

IMPACT OF DEPRESSION ON EVERYDAY MEMORY SELF EFFICACY AMONG OLDER ADULTS IN A.P.

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Abstract: Depression is important critical issues in gerontology that needs to be studied at personal levels. Studies reflect that community-dwelling older adults do not have a high prevalence of major depression; especially in comparison to other adult populations. Recent findings have suggested that the relationship between memory self-efficacy and depression is closely associated with personality-related depression rather than low mood. The paper focuses on the memory self efficacy in the aged and its association with depression. Review reveals that there is paucity of studies related to depression and everyday memory self efficacy in the aged. The paper focuses on the everyday memory self efficacy in the aged (N=600) and its association with depression. The sample of the present study consists of 600 older men and women community-living in the Kadapa District of Andhra Pradesh. The tools like depression and Everyday memory self efficacy questionnaire were used to collect the data. The data indicates that there were significant sub group differences in experiencing depression. It was also found that age, education and locality wise sub-group differences were significant. The role of depression is highlighted in relationship with everyday memory self efficacy performance among older men and women.

I. Introduction:

Memory self-efficacy is dynamic in nature, with a self-evaluative system involves believes and judgments regarding memory performance. It was evolved in the 1980s as a separate construct, which is widely testable. Few pieces of research found strong support to understand the real nature of memory self-efficacy in the field of adult development and ageing, researchers have to perceive the things out of the box (Berry et al., 1999). Berry et al., (1986) investigated the relationship between memory self-efficacy and laboratory versus everyday tasks performance in older adults and results revealed that the correlations between efficacy beliefs and everyday memory performance were higher than those between efficacy and performance on the laboratory tasks. Berry et al., (1989) study found memory self-efficacy for everyday tasks (location, map, phone, and grocery) predicted memory performance of everyday tasks, but not in laboratory tasks (picture, word digit, and maze). And also found that memory self-efficacy predicted the performance in everyday tasks (Berry et al., 1989; Rebok & Balcerak, 1989). Numerous studies carried out with African and Caucasian American elders concluded that memory self-efficacy has predicted memory performance (Berry et al., 1989; Best et al., 1992; Lachman et al., 1992).

Bandura (1989) indicates that our judgment of our own competence in a particular situation, which is called self-efficacy, has a powerful effect on how well we learn and remember in various situations. Older adults anticipate the outcomes of their actions and set goals for themselves based on the way they appraise their capabilities. McDougall ,et al., (2001) examined the effectiveness of the Cognitive Behavioral Model of Everyday Memory (CBMEM) on memory self-efficacy and memory performance of the elderly.

Older adults with depression performance are low compared to their counterparts (Clark & Teasdale, 1985; Martin, 1985). Among older adults, those who are depressed are more concerned about memory lapses and complain more bitterly about them than do those who show no signs of depression (O'Hara et al., 1986; Scogin, 1985). According to West et al., (1984) and Williams et al., (1987) depressed older adults showed poor memory efficiency and response. Bazargan and Barbre, (1994) examined the prevalence and correlates of self-reported memory problems among Black elderly persons. According to data, those Black elderly individuals who have hearing problems, who report a higher number of stressful life events, who experience a higher level of depression, and who suffer from poorer health are more likely to complain of memory problems. Helkala et al., (1997) found the relationship between memory complaints and performance but perplexing because complaints are positively related to depression but inversely related to

actual performance. Many studies concluded that memory self-efficacy to be related to psycho-social factors like depression, coping and neuroticism compared to actual memory functioning, which affects social participation and quality of life in late adulthood (Cipolli et al., 1996; Ponds, 1998). Studying depression in community-dwelling adults is a challenge in gerontological research. But some studies elevated depressive symptoms are risk factors for memory diseases but the reasons unclear (Burt, Zembar, & Niederehe, 1995; Jorm 2000). Depression may be the primary symptom for cognitive decline, which leads to dementia (Gabryelewicz et al., 2007; Jorm 2000).

Aben et al., (2008) study aimed to explore the relationship between memory self-efficacy to depression, neuroticism and coping in stroke patients. The sample consists of 17 male and 6 female patients (age group from 18 to 75 years) after stroke from inpatient rehabilitation. Results show that the Low MSE group has significantly higher scores on depression in comparison with high MSE group. The Low MSE subjects got High scores in depression and passive coping as determinants of MSE. Cristiane et al., (2019) study aimed to analyze the association between depressive symptoms and cognitive functioning of the elderly from the Family Health Strategy. The sample of 306 elderly was assessed standardized tools like Geriatric depression scale, Test of Verbal Fluency, Boston naming test, Logical memory test (WMS-R) and List of words (CERAD battery). The sample was divided into G1 and G2 groups based on depression scores. Results reveal that the prevalence of 29.41 % depressive symptoms in women and younger adults. The subjects in G2 (group with high depression) showed poor performance in cognitive related tests indicates the depressive symptomatology interferes in the cognitive performance in the elderly.

Studies reflect that community-dwelling older adults do not have a high prevalence of major depression, especially in comparison to other adult populations. This situation reflects the prediction that the prevalence of depression is expected to double within the older adult population as Baby Boomers age, making it meaningful to study (Conner et al., 2010). Depression negatively affects older adults' well-being and increases morbidity (Conner et al., 2010; Penninx et al., 1998). Furthermore, the depressive symptoms are associated with risk of dementia, the relationship between depression and cognitive decline may be reinforced by a differential ability to access or learn compensatory cognitive strategies (Jorm, 2011).

The relationship between some of the psychological variables and memory is difficult to study because all the domains are intertwined. But very less was carried out to see the influence of psycho-social variables on memory. The studies on adult intelligence and personality or self belief variables (for e.g., self-esteem, internal and external locus, mental health and social supports) suggest that close or possible inter dependent relationship is obvious (Lalitha, 2000; Lalitha & Jamuna, 2004). The study of cognitive status particularly everyday memory and other psychological variable is considered as one of the important and gray areas of Gero-psychological research as evident from the reviews (Birren & Schaie, 1996; Misra, 2010; Ramamurti & Jamuna, 1993, 1995, 2010; Ramamurti, et al., 2015).

Keeping this in view, the study has been taken up with the following objectives:

- To assess the Depression status across age, gender, educational, family and location status groups of older persons.
- To assess the Everyday memory self efficacy status across age, gender, educational, family and location status groups of older persons.
- To find out the association between Depression ,Everyday memory self efficacy and socio demographic variables.

II. Sample of the study:

Table – I: Socio-Demographic details of the sample.

Sl. No.	Sub-Group	N	%
1.	Age		
	60-65	200	33.3
	66-70	200	33.3
	71-75	200	33.3
2.	Gender		
	Male	300	50.0
	Female	300	50.0
3.	Education		
	a)No Education	237	39.5
	b)School Education	334	55.6
	c)College Education	29	04.8
4.	Family		
	Nuclear	322	53.7
	Joint	278	46.3
5.	Location		
	Rural	352	58.66
	Urban	248	41.33

The main study sample consists of 600 older adults. The sample characteristics like age, gender, location, Family, education, and economic status are described in the Table. II. The total sample was equally distributed across age groups, 60-65; 66-70 and 71-75years, taking 200from each age group, gender wise (300 men and 300 women). The educational status of the sample shows that 39.5 percent of the sample was no formal education, but who can read write, 55.6 percent with school education, and 4.8 percent with the college education. The family status shows that 53.7 percent belongs to the nuclear family and 46.3 percent are living in the joint families. The locality wise data show that 58.66 percent from rural areas, 41.33 percent are living in urban areas.

III. Tools Used In the Study

The standardized tools were used to collect the data on the following variables:

The standardized tools were used to collect the data on the following variables: Everyday Memory self –efficacy Questionnaire(EMSQ) related to self efficacy related every day memory activities (Berry et al., 1989) was developed in regional language i.e., Telugu with 11 items to assess everyday memory in the aged. Higher the score good self-efficacy. The questions were translated in regional language i.e., Telugu. (Lalitha, 2015). Depression was assessed by an adapted version of Depression Scale (Beck, 1972 adapted by Jamuna et al., 1997) which consists of 25 statements with 2 responses i.e., Yes or No. Personal data sheet which consists of the details of the subjects was also used to get the primary data related to the subject.

IV. Method of testing:

All the older subjects were personally contacted and explained the importance of the study. If they were willing to cooperate the data was taken in the first instance itself, otherwise based on the convenient timing of the subject the data was drawn. Care was taken to include disability free and cognitively intact persons as sample of the study.

V. Results and Discussion:

The obtained data was analyzed to meet the objectives of the study. The results related to depression related to everyday memory self efficacy shows that the mean in different sub-groups are as follows: the age group wise the means are as follows: 60-65 (M= 10.54); 66-70(10.12); 71-75(12.71) and the t-values a-b (t=1.24), b-c (t= 7.07).age wise statistically significant. The gender wise data shows that the mean for the male subjects is 10.75, and female subjects is (M=11.50) and the t-value is 2.50 which is statistically significant.

Table. II: Means, S.D's and 't' values related to Depression in Different Subjects

Sl. No	Sub-Group	N	M(-)	't'
1.	AGE			
	60-65	200	10.54(3.24)	1.24(a-b)
	66-70	200	10.12(3.51)	7.07(b-c)**
	71-75	200	12.71(3.79)	
2.	Gender			
	Male	300	10.75(3.90)	2.50**
Female	300	11.50(3.44)		
3.	Education			
	No Education	237	11.18(3.66)	0.021(a-b)@ 1.21(b-c) @
	School Education	334	11.17(3.67)	
College Education	29	10.17(4.26)		
4.	Family			
	Nuclear	322	11.35(3.74)	1.62@
Joint	278	10.86(3.63)		
5.	Location			
	Rural	352	10.94(3.82)	1.46@
Urban	248	11.38(3.49)		
* Significant at 0.05 level; ** Significant at 0.01 level, @ not significant				

The educational-wise trends that the subjects with no education (M=11.18); School Education (M=11.17); College education (M=10.17) and the t-values (a-b= 0.021; b-c= 1.21). The data related to the family shows that those who are living in nuclear (M=11.35) reported high depression compared to those in Joint (10.86) families and the t-value is (1.62). The Locality-wise data shows that the subjects from rural (M=10.94) areas reported to less depression compared to those who are from urban (M=11.38) and the obtained t-value (t=1.46) is statistically not significant. Results clearly indicate that

Results related to Everyday Memory Self-efficacy Performance

The results related to subgroup differences in Everyday memory self –efficacy related (vide Table IX) shows that the mean in different sub-groups are as follows: the age group wise the means are as follows: 60-65yrs (M= 58.44); 66-70yrs (58.39); 71-75yrs (51.99) and the t-values a-b (t=0.02), b-c (t=3.21). The sub-group differences indicate that the age differences between 66-70yrs and 71-75yrs are statistically significant (t= 3.21). Everyday memory self-efficacy is good in 60-65yrs age group compared to other age groups.

Table. III: Means, S.D's and 't' values related to Everyday Memory Self-efficacy in Different Subjects.

Sl.No	Sub-Group	N	M(±)	't'
1.	Age			
	a)60-65	200	58.44(20.60)	0.02(a-b) [@] 3.21 (b-c) **
	b) 66-70	200	58.39(18.02)	
c)71-75	200	51.99(21.61)		
2.	Gender			5.41**
	Male	300	60.66(19.90)	
	Female	300	51.88(21.14)	
3.	Education			8.04(a-b)** 4.48(b-c)**
	a)No formal Education	237	47.62(19.62)	
	b)School Education	334	60.66(18.29)	
	c)College Education	29	76.44(18.19)	
4.	Family			2.22*
	Nuclear	322	54.55(19.06)	
	Joint	278	58.26(21.57)	
5.	Location			2.13*
	Rural	352	54.82(21.25)	
	Urban	248	58.33(18.79)	
* Significant at 0.05 level; ** Significant at 0.01 level; @ Not significant				

The gender wise data shows that the mean for the male subjects is (M= 60.66) high, compared to the female subjects(M=51.88) and the t-value 5.41, which is statistically significant indicates gender differences in reporting the self-efficacy related to the memory related to everyday tasks. The efficacy of mean scores reported by the male is very high (M=60.66), compared to the female (M=51.88). The educational-wise trend show that the subjects with no formal education (M=47.62); School Education (M=60.66); College education (M=76.44) and the t-values (a-b= 8.04; b-c= 4.48). The above data suggest that education plays a significant role in reporting their responses related to their memory and the sub-group difference were also statistically significant. The data related to the family shows that those who are living in nuclear (M=54.55) reported less memory self-efficacy compared to those in Joint (58.26) families and the t-value is 2.22 which is statistically significant. The Locality-wise data shows that the subjects from the rural (M=54.82) areas reported to less self-efficacy compared to those who are from urban (M=58.33) and the obtained t-value (t=2.13) is statistically significant.

Table. IV: Correlation matrix related to Depression and Everyday Memory Self efficacy

Sl. No.	Variables	Depression	Everyday memory self efficacy
1.	Age	.240**	-.130**
2.	Gender	.102*	-.216**
3.	Education	.004 [@]	.380**
4.	Family	.066 [@]	.091*
5.	Location	.059 [@]	.085 [@]
* Significant at 0.05 level; ** Significant at 0.01 level; @ Not significant			

The present study aimed to examine to see the relationship between Depression, Everyday memory self efficacy with socio-demographic variables(vide Table IV). Results reported above clearly indicate that in the case of depression age(r=.240) and gender (r=.102) were significantly correlated but not other variables. But in the case of everyday memory self efficacy strongly and statistically significantly

associated with socio-demographic variables like age($r=-.130$), gender($-.216$), education($r=.380$), family($r=.091$ except locality($r=.085$)). The above results bringout the role of age and gender in experiencing the depression and memory self efficacy.

Table. V: Correlation matrix related to Depression and Everyday Memory Self efficacy

Sl. No.	Variables	Low Depression (n=75)	High Depression (n=75)	Total (n=600)
1.	Everyday memory self efficacy	-.151	-.116	-.094*
*Significant at 0.05 level				

Further analysis was carried out to see the impact of depression on everyday memory self efficacy (See Table. V). To see the real impact of depression the total sample was divided into two extreme groups. The low group consists of 75 members with low depression scores and high group consists of 75 members with high depression scores from the main sample. The data in Table IV clearly indicates that the group with low depression scored 'r' value $=-.151$ and high depression group 'r' value $=-.116$ which are not statistically significant indicates low and high groups impact was not found with memory self efficacy and when further analysis was carried out for the total sample, the correlation value between depression and everyday memory self efficacy is $-.094$ which is statistically significant at 0.05 level.

Results related to Memory self efficacy clearly brought out the important role certain socio-demographic variables in maintain day today life. The young-old, male, the subjects with the college education, those who are living in joint families, the subjects from urban areas and belongs to middle income groups reported high everyday memory self efficacy. The above results demonstrate that age, gender, education, locality, family except economic status found to be important for good everyday memory self efficacy. The majority of older adults certified at least two compensatory strategies, which they perceived to be more helpful in normal routines. Compensatory strategies were related to higher education, more medications, having the concern, and self-efficacy to take medications. The results are on par with predictions in our culture. But higher the memory self efficacy, higher the everyday memory performance. Research into cognitive aging has increasingly focused on memory self-efficacy as an important resource for older adults' everyday memory functioning.

Seeman et al., (1993) found that cognitive performance in men was associated with self-efficacy beliefs but not in women. Langan and Marotta, (2000) examined predictors of self-efficacy in older adults, with physical activity, age, and sex as the predictor variables. Regression analyses revealed physical activity to be the only statistically significant predictor of self-efficacy. A higher level of memory self-efficacy may have beneficial motivational effects in the context of cognitive challenges, resulting in higher cognitive performance (Berry, 1999; De Frias, Dixon, & Backman, 2003; Hertzog & Hultsch, 2000; Valentijn et al., 2006). Kim et al., (2005) identified several predictors of depression, including living arrangement (living alone versus living with family/spouse); having chronic conditions such as diabetes, arthritis, digestive disorders, or chronic bronchitis; years of education; and cognitive impairment. As memories amend older adults rely on multiple cues, and perceive reliance on multiple indications to be helpful.

Important findings and Implications:

- The findings indicate that age-wise differences, gender wise differ significantly in experiencing the depression.
- Everyday Memory self-efficacy status shows that age, gender, education, family and locality –wise differences were significant.
- Depression is significantly associated with age and gender was with but not other variables like education, family and location.
- Everyday memory self efficacy was significantly associated with age, gender, education, family but not with family.
- There was significant relationship between Depression and Everyday Memory Self Efficacy among older adults.

- In the recent years, there is an increase in the prevalence of memory problems with increasing longevity (at age 60). It is therefore important to take up systematic investigations to generate national data base on memory problems of the elderly.
- The study findings imply that affect domain also plays an important role for good cognitive function which directly influences the mental health of an individual.
- The results of this study will be very useful for social and public health policies for older people.

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