging. The study revealed that irreversible decrements are inevitably associated with aging as a consequence of biological degeneration. Although, there are well-documented changes in cognitive functioning with healthy aging, decrements are smaller in magnitude and occur somewhat later than has been commonly assumed (Schaie et al., 1994). Of course, such decrements are real, they are not likely to have a great impact on the everyday functioning of older individuals who adopt a range of strategies designed to adapt to cognitive changes. Cognitive functioning refers to a person's entire mental abilities to process thoughts, memory and the ability to learn new information, speech, and reading comprehension.

Abusive behavior with elderly exerts significant impact on cognitive functions. Denney, Tozier and Schlotthauer (1992) revealed that most work on cognitive aging has focused on memory and psychometric intelligence and findings suggest that cognitive aging is characterized by two important features; first, different abilities show different patterns of change with age and second, diversity between individuals ability levels increases. Ponds and Jolles (1996) examined the relationship between memory complaints and memory performance, by comparing a group of elderly participants with memory complaints with a group of participants without memory complaints. The groups were matched with age, sex, and education and the mean age was 63 years. Significant group differences were found in memory, verbal fluency and depression. The findings suggest that concerns and complaints about memory in old age reflect memory self-efficacy beliefs rather than declining memory abilities.

In a previous study, Marmolejo (2008) reported that the "percentage of elderly people suffering cognitive impairment was significantly higher among abused than non-abused". Furthermore, according to National Council on Aging (2021), denoted that older people who have been abused have a 300% higher risk of death when compared to those who have not been mistreated, as well as higher rates of hospitalization. Untreated physical effects may have an even greater impact and can even result in death. As a result of abuse older adults often experience worry, depression, or anxiety. These signs may be mistaken for memory loss or illness when really, they are the effects of stress or worry.

Although mental health problem for elders is an aging consequence but again elder abuse is a risk factor for psychological illness which leads to cognitive impairments in elderly (Pandey & Kushwaha, 2024). In a study, Dong et al., (2010) aimed to examine the cross-

sectional association between self-neglect and cognitive function. They found that Self-neglect was associated with poorer cognitive function. Self-neglect is also negatively associated with lower global cognitive function, episodic memory and perceptual speed. Another study revealed that sexual violence, neglect, and self-neglect had changes in the elderly cognitive functions (Faustino, Moura & Gandolfi, 2016). Findings of the study confirm the idea that social determinants of health must be considered when analyzing the relationship between cognitive function and violence among the elderly.

The review of the above studies indicates that elder abuse causes detrimental effects on cognitive function of elderly. The majority of the research on elder abuse has focused on the health status of elderly and a few studies have been done in India to examine the relationship between elder abuse and cognitive processes. Therefore, the present study was planned to investigate the impact of elder abuse, age and gender on cognitive functioning of elderly.

Objectives

Present piece of work was conducted with following specific objectives:

- To examine the effect of age and gender on cognitive functioning of elderly people.
- To assess the impact of elder abuse on cognitive functioning.

Hypotheses

On the basis of above objectives, following hypotheses were formulated:

Previous studies indicate that cognitive functioning of elderly decreases with increasing age (Rashid et al., 2012; Sherina et al., 2004). Thus, it was hypothesized that the old-old (71-80 years) group would exhibit poor cognitive function on as compared to young-old (61-70years) group.

Gender wise variations in cognitive functioning of elderly have been reported in previous researches. Some studies concluded that female elderly exhibited better cognitive functions than male elderly (Halpern, et al, 2007; Ahrenfeldt, Petersen, Johnson, Christensen, 2015), whereas other researchers reported in favour of male elderly (Voyer, Voyer, Bryden, 1995; Torres, et al, 2006). Therefore, it was hypothesized that male and female participants would differ on various domains of cognitive functions.

Earlier studies revealed that abusive treatment by trusted one caused damaging impact on cognitive functioning of older people (Faustino, Barroso, & Gandolfi, 2016; Spike, 2015). Therefore, it was expected that elder abuse would cause adverse effects on cognitive functions of elderly.

METHODOLOGY

Research Design

The present study is based on a 2X2X2 factorial design with two Age groups i.e., [Young-Old (61-70years) & Old-Old (71-80years)] x Gender (Male & Female) x level of Abuse (High Abused & Low Abused).

Participants

A total of 162 elderly people were selected from Gorakhpur and Maharajganj, districts of Utter Pradesh for the present study. A purposive sampling technique was used for sample selection. Based on the median score obtained on the Elder Abuse Checklist (mdn=141), participants were divided into high and low abused groups.

Measures

1. **Personal Data Sheet (P.D.S.): -**In order to determine the personal information of participants, 'Personal Data Sheet' was prepared (Kushwaha, & Pandey, 2020) and used.
2. **Elder Abuse Checklist (EAC): -**To ascertain the magnitude and forms of abuses of elderly by family members, 'The Elder Abuse Checklist' was developed (Kushwaha, & Pandey, 2020). This checklist is based on the Elder Assessment Instrument (Fulmer, Paveza, Abraham & Fairchild, 2000). The EAC checklist includes five sub-sections and contains 46 items related to Physical Abuse, Psychological Abuse, Neglect, Financial Abuse and Sexual Abuse. The EAC has 5-point scale ranging from 'Never, Rarely, Seldom, Often and Always' (1 to 5). The responses that revealed maximum abuse were scored as 5, whereas items that revealed the least amount of abuse were scored as 1. Other items were scored as 4, 3 and 2, depending on the degree of abuse. The score could range from 46 to 230. Total summated scores in each area denote the magnitude of abuse in a specific area and based on the grand total, abuse (as a whole) was determined, and the median score (mdn = 141) was calculated. Further, on the basis of the median score the category of high and low abused groups of elderly was determined.
3. **Cognitive Measure:** To assess the level of cognitive functioning of elderly**,** Addenbrooke's Cognitive Examination-III (ACE-III) was used. ACE-III is a brief cognitive test that assesses five cognitive domains: Attention, Memory, Verbal fluency, Language and Visuospatial abilities. The ACE-III has an adaptation in Hindi on the Indian population (Bajpai et al., 2020). Administration of the ACE-III takes on average 15 minutes and scoring takes about 5 minutes. The ACE-III demonstrated high sensitivity and specificity, (sensitivity =0.93; specificity =1.0). For each domain of the test if the participant's answer/task was correct, then they were marked as 1 and if it was incorrect he/she was given 0 score. The total score would be 100 with higher scores indicating better cognitive functioning.

RESULTS

Data obtained on various measures from participants were scored according to defined rules. Scores were treated statistically in terms of comparative analysis.

A 2x2x2, factorial analysis of variance was calculated to examine the effect of age, gender and elder abuse on various cognitive functions i.e. attention, memory, fluency, language and visuospatial ability. Results are displayed in tables and figures and reported separately for each domain of cognitive functions and as a whole.

1) Attention as a function of Age, Gender and Elder Abuse

Table 1 displays Mean, S.D. and Significant F-Values of Attention across age, gender and level of abuse. Results revealed that the level of attention differed in accordance with age, gender and elder abuse.

Table 1: Mean, S.D. and Significant F-Value of Attention by Age, Gender and Level of Abuse

Age		Male		Female		Significant F Values
		High Abused	**Low Abused**	**High Abused**	**Low Abused**	A= Age B= Gender C= Elder Abuse
Young-Old	Mean	10.04	11.28	7.14	10.53	
	S.D.	3.54	3.75	2.60	2.12	A= 4.97*
Old-Old	Mean	8.20	10.10	6.38	10.26	B= 8.55**
	S.D.	2.65	2.22	2.78	2.88	C=32.85** B x C= 5.18*

N=162, **P<.01, *P<.05

ANOVA results (Table 1) revealed that Attention was significantly influenced by age, gender and elder abuse. The interaction effect of gender and elder abuse was also found significant. Results are displayed in figures (1, 2, 3 & 4).

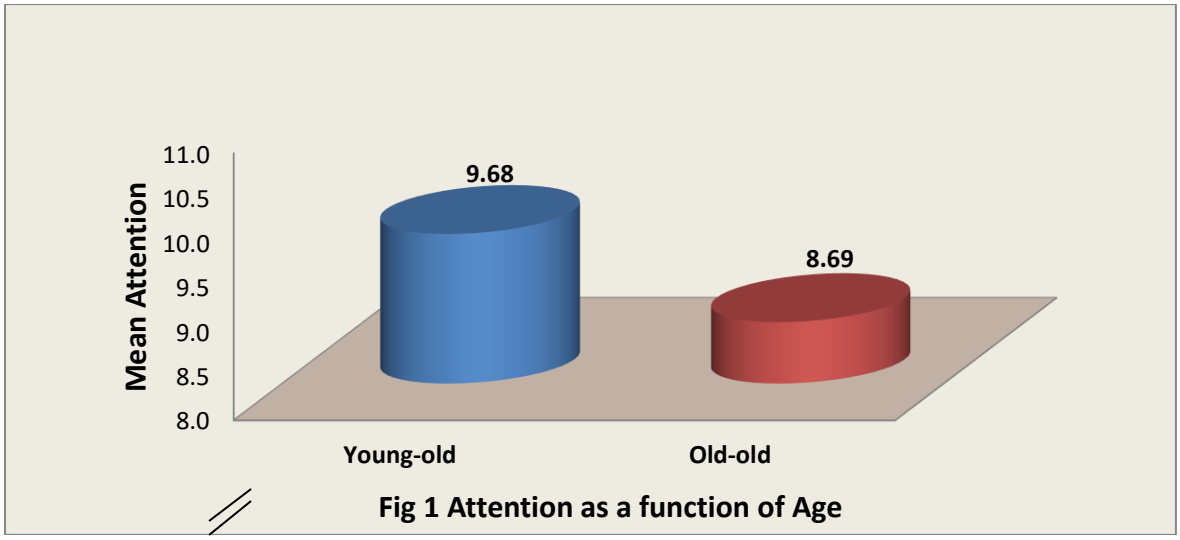

Fig 1 Attention as a function of Age

Results (Fig. 1) revealed that attention was significantly influenced by age. The significant main effect of age on Attention (F (1, 154) = 4.97, P<.05) indicates that younger elderly displayed superior attention (M=9.68) than older elderly (M=8.69).

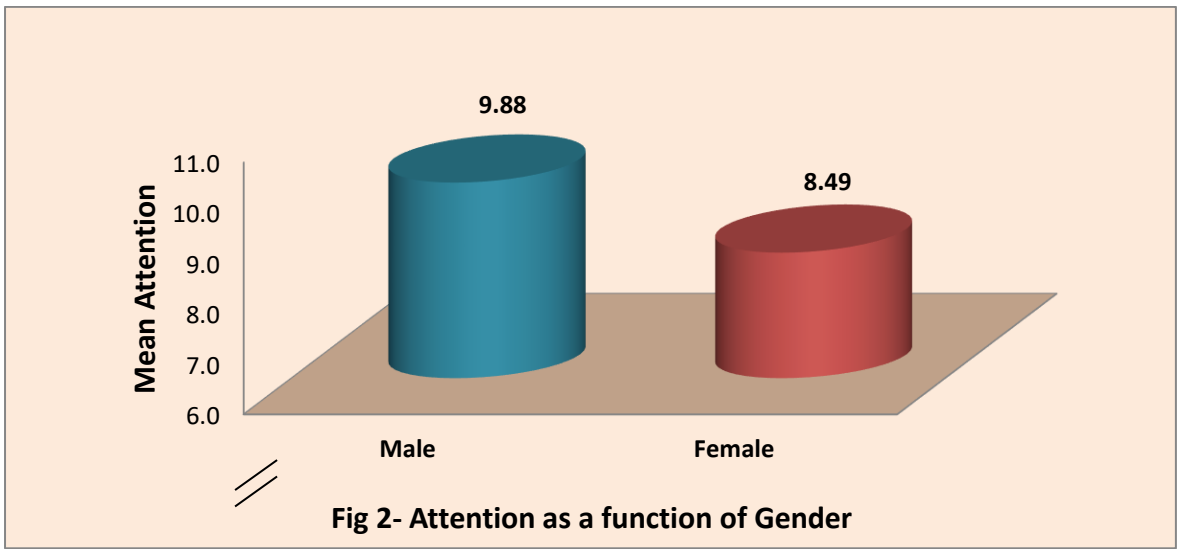

Fig 2- Attention as a function of Gender

Similarly, the main effect of gender was found significant (F (1, 154) = 8.55, P<.01), which revealed that male elderly were found better in attention (M=9.88) than female counterparts (M=8.49) (Fig.2).

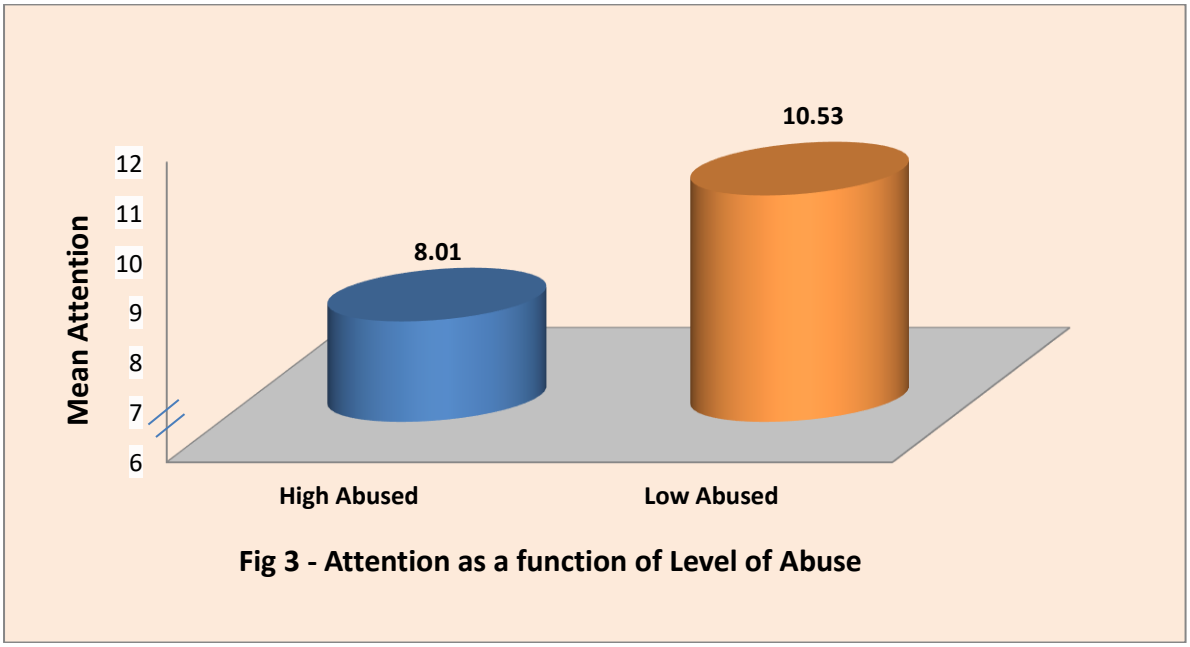

Fig 3 - Attention as a function of Level of Abuse

Moreover, the significant main effect of abuse on attention (F (1, 154) = 32.85, P<.01) revealed that highly abused elderly displayed poor attention (M=8.01) as compared with low abused elderly (M=10.53) (Fig.3). Interaction effect was also found significant.

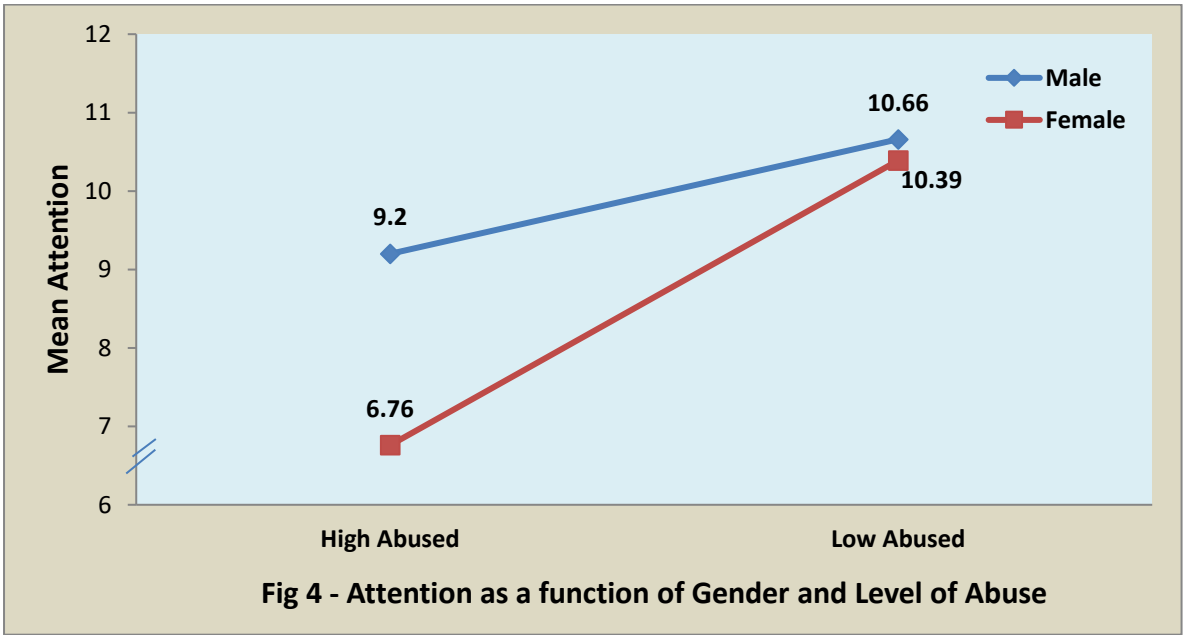

Fig 4 - Attention as a function of Gender and Level of Abuse

A significant gender x level of abuse interaction effect (F (1, 154) = 5.18, P<.05) evinced that both the factors exercised joint influence on the attention of elderly. The interaction graph (Fig.4) indicates that in case of the high abused group, females have shown rather poor attention than their male counterparts. Whereas, in the case of the low abused group an insignificant variation in attention was found between male and female elderly.

2) Memory as a function of Age, Gender and Elder Abuse

Table 2 displays Mean, S.D. and Significant F-Values of Memory across levels of Abuse, age and gender. Results revealed that the memory of elderly differed in accordance with age, gender and level of abuse.

Table 2: Mean, S.D. and Significant F-Values of Memory by Age, Gender and Level of Abuse

Age		Male		Female		Significant F-Value
		High Abused	Low Abused	High Abused	Low Abused	A= Age B= Gender C= Elder Abuse
Young-Old	Mean	9.37	12.83	9.29	13.47	
	S.D.	5.07	4.96	4.13	4.60	
Old-Old	Mean	8.45	12.60	7.76	13.26	C=39.70**
	S.D.	4.26	2.76	3.27	5.18	

N=162, **P<.01

Results displayed in Table 2, evinced that memory was significantly influenced by levels of abuse. Results are presented in (Fig. 5).

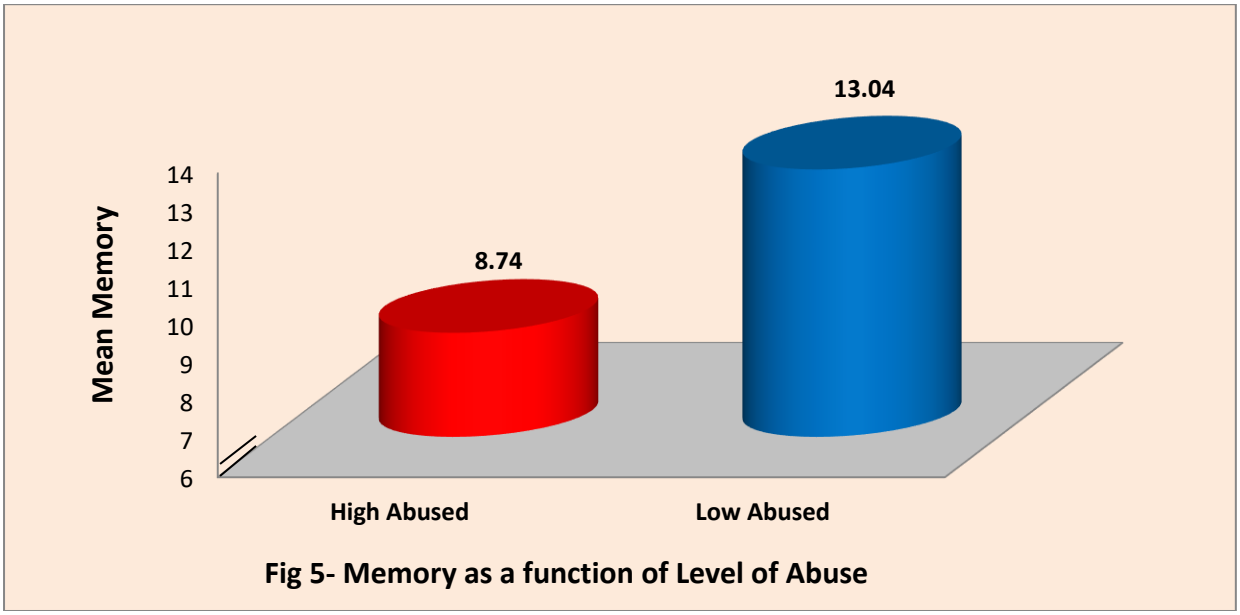

Fig 5- Memory as a function of Level of Abuse

The main effect of elder abuse was found significant (F (1, 154) = 39.70, P<.01), which revealed that the highly abused group exhibited lower level of memory (M=8.74) than the low abused group (M=13.04).

3) Fluency as a function of Age, Gender and Elder Abuse

Table 3 displays Mean, S.D. and Significant F-Values of Fluency which, differed in accordance with age, gender and level of abuse.

Table 3: Mean, S.D. and Significant F-Values of Fluency by Age, Gender and Level of Abuse

Age		Male		Female		Significant F-Value
		High Abused	Low Abused	High Abused	Low Abused	A= Age B= Gender C= Elder Abuse
Young-Old	Mean	3.92	6.67	2.90	5.58	
	S.D.	3.40	4.31	1.76	2.65	A= 10.68**
Old-Old	Mean	2.30	3.95	2.29	4.63	C=27.22**
	S.D.	1.92	3.12	2.19	2.79	

P<.01, N=162

Results displayed in Table 3, evinced that fluency was significantly influenced by age and level of abuse. Results are presented in Fig. 6-7.

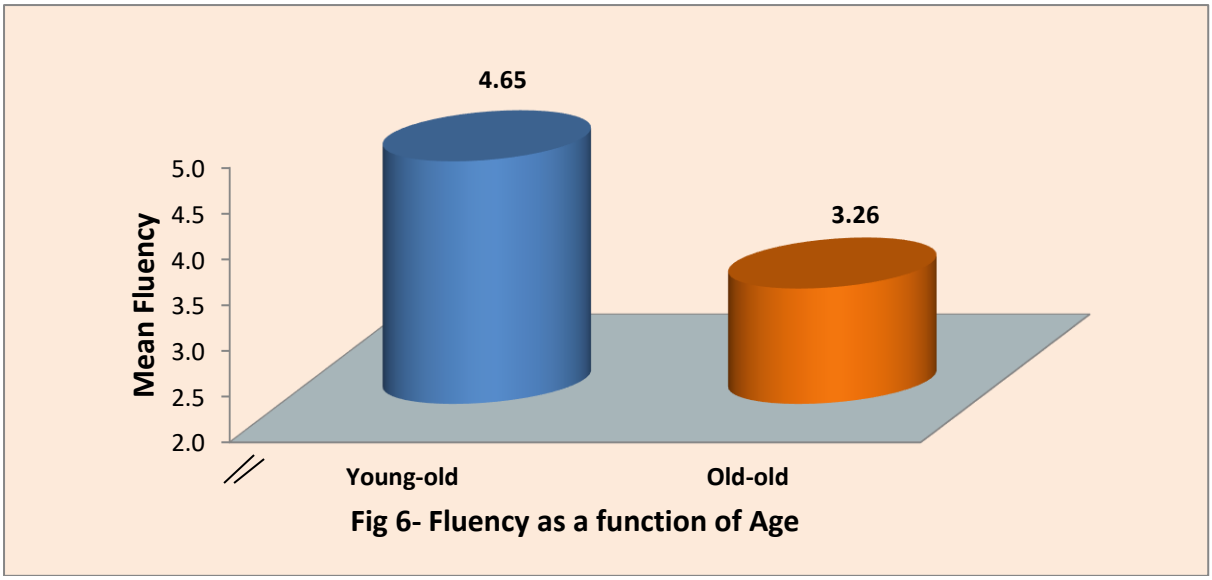

Fig 6- Fluency as a function of Age

The significant main effect of age (F (1,154) = 10.678, P<.01) evinced that the young-old group of elderly showed poor fluency (M=3.26) than the old-old group (M=4.65) (Fig. 6).

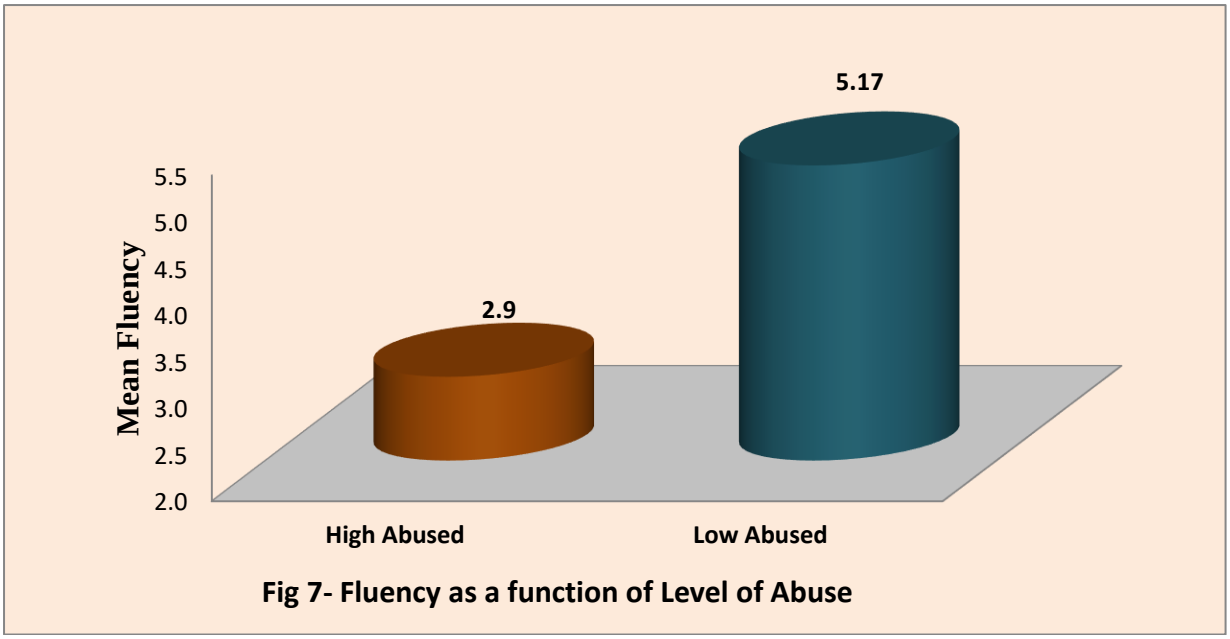

Fig 7- Fluency as a function of Level of Abuse

Further, the main effect of abuse (F (1, 154) = 27.223, P<.01) evinced that high abused elderly expressed very poor level of fluency (M=2.90) than low abused elderly (M=5.17), (Fig. 7)

4) Language as a function of Age, Gender and Elder Abuse

Table 4 displays Mean, S.D. and Significant F-Values of Language which differed in accordance with age, gender and level of abuse.

Table 4: Mean, S.D. and Significant F-Values of Language by Age, Gender and Level of Abuse

Age		**Male**		**Female**		**Significant F-Value**
		High Abused	**Low Abused**	**High Abused**	**Low Abused**	A= Age B= Gender C= Elder Abuse
Young-Old	Mean	16.83	18.72	13.24	17.42	
	S.D.	3.99	3.72	5.31	2.79	A= 5.49*
Old-Old	Mean	13.90	16.05	13.05	17.26	C=23.95**
	S.D.	3.95	4.06	4.08	3.74	A x B= 4.28*

N=162, **P<.01, *P<.05,

Results displayed in Table 4, evinced that language was significantly influenced by age and level of abuse. Interaction effect of age x gender was also found significant. Results are presented in Fig. 8, 9 & 10.

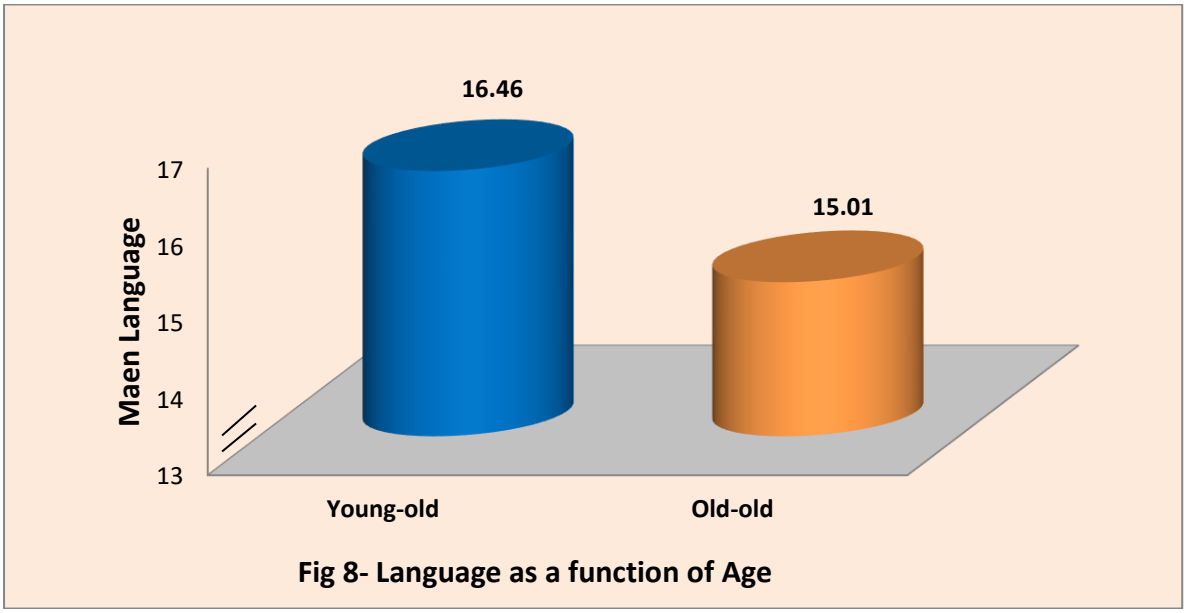

Fig 8- Language as a function of Age

The significant main effect of age (F (1, 154) = 5.49, P<.05) indicated that young-old group expressed better language ability (M=16.46) as compared to old-old group of elderly people (M=15.01) (Fig. 8).

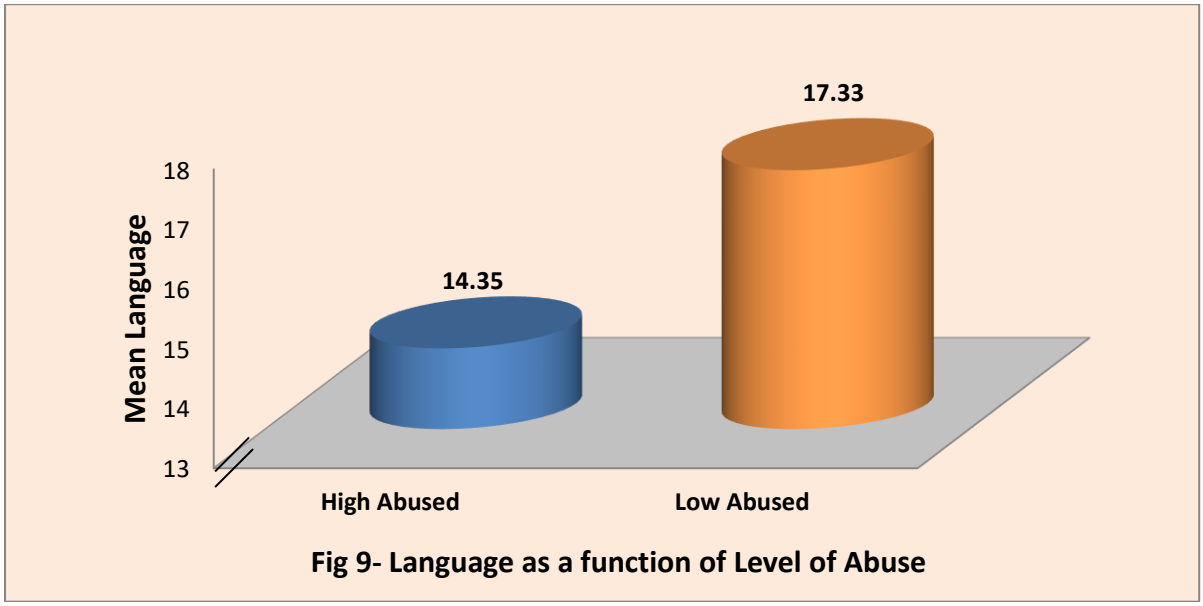

Fig 9- Language as a function of Level of Abuse

Likewise, the main effect of elder abuse was found significant (F (1, 154) = 23.95, P<.01), which revealed that highly abused elderly showed poor language ability (M=14.35) than low abused elderly (M=17.33) (Fig. 9).

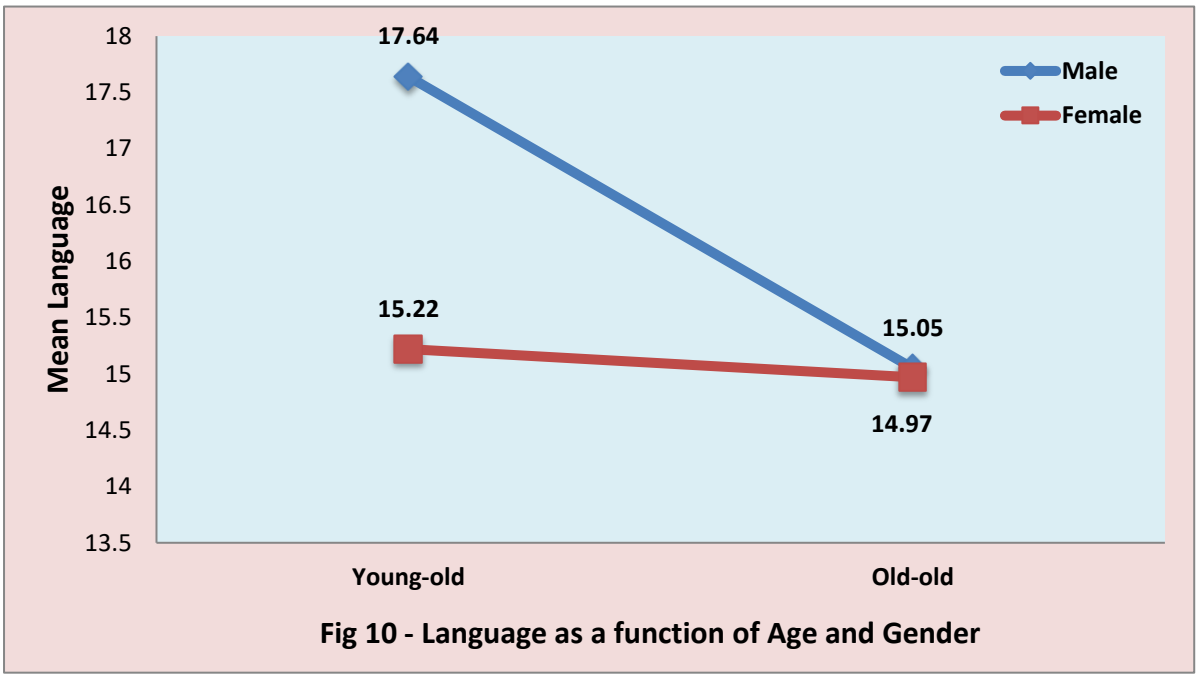

Fig 10 - Language as a function of Age and Gender

Moreover, the significant interaction effect of age x gender (F (1, 154) = 4.28, P<.05) denoted that in case of young-old group male elderly showed better language ability than females. However, a little variation was found in the case of old-old group between male and female elderly (Fig. 10).

5) Visuospatial ability as a function of Age, Gender and Elder Abuse

Table 5, displayed Mean, S.D. and Significant F-Values of the Visuospatial ability of elderly. Results revealed that the visuospatial ability of elderly differed in accordance with age, gender and level of abuse.

Table 5: - Mean, S.D. and Significant F-Values of Visuospatial ability by Age, Gender and Level of Abuse

Age		**Male**		**Female**		**Significant F-Value**
		High Abused	**Low Abused**	**High Abused**	**Low Abused**	A= Age B= Gender
Young-Old	Mean	5.21	7.50	4.19	5.53	C= Elder Abuse
	S.D.	2.60	3.58	2.73	2.95	A= 5.31*
Old-Old	Mean	3.15	6.30	4.05	4.79	B= 4.03*
	S.D.	1.42	3.83	2.50	2.66	C=17.53**

N=162, **P<.01, *P<.05,

Results displayed in Table 5, evinced that visuospatial ability was significantly influenced by age, gender and level of abuse. Results are displayed in (Fig. 11, 12 & 13) as given below.

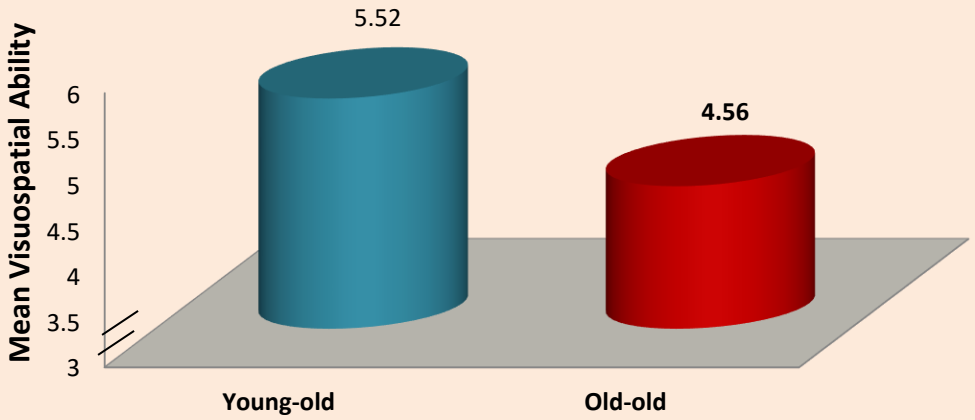

Fig 11 - Visuospatial Ability as a funtion of Age

The significant main effect of age (F (1, 154) = 5.31, P<.05) indicated that the young-old group of elderly showed better visuospatial ability (M=5.52) as compared to the old-old group (M=4.56), (Fig.11).

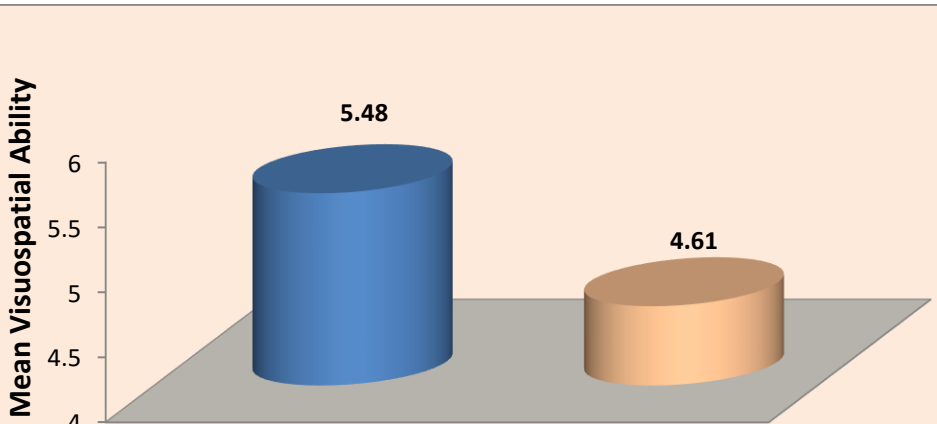

Fig 12 - Visuospatial Ability as a function Gender

Likewise, the significant main effect of gender (F (1, 154) =4.03, P<.05) indicated that male elderly exhibited greater visuospatial ability (M=5.48) as compared to female counterparts (M=4.61), (Fig.12).

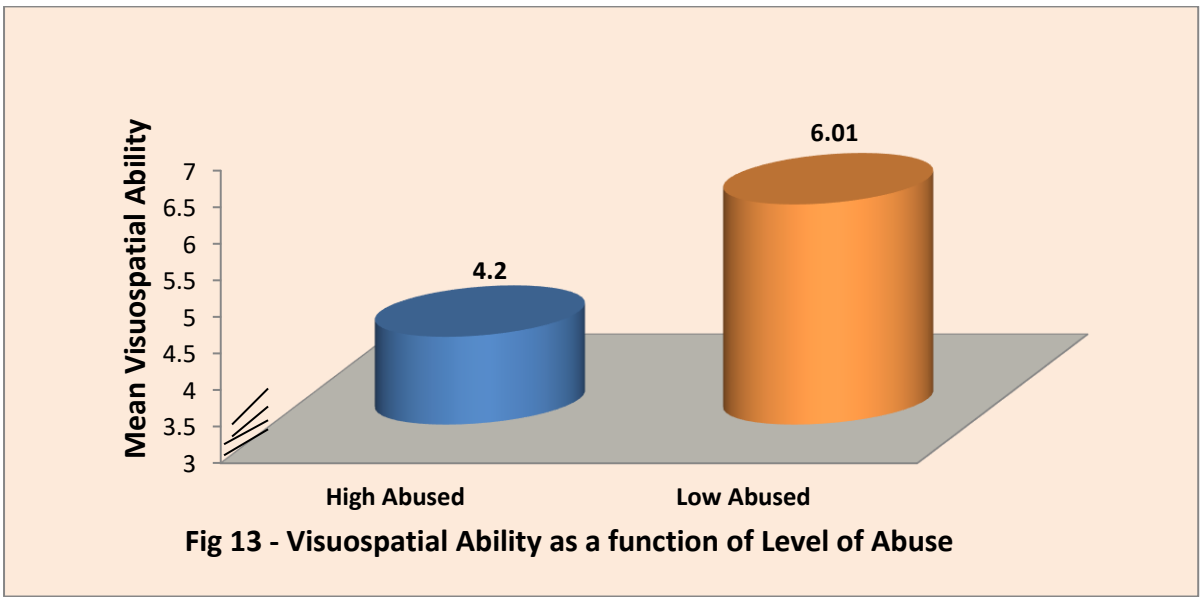

Fig 13 - Visuospatial Ability as a function of Level of Abuse

Furthermore, the main effect of level of abuse was found significant (F (1, 154) = 17.53, P<.01), which revealed that high abused elderly exhibited far poor visuospatial ability (M=4.20) than low abused elderly (M=6.01) (Fig.13).

6) Cognitive Functioning (as a whole) as a function of Age, Gender and Elder Abuse

Table 6 displays Mean, S.D. and Significant F-Values of Cognitive Functioning (as a whole) across the level of abuse, age and gender. Results revealed that overall cognitive functions differed by age, gender and level of abuse.

Table 6: Mean, S.D. and Significant F-Values of Cognitive Function (as a whole) by Age, Gender and Level of Abuse

Age		**Male**		**Female**		**Significant F-Value**
		High Abused	**Low Abused**	**High Abused**	**Low Abused**	A= Age B= Gender C= Elder Abuse
Young-Old	Mean	45.29	56.44	36.81	52.63	
	S.D.	12.23	13.94	10.87	10.24	A= 10.84**
Old-Old	Mean	35.95	49.30	33.43	50.16	B= 4.23*
	S.D.	7.92	9.60	6.82	12.81	C= 70.72*

N=162, **P<.01, *P<.05

ANOVA results displayed in Table 6, revealed that cognitive function (as a whole) was significantly influenced by age, gender and level of abuse. Results are displayed in Figures 14, 15 & 16.

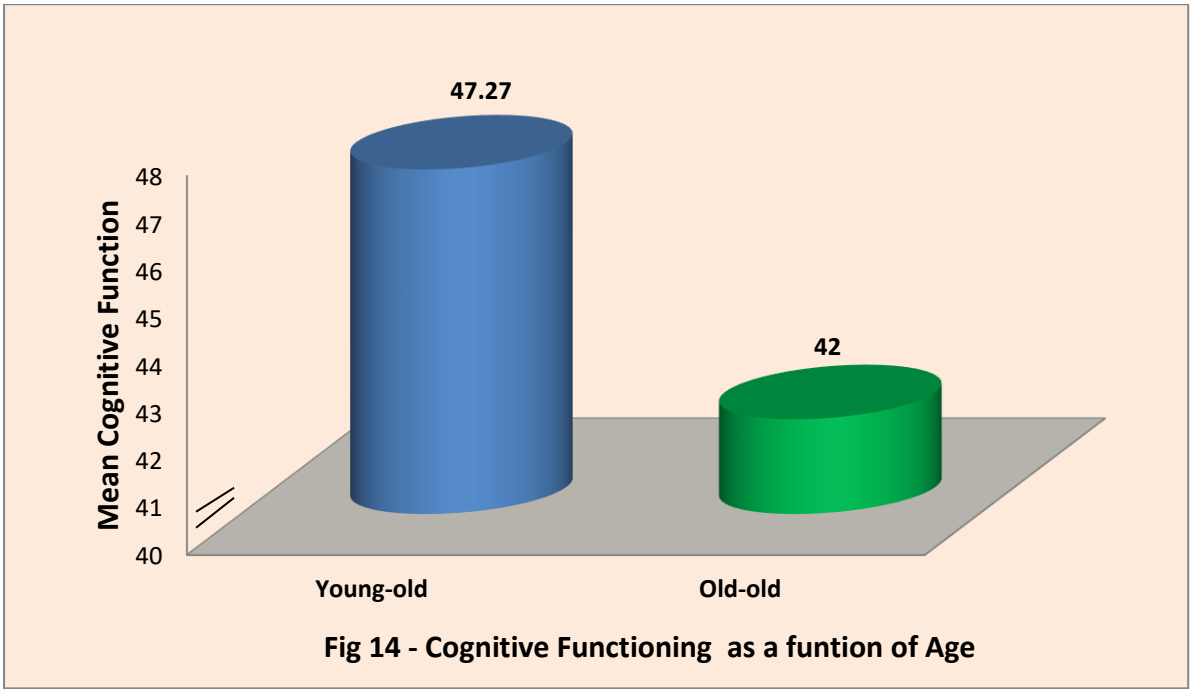

Fig 14 - Cognitive Functioning as a funtion of Age

The significant main effect of age (F (1, 154) = 10.84, P<.01) revealed that the young-old group of elderly exhibited superior cognitive functioning (M=47.27) as compared to the old-old group (M=42.00) (Fig. 14).

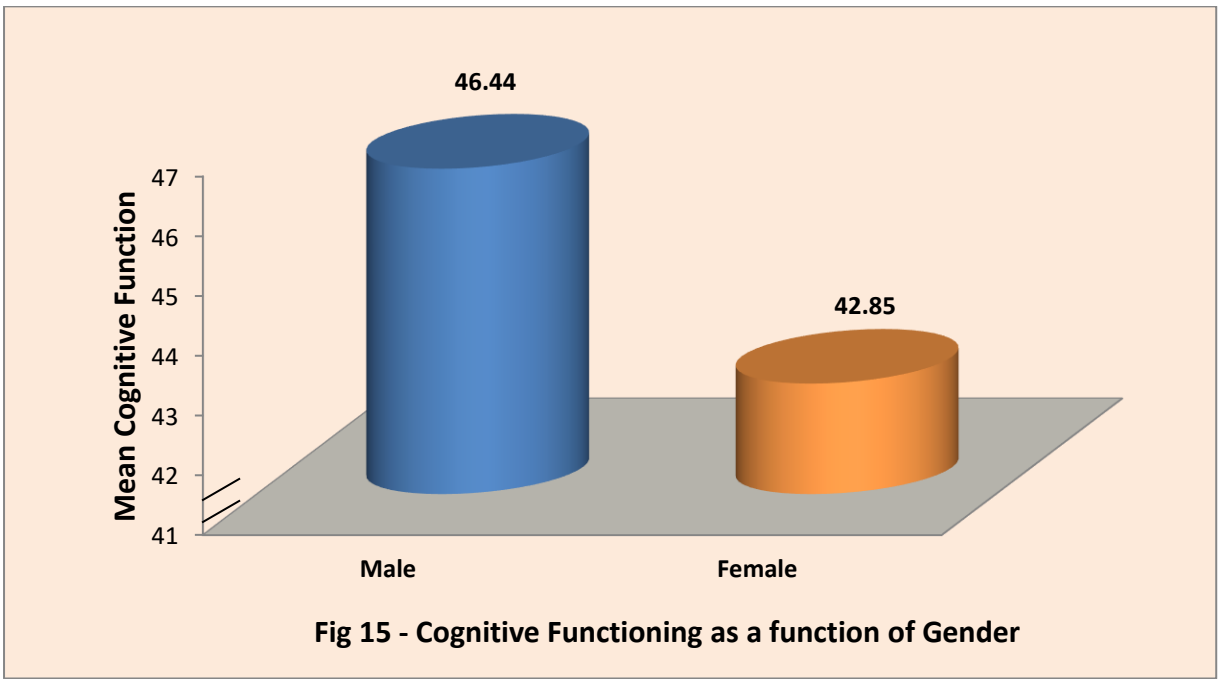

Fig 15 - Cognitive Functioning as a function of Gender

Likewise, the significant main effect of gender (F (1, 154) =4.23, P<.05) indicated that male elderly showed better cognitive functioning (M=46.44) as compared to female counterparts (M=42.85), (Fig. 15).

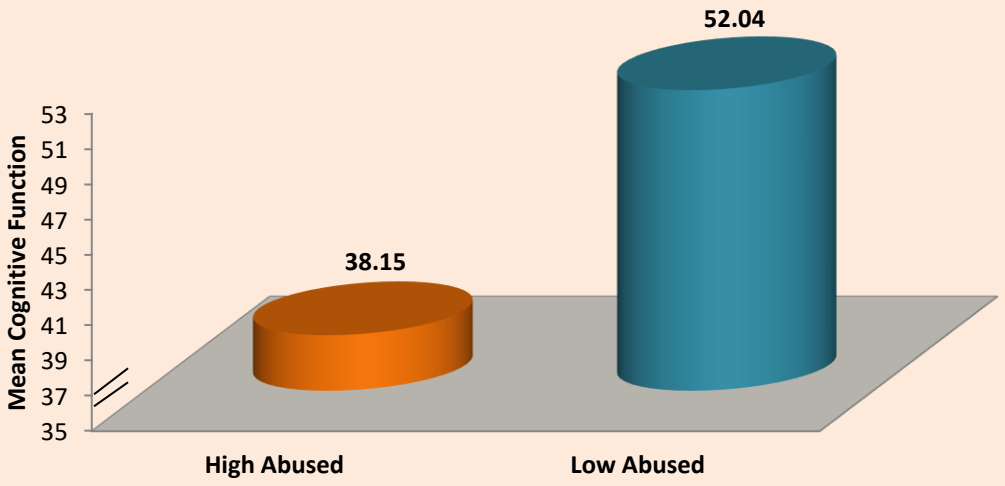

Fig 16 - Cognitive Functioning as a function of Level of Abuse

Furthermore, the main effect of the level of abuse ($F(1, 154) = 70.72$, $P<.01$), was also found significant. It reflects that high abused elderly showed very poor cognitive functions ($M=38.15$) than low abused counterparts ($M=52.04$), (Fig. 16).

DISCUSSION

A cursory glance at ANOVA results evinced that age, gender and elder abuse exercised significant impact on cognitive functioning of elderly. More specifically, young-old elderly showed better Attention, Fluency, Language, Visuospatial ability and Cognitive function as a whole as compared to old-old elderly. In other words, older group displayed inferior level of cognitive functions than younger group. Furthermore, male elderly scored higher on Attention, Visuospatial ability and Cognitive Function as a whole as compared to female elderly. Moreover, High abused elderly showed very poor cognitive functions as compared to low abused counterparts. Interaction effects were also found significant which indicate joint impacts of age, gender and elder abuse on various domains of cognitive functions. Findings have been interpreted and discussed in the light of other empirical evidences.

The cognitive impairment increases with age. The prevalence of cognitive impairment was found 23.4% in respondents aged 65 years and this figure increased to 38% among respondents aged 85 years and older (National Institutes of Health, 2001). Sherina et al. (2004) found that cognitive impairment was significantly higher among older elderly as compared to younger elderly counterparts. Valencia et al., (2008) also revealed that there was a negative association between attention and aging. In addition to changes in sensory perception, there is a clear decline in processing speed in advancing age with older adults performing these activities more slowly than younger adults (Salthouse, 2010).

Other studies also evinced that decline in cognitive function is a common problem in the elderly that is associated with age (Rashid, Azizah, & Rohana, 2012). More specifically, young adults have better cognitive performance than old adults (Tricco et al., 2012). Several other studies indicate that cognitive abilities can be divided into several specific cognitive domains including attention, memory, executive function, language, and visuospatial abilities and each of these domains have measurable declines with age (Lezak, Howieson, Bigler & Tranel, 2012). Singh et al. (2012) opined that increasing age is the main predictor

of cognitive decline in normal aging. Other studies revealed that older adults' cognition was influenced by a range of factors along with age continuum (Chapman et al., 2012; Potvin et al., 2013). Thus, present finding is also supported by previous studies.

Another objective of the present study was to ascertain the role of gender in cognitive functioning of elderly people. ANOVA results indicate that male elderly have displayed better Attention, Visuospatial ability and Cognitive Function (as a whole) as compared to female elderly. This finding is also supported by some of the studies. Brayne et al. (1995) examined 1014 persons and found that decline became common with advancing age and was greater in women. In a later study, Faustino et al. (2016) found that, when elderly people have some cognitive impairment, there is a greater chance of abuse, particularly sexual abuse, neglect, and self-neglect.

The present results also indicate that the largest number of cases of abuse occur among female elderly than male counterparts. Arango et al. (2016) also found that female elderly were more at risk of cognitive impairment than male counterparts. Other studies exhibited that women generally live longer than men and have a higher risk of having morbidities, including coronary heart disease, depression, and myocardial infarction, which are all risk factors for cognitive impairment (Kautzky-Willer, Harreiter, & Pacini, 2016; Nebel et al., 2018). Gender differences in favor of men in the retention of spatial information memory and in the reproduction of previously presented stimuli have been found (Lewin, Wolgers & Herlitz, 2001), whereas, some studies report no statistically significant association between gender and cognitive function. So, findings are equivocal. However, the present study has proved gender wise variation on some domains of cognitive functions and these findings have also been supported by some researches (Lewin, Wolgers & Herlitz, 2001; Kautzky-Willer, Harreiter, & Pacini, 2016).

The most significant findings of the present study reveal that elder abuse exerted negative impact on cognitive functioning of elderly. As ANOVA results indicate, high abused elderly displayed far poor Attention, Memory, Fluency, Language, Visuospatial ability and cognitive functions (as a whole) as compared to low abused elderly. This finding is strongly supported by other empirical evidences.

Denburg et al. (2005) reported that 35 percent of abused elderly were likely to have decision-making impairment and that people with ostensibly intact cognitive functioning, but with a neurological or psychiatric illness, were susceptible to financial abuse. Moreover, Riedel-Heller et al. (2006) found that because of abuse or neglect, older adults often experience worry, depression, or anxiety. These signs may be indicator for memory loss or illness when really, they are the effects of stress or worry. Cooper et al. (2006) found a positive link between the severity of cognitive impairment and elder abuse. Similarly, Marmolejo (2008) found a positive association between cognitive impairment and abuse of older people in a nationally representative study.

Dong et al. (2010) also found that impaired cognitive function among the elderly had been associated with a larger number of events related to elder abuse characterized as self-neglect. In a study in 52 percent elderly people who were suspected victims of financial abuse had dementia and 7 percent had mental illness (Wainer et al., 2010). Another **s**tudy also reported that prevalence of violence is more frequent among elderly with cognitive impairments and dementia and that elder abuse associated with mortality is more common among those with lower levels of cognitive functions **(**Dong et al., 2011). In a study, Faustino et al. (2016)

found clear association between abuses, neglect, and self-neglect and changes in the elderly cognitive functions. Similarly, Sirey and Leffel (2016) proved that abuse and stress produce transient effects on cognition, resulting in lower cognitive performance and increased rates of dementia in elderly. Further, in a study, Lichtenberg et al. (2016) found that financially exploited older adults performed significantly more poorly on a measure of general cognitive functioning than non-exploited older adults. Present piece of research has also evinced pervasive impact of elder abuse, age and gender on cognitive functioning of elderly and these findings have been strongly supported by a number of existing researches.

CONCLUSION

A close perusal of findings of the present study evinces that age gender and elder abuse have exerted significant impact on cognitive functioning of elderly. Findings evinced that Young-old elderly have shown better Attention, Fluency, Language, Visuospatial ability and Cognitive function (as a whole) as compared to Old-old counterparts. Gender differences in cognitive functioning are also supported at some extent. More specifically, male elderly have displayed better Attention, Visuospatial ability and Cognitive Function (as a whole) as compared to female elderly. Despite this, highly abused elderly have shown poor cognitive functioning as compared to low abused elderly.

Present study provides valuable data, which focus on some of the less explored area i.e. elder abuse and its damaging role in cognitive functioning of elderly. Apart from this, results of the study suggest that elderly and caregivers of older people both should be made aware of ill effects of elder mistreatment. However, there are few limitations of the study. First, a generalization of the results from this study is limited to one region (Gorakhpur & Maharajganj) of Utter Pradesh. Secondly, mediating and moderating role of risk factors of elder abuse should be explored in the context of cognitive functioning of elderly. Finally, researchers should implement some interview schedule to exercise other qualitative analysis to support findings of the study.

REFERENCES

Ahrenfeldt, L., Petersen, I., Johnson, W., & Christensen, K. (2015). Academic performance of opposite-sex and same-sex twins in adolescence: A Danish national cohort study. *Hormones and behavior*, *69*, 123-131.

Arango, D. C., Cardona, A. S., Duque, M. G., Cardona, A. S., & Sierra, S. M. C. (2016). Estado de salud del adulto mayor de Antioquia, Colombia. *Revista Brasileira de Geriatria e Gerontologia*, *19*, 71-86.

Bajpai, S., Upadhyay, A., Sati, H., Pandey, R. M., Chaterjee, P., & Dey, A. B. (2020). Hindi version of Addenbrooke's cognitive examination III: Distinguishing cognitive impairment among older Indians at the lower cut-offs. *Clinical Interventions in Aging*, 329-339.

Bloom, D. E., Sekher, T. V., & Lee, J. (2021). Longitudinal Aging Study in India (LASI): new data resources for addressing aging in India. *Nature Aging*, *1*(12), 1070-1072.

Brayne, C., Gill, C., Paykel, E. S., Huppert, F. & O'Connor, D. W. (1995). Cognitive decline in an elderly population – a two wave study of change. Psychological Medicine 25, 673–683.

Chapman, B., Duberstein, P., Tindle, H. A., Sink, K. M., Robbins, J., Tancredi, D. J. & Gingko Evaluation of Memory Study Investigators. (2012). Personality predicts cognitive function over 7 years in older persons. *The American Journal of Geriatric Psychiatry*, *20*(7), 612-621.

Cooper, C., Katona, C., Finne-Soveri, H., Topinková, E., Carpenter, G. I., & Livingston, G. (2006). Indicators of elder abuse: a cross-national comparison of psychiatric morbidity and other determinants in the Ad-HOC study. *The American journal of geriatric psychiatry*, *14*(6), 489-497.

Denburg, N. L., Tranel, D., & Bechara, A. (2005). The ability to decide advantageously declines prematurely in some normal older persons. *Neuropsychologia*, *43*(7), 1099-1106.

Denney, N. W., Tozier, T. L., & Schlotthauer, C. A. (1992). The effect of instructions on age differences in practical problem solving. *Journal of Gerontology*, *47*(3), 142-145.

Dong, X., Simon, M. A., Wilson, R. S., Mendes de Leon, C. F., Rajan, K. B., & Evans, D. A. (2010). Decline in cognitive function and risk of elder self-neglect: Finding from the Chicago Health Aging Project. *Journal of the American Geriatrics Society*, *58*(12), 2292-2299.

Dong, X., Simon, M., Beck, T., & Evans, D. (2010). A cross-sectional population-based study of elder self-neglect and psychological, health, and social factors in a biracial community. *Aging and Mental Health*, *14*(1), 74-84.

Dong, X., Simon, M., Rajan, K., & Evans, D. A. (2011). Association of cognitive function and risk for elder abuse in a community-dwelling population. *Dementia and geriatric cognitive disorders*, *32*(3), 209-215.

Faustino, A. M., Barroso Azevedo Moura, L., & Gandolfi, L. (2016). Relationship Between Violence and Cognitive Function in The Elderly. *Journal of Nursing UFPE/Revista de Enfermagem UFPE*, *10*(5).

Fulmer, T., Paveza, G., Abraham, I., & Fairchild, S. (2000). Elder neglect assessment in the emergency department. *Journal of Emergency Nursing*, *26*(5), 436-443.

Halpern, D. F., Benbow, C. P., Geary, D. C., Gur, R. C., Hyde, J. S., & Gernsbacher, M. A. (2007). The science of sex differences in science and mathematics. *Psychological science in the public interest*, *8*(1), 1-51.

Kausler, D. H. (1989). Comments on aging memory and its everyday operations. *Everyday cognition in adulthood and late life*, 483-495.

Kautzky-Willer, A., Harreiter, J., & Pacini, G. (2016). Sex and gender differences in risk, pathophysiology and complications of type 2 diabetes mellitus. *Endocrine reviews*, *37*(3), 278-316.

Kushwaha, B. & Pandey, S. (2020). Elder Abuse Checklist. Unpublished.

Lachs, M. S., Williams, C., O'Brien, S., Hurst, L., & Horwitz, R. (1997). Risk factors for reported elder abuse and neglect: A nine-year observational cohort study. *The Gerontologist*, *37*(4), 469-474.

Lewin, C., Wolgers, G., & Herlitz, A. (2001). Sex differences favoring women in verbal but not in visuospatial episodic memory. *Neuropsychology*, *15*(2), 165.

Lezak M.D., Howieson D.B., Bigler E.D., Tranel D. (2012). *Neuropsychological assessment* . Oxford University Press, New York.

Lichtenberg, P. A., Ficker, L. J., & Rahman-Filipiak, A. (2016). Financial decision-making abilities and financial exploitation in older African Americans: Preliminary validity evidence for the Lichtenberg Financial Decision Rating Scale (LFDRS). *Journal of elder abuse & neglect*, *28*(1), 14-33.

Marmolejo, I. I. (2008). *Maltrato de personas mayores en la familia en España: Elder abuse in the family in Spain*. Fundación de la Comunitat Valenciana para el Estudio de la Violencia.

Maurya, P., Chattopadhyay, A., Rao, S., & Sharma, P. (2024). Understanding elder abuse in India: Contributing factors and policy suggestions. *Journal of Population Ageing*, *17*(1), 5-32.

National Council on Aging. (2021). Issues for advocates: Get the facts on elder abuse. https://www.ncoa.org/article/get-the-facts-on-elder-abuse. Accessed 22 Apr 2022

National Institutes of Health (2001). Cognitive Impairment High Among Older People, Study Suggest. *Press Release*.

Nebel, R. A., Aggarwal, N. T., Barnes, L. L., Gallagher, A., Goldstein, J. M., Kantarci, K., ... & Mielke, M. M. (2018). Understanding the impact of sex and gender in Alzheimer's disease: a call to action. *Alzheimer's & Dementia*, *14*(9), 1171-1183.

Pandey, S. & Kushwaha, B. (2024). Understanding Dynamics of Elder Abuse and its Consequences. *Geriatric Issues in Community Perspective*, 12, 238-258.

Ponds, R. W., & Jolles, J. (1996). Memory complaints in elderly people: The role of memory abilities, metamemory, depression, and personality. *Educational Gerontology: An International Quarterly*, *22*(4), 341-357.

Potvin, O., Bergua, V., Meillon, C., Le Goff, M., Bouisson, J., Dartigues, J. F., & Amieva, H. (2013). State anxiety and cognitive functioning in older adults. *The American Journal of Geriatric Psychiatry*, *21*(9), 915-924.

Rashid, A. K., Azizah, A. M., & Rohana, S. (2012). Cognitive impairment among the elderly Malays living in rural Malaysia. *Med J Malaysia*, *67*(2), 186-9.

Riedel-Heller, S. G., Busse, A., & Angermeyer, M. C. (2006). The state of mental health in old-age across the 'old European Union–a systematic review. *Acta Psychiatrica Scandinavica*, *113*(5), 388-401.

Salthouse, T. A. (2010). Selective review of cognitive aging. *Journal of the International neuropsychological Society*, *16*(5), 754-760.

Samanta, T., Chen, F., & Vanneman, R. (2015). Living arrangements and health of older adults in India. *The Gerontologist, 70*(6), 937–947.

Schaie, K. W., Willis, S. L., & O'Hanlon, A. M. (1994). Perceived intellectual performance change over seven years. *Journal of gerontology*, *49*(3), 108-118.

Seth, N., Yadav, A., Adichwal, N. K., & Kamble, S. B. (2019). Elder abuse and its association with socio-demographic variables in India. *Clinical Epidemiology and Global Health, 7*(2), 188–191.

Sherina, M. S., Rampal, L., & Mustaqim, A. (2004). Cognitive impairment among the elderly in a rural community in Malaysia. *Medical Journal of Malaysia*, *59*(2), 252-257.

Singh-Manoux, A., Kivimaki, M., Glymour, M. M., Elbaz, A., Berr, C., Ebmeier, K. P. & Dugravot, A. (2012). Timing of onset of cognitive decline: results from Whitehall II prospective cohort study. *Bmj*, *344*.

Sirey, J.A. & Leffel, L. (2016). Elements of Elder Abuse and How Aging Impacts Cognitive Capacity. New York: *Cornell University*.

Skirbekk, V., & James, K. S. (2014). Abuse against elderly in India—the role of education. *BMC Public Health*, *14*, *336*.

Spike, C., & Unit, E. A. P. (2015). *The EAPU Helpline: Results of an investigation of five years of call data*. Elder Abuse Prevention Unit, Uniting Care Community.

Torres, A., Gómez-Gil, E., Vidal, A., Puig, O., Boget, T., & Salamero, M. (2006). Gender differences in cognitive functions and influence of sex hormones. *Actas españolas de psiquiatría*, *34*(6), 408-415.

Tricco, A. C., Soobiah, C., Lillie, E., Perrier, L., Chen, M. H., Hemmelgarn, B., & Straus, S. E. (2012). Use of cognitive enhancers for mild cognitive impairment: protocol for a systematic review and network meta-analysis. *Systematic Reviews*, *1*, 1-6.

United Nations. (2009). World population aging. *Department of Economic and Social Affairs, Population Division. New York:* UN.

Valencia, C., López-Alzate, E., Tirado, V., Zea-Herrera, M. D., Lopera, F., Rupprecht, R., & Oswald, W. D. (2008). Efectos cognitivos de un entrenamiento combinado de memoriay psicomotricidad en adultos mayores. *Rev Neurol*, *46*(8), 465-71.

Voyer, D., Voyer, S., & Bryden, M. P. (1995). Magnitude of sex differences in spatial abilities: a meta-analysis and consideration of critical variables. *Psychological bulletin*, *117*(2), 250.

Wainer, J., Owada, K., & Darzins, P. (2010). *Prevalence of financial elder abuse in Victoria*. Melbourne: Monash University.

World Health Organization. (2011). Aging, & Life Course Unit. *WHO global report on falls prevention in older age*. World Health Organization.

Acknowledgment

Authors profoundly appreciate all those who participated in the study and helped to facilitate the research process. Their contributions are acknowledged however their names cannot be able to be mentioned.

Conflict of Interest

Authors declared no conflict of interests.

How to cite this article: Kushwaha, B. & Pandey, S. (2024). Elder Abuse and its Impact on Cognitive Functioning. *International Journal of Indian Psychology*, *12*(4), 162-180. DIP:18.01.017.20241204, DOI:10.25215/1204.017