Optimistic and Pessimistic Attitude Influencing Depressive Symptoms in Old Age

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Abstract

Depression is the commonest and the most reversible mental health problem in old age. It is associated with physical illness and disability, life events, social isolation and loneliness. Present study attempts to ascertain the role of optimistic and pessimistic attitude for depressive symptoms in individuals at the late stage of their life. The study was carried out with 300 participants of 60 to 85 years age who were drawn from Delhi, India. The respondents were given 21 items BDI scale to measure their level of depression and 56 items OPS scale which measures the optimistic and pessimistic attitude. Linear regression analysis was applied to complete the objectives of the study. Analysis of the responses showed that pessimism was a significant predictor of depression whereas optimism was found as an insignificant predictor of depressive symptoms among elderly. Results also indicated pessimism as a significant predictor of depression among female older persons, elderly living in urban settings, older who had their spouses alive and also among those having spouses not alive.

Keywords: Depression, Optimism, Pessimism, Old age.

Introduction

Depression is the most common mental health problem in old age and also most reversible cause of psychiatric morbidity and mortality in late life. For older people depression is often associated with other co-morbid conditions, such as physical disability[1], dementia[2] and anxiety[3] that increase the distress of older persons. According to WHO (2001), factors increasing depression risk in older adults include genetic susceptibility, chronic disease and disability, pain, frustration with limitations in activities of daily living (ADL), personality traits (dependent, anxious or avoidant), adverse life events (separation, divorce, bereavement, poverty, social isolation) and lack of adequate social support. Many studies have demonstrated a relationship between depression and various socioeconomic variables such as advanced age, low education, poverty and manual occupation[4-6]. Thus, an older adult patient suffering from depression often has a combination of psychological, physical and social needs[7].

Occurrence of depressive symptomatology is a prominent condition amongst older people, with a significant impact on the well-being and quality of life. Many studies have demonstrated that the prevalence of depressive symptoms increases with age[8]. Analyses of depression in later life (i.e. above age 65) reveal a strong positive association between the prevalence of symptoms of depression and age[9]. The investigators found that the higher frequency of depression is explained by factors associated with aging, such as a higher proportion of women, more physical disability, more cognitive impairment, and lower socioeconomic status[10]. When these factors are controlled, there is no relationship between depressive symptoms and age[11]. The 1-year incidence of clinically significant depressive symptoms is high in the oldest old, reaching 13% in those aged 85 years or older[12].

Optimism is all about looking at the bright side, seeing a challenge and knowing everything is going to turn out exactly as it should. Optimism can be conceptualized as a tendency to expect the best possible outcome or dwell on the most hopeful aspects of a situation.

Another term relative to optimism which can be said to be another aspect of optimism is pessimism. Optimism as discussed by Leibniz was cognitive in its emphasis, reflecting a reasoned judgment that good would predominate over evil, even if goodness were associated with suffering. In contrast, pessimism as discussed by Schopenhauer had an emotional referent: The pessimistic individual was one for whom suffering would outweigh happiness.

The question arises whether optimism and pessimism are two separate poles of a single construct or whether optimism and pessimism are states that can live together in the same people. Lightsey[13] reconsidered the original study by Scheier and Carver[14] and observed that also in the original factor analysis there were two factors incorporating both positive and negative items. However, the one-dimensional version of optimism has adequate statistical properties and expected correlations with other constructs as depression, hopelessness, self-esteem, stress and locus of control and there is not enough discriminate validity for justifying two dimensions. On the contrary, according to Chang and Mc Bride- Change[15], Optimism and Pessimism are two distinct traits correlated to each other. The

relationship of optimism and pessimism with depression can be seen from the following studies:

Carver and Gaines[16] examined the role of dispositional optimism versus pessimism as a moderator of the tendency to become depressed after a specific stressful life change: the birth of a child. Both optimism and depressive mood were assessed before several weeks of childbirth. Depressive mood was measured again three weeks postpartum. Even after statistically controlling for initial dysphoria, optimism was inversely correlated with subsequent dysphoria. The researchers found that the effect of optimism was most pronounced among women who initially were not depressed, suggesting that optimism confers resistance to the development of depressive symptoms.

Recently Velden et al[17] studied the association between dispositional optimism and depression in the victims of natural disaster. The results of this research showed that pessimists nurtured little hope for the future and were more at risk for depressive and anxiety disorders compared to optimists. They also found subsequent impairment of social functioning and quality of life among pessimists.

Puskar, Sereika, Lamb and Tasaire-Mumford[18] found a significant relationship between dispositional optimism and lower depression and anger among adolescents. The relationship between higher dispositional optimism and lower depression was also found in other studies[19].

Hasan and Power[20] investigated the relation between mothers' generalized expectancies, mothers' self-reported parenting practices, and their children's optimism, pessimism, and depressive symptoms. A community sample of 81 children, 8 to 12 years old, and their mothers participated. Results showed that maternal pessimism correlated with child pessimism, and that maternal depressive symptoms correlated negatively with child optimism. Multiple regressions indicated that mothers who were moderately controlling had children who showed the most optimism, whereas those who allowed their children little autonomy in problem solving had children with the highest level of depressive symptoms.

Objectives: i. To find out the relationship of optimistic and pessimistic attitude with depression among elderly. ii. To find out the relationship of optimistic and pessimistic attitude with depression among male and female elderly. iii. To find out the relationship of optimistic and pessimistic attitude with depression among elderly having spouse alive as well as those having spouse not alive. iv. To find out the relationship of optimistic and pessimistic attitude with depression among elderly living in rural and urban settings.

Hypothesis: i. Optimism and pessimism would be significant predictors of depression among older adults. ii. Optimism and pessimism would significantly predict depression among male and female elderly persons. iii. Optimism and pessimism would significantly predict depression among elderly with spouse alive and elderly with spouse not alive. iv. Optimism and pessimism would be significant predictors of depression among older adults living in rural as well as urban areas. v. There would be no significant mean difference between male and female elderly participants on depression, optimism and pessimism. vi. There would be no significant mean difference between elderly with spouse alive and elderly without spouse on depression, optimism and pessimism. vii. There would be no significant mean difference between elderly living in rural areas and elderly living in urban areas on depression, optimism and pessimism.

Methodology

Participants: The study population was 300 elderly participants of 60 to 85 years. The mean age of the sample population was 73.45 years. Further the sample was categorized into elderly who were having their spouses alive (146) and elderly who were not having their spouses alive (154); elderly living in rural area (133) and elderly living in urban area (167) group. There were 143 male and 157 female participants in the sample population. The participants were selected from the random sampling method. The subjects for the sample were selected from the older adults of a Delhi-based region residing in the housing societies. These elderly persons were contacted personally, and the questionnaires were administered to them.

Measures: Beck depression inventory 2nd Edition[21]

The Beck Depression Inventory (BDI) is a 21-item self-report scale measuring supposed manifestations of depression. BDI- II is positively correlated with the Hamilton depression Rating Scale with a Pearson r of 0.71. The test was also shown to have a high one-week test-retest reliability (Pearson r= 0.93), test also has high internal consistency (α= .91).

Optimism-Pessimism Scale[22]: The optimism-pessimism scale or OPS is a measure with 18 items reflecting optimism, 18 items reflecting pessimism and 20 fillers. Items are chosen based on a four point likert scale that ranges from "strongly agree" to "strongly disagree. The OPS is based on the view that a person can be both optimistic and pessimistic, but at varying degrees. Validity and reliability for the OPS have found alpha coefficients of r = .94 for the optimism scale and r = .86 for the pessimism scale.

Procedure: Initially the participants were personally contacted and rapport was established with them. The participants completed the questionnaires given to them. Standard instructions were written on top of each questionnaire, and the participants were asked to rate themselves under the option they felt relevant to them. It was made clear to the participants that there were no right and wrong answers. If they had any difficulty, they were encouraged to ask questions. After finishing the entire set of questions, they were asked to return the questionnaires. The test administration took about 45minutes.

Results and Discussion

To achieve the objectives of the study, linear regression analysis was used to establish the relationship between optimistic pessimistic attitude and depressive symptoms and t-test was used to find out the mean difference between groups on variables using (SPSS version 16.0) software program. The following results were obtained:

Table-1
Linear Regression of optimism and pessimism to predict depression among old age persons (N= 300):
Table-1.a Model Summary

Model	R	R Square	Adjusted R Square	R Square Change
1	.669[a]	.491	.490	.491

Predictors: (Constant), pessimism

Table-1.b Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
2	(Constant)	-.075	1.189	00	-.064	.939
	Pessimism	.644	.031	.669	22.990	.000

Dependent variable: depression

The model summary table-1a clearly indicates that pessimism is the only significant predictor of depressive symptoms among elderly. The value of R square shows that predictor variable (pessimism) explained approximately 49.1% of the variance of criterion variable (depression). The actual contribution of predictor variable to the criterion variable is in a form of R square change which is .491. The coefficient table is providing the details of the results. The t and sig (p) values give a rough indication of the impact of predictor variable. The standard beta coefficient for pessimism is .669 which indicates that a unit change in the predictor variable pessimism has a positive effect on criterion variable depression.

Table-2
Linear Regression of optimism and pessimism to predict depression among male old age persons:
Table-2.a Model Summary

Model	R	R Square	Adjusted R Square	R Square Change
1	.308[a]	.157	.162	.157
2	.341[b]	.184	.184	.025

Predictors: (Constant), pessimism, optimism

Table-2.b Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
2	(Constant)	-13.849	8.044	00	-1.722	.087
	pessimism	.715	.131	.387	5.273	.000
	Optimism	.230	.101	.173	2.256	.020

Dependent variable: depression

It can be observed from the table-2a that optimism and pessimism are the significant predictors of depressive symptoms among male older adults. The value of R square shows that predictor variable (pessimism) explained approximately 15.7% of the variance of criterion variable (depression) while predictor variable (optimism) explained approximately 18.4% of the variance of depression. The actual contribution of predictor variable pessimism and optimism to the criterion variable is .157 and .025 respectively. In the coefficient table the standard beta coefficient for pessimism and optimism are .387 and .173 respectively which indicates that a unit change in the predictor variable pessimism and optimism have a positive effect on criterion variable depression.

Table -3
linear regression of optimism and pessimism to predict depression among female old age persons:
Table- 3.a Model Summary

Model	R	R Square	Adjusted R Square	R Square Change
1	.732[a]	.593	.592	.593

Predictors: (Constant), pessimism

Table-3.b Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
2	(Constant)	-.740	1.250	00	-.522	.435
	pessimism	.744	.031	.822	21.836	.000

Dependent variable: depression

The table-3a clearly indicates that pessimism is the only significant predictor of depressive symptoms among female elderly persons. The value of R square shows that predictor variable (pessimism) explained approximately 59.3% of the variance of criterion variable (depression). The actual contribution of predictor variable to the criterion variable is .593. In the coefficient table the standard beta coefficient for pessimism is .882 which indicates that a unit change in the predictor variable pessimism has a positive effect on criterion variable depression.

Table-4
linear regression of optimism and pessimism to predict depression among old age persons with spouse alive:
Table- 4.a Model Summary

Model	R	R Square	Adjusted R Square	R Square Change
1	.516[a]	.280	.277	.280
2	.533[b]	.390	.365	.021

Predictors: (Constant), pessimism, optimism

Table- 4.b Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
2	(Constant)	-20.137	8.149	00	-2.471	.014
	pessimism	.746	.072	.659	11.368	.000
	optimism	.226	.128	.102	3.761	.006

Dependent variable: depression

The table 4.a predicts that optimism and pessimism are the significant predictors of depressive symptoms among older adults with spouse alive. The value of R square shows that predictor variable (pessimism) explained approximately 28% of the variance of criterion variable (depression) while predictor variable (optimism) explained approximately 39% of the variance of depression. The actual contribution of predictor variable pessimism and optimism to the criterion variable is .280 and .021 respectively. In the coefficient table the standard beta coefficient for pessimism and optimism are .659 and .102 respectively which indicates that a unit change in the predictor variable pessimism and optimism have a positive effect on criterion variable depression.

Table-5
Linear Regression of optimism and pessimism to predict depression among old age persons with spouse not alive:
Table-5.a Model Summary

Model	R	R Square	Adjusted R Square	R Square Change
1	.741[a]	.691	.680	.691

a. Predictors: (Constant), pessimism

Table-5.b Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
2	(Constant)	-.588	1.600	00	-.420	.668
	Pessimism	.665	.048	.741	21.377	.000

Dependent variable: depression

The model summary table-5a shows that pessimism is the only significant predictor of depressive symptoms among elderly persons who were not having their spouses alive. The value of R square shows that predictor variable (pessimism) explained approximately 69.1% of the variance of criterion variable (depression). The actual contribution of predictor variable to the criterion variable is .691. In the coefficient table the standard beta coefficient for pessimism is .741 which indicates that a unit change in the predictor variable pessimism has a positive effect on criterion variable depression.

Table-6
Linear Regression of optimism and pessimism to predict depression among old age persons living in rural area:
Table-6.a Model Summary

Model	R	R Square	Adjusted R Square	R Square Change
1	.520[a]	.285	.282	.285

Predictors: (Constant), pessimism

Table-6.b Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
2	(Constant)	2.346	2.031	00	1.138	.253
	Pessimism	.591	.053	.610	11.989	.000

Dependent variable: depression

It can be observed from the model summary table-6a that pessimism is the only significant predictor of depressive symptoms among elderly persons living in rural settings. The value of R square shows that predictor variable (pessimism) explained approximately 28.5% of the variance of criterion variable (depression). The actual contribution of predictor variable to the criterion variable is .285. In the coefficient table the standard beta coefficient for pessimism is .610 which indicates that a unit change in the predictor variable pessimism has a positive effect on criterion variable depression.

Table-7
linear regression of optimism and pessimism to predict depression among old age persons living in urban area:
Table-7.a Model Summary

Model	R	R Square	Adjusted R Square	R Square Change
1	.719[a]	.571	.569	.571

Predictors: (Constant), pessimism

Table-7.b Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	**Std. Error**	**Beta**		
2	(Constant)	-2.385	1.517	00	-1.313	.159
	Pessimism	.682	.028	.719	21.353	.000

Dependent variable: depression

The model summary table-7a predicts that pessimism is the only significant predictor of depressive symptoms among elderly persons living in urban area. The value of R square shows that predictor variable (pessimism) explained approximately 57.1% of the variance of criterion variable (depression). The actual contribution of predictor variable to the criterion variable (R square change) is .571. The standard beta coefficient for the predictor variable pessimism is .719 which indicates that a unit change in the predictor variable pessimism has a positive effect on criterion variable depression.

Table-8
Showing means difference between male and female old age participants on depression, optimism and pessimism:

Test variable	Groups	N	Mean	SD	T (298)
Depression	Male	143	24.826	7.2074	1.417
	Female	157	26.674	13.1188	
Optimism	Male	143	48.615	5.2555	.302
	Female	157	48.063	8.9866	
Pessimism	Male	143	33.096	3.9091	2.866*
	Female	157	36.798	14.5809	

*significant at .01 level, **significant at .05 level, NS

The table-8 is showing that male and female elderly people do not differ significantly on depression and optimism variables but there is a significant mean difference between the two groups on pessimistic attitude. The statistical value given in the table is t= 2.866 which is showing a significant difference (p<.01) between the male and female groups on pessimism. The mean value for female participants (M= 36.798) is greater than the mean value of male participants (M= 33.096) which presents the idea that females are more pessimistic in nature than the male participants in their old age.

Table-9
Showing means difference between old age participants with spouse alive and spouse not alive on depression, optimism and pessimism

Test variable	Groups	N	Mean	SD	T (298)
Depression	Spouse Alive	146	24.664	10.0014	4.335*
	Spouse not Alive	154	29.810	13.7380	
Optimism	Spouse Alive	146	50.659	6.2049	3.622*
	Spouse not Alive	154	47.557	10.7620	
Pessimism	Spouse Alive	146	33.451	8.9646	5.308*
	Spouse not Alive	154	39.891	15.1098	

*significant at .01 level, **significant at .05 level, NS

Table-9 shows that elderly group with spouse alive are having a significant mean difference from the elderly group with spouse not alive on depression, optimism and pessimism variables. The mean value of spouse not alive group is more than the other group on depression (M= 29.810) and pessimism (M= 39.891) which presents the idea that older person whose life partners were not alive at the time, were at greater risk of depression and pessimistic thinking. They were more depressed and having more pessimistic attitude than those who were living their life with their spouses. The group with alive life partners are found more optimistic (M= 50.659) than the other comparing group (M= 47.557).

Table-10
Showing means difference between rural and urban old age participants on depression, optimism and pessimism

Test variable	Groups	N	Mean	SD	T (298)
Depression	Rural	133	24.169	8.1757	2.735*
	Urban	167	27.551	13.0525	
Optimism	Rural	133	50.792	5.2428	3.535*
	Urban	167	47.705	9.1779	
Pessimism	Rural	133	31.908	7.2438	5.333*
	Urban	167	38.434	13.7220	

*significant at .01 level, **significant at .05 level, NS

In table-10 of mean difference we can see that there is a significant mean difference between older adults living in rural as well as urban settings on depressive symptoms, optimistic and pessimistic attitude. The mean values show that elderly who live in urban settings are more depressed (M= 27.551) and also more pessimistic (M= 38.434) than those who are living in rural

areas. On the other hand elderly living in urban areas are found less optimistic (M= 47.705) than those living in rural areas (M= 50.792).

Conclusion

Depression is a very distressing situation in anyone's life. It affects the mental as well as physical health directly. Optimism and pessimism are the states that strongly influence depressive symptoms especially in old age. Older livings have to face many challenging and stressful situations at that time. Old age turns an elderly person towards either positive or negative mental status which moulds the depressive state of the elderly. The present study investigated the influence of optimistic and pessimistic attitude on depression among older adults. Linear regression analysis and t test were applied to find the results.

As a result of regression analysis we found that pessimistic attitude was significantly related to depressive symptoms among older adults. The results are supported with the findings of Van der Velden et al[17] who studied the association between dispositional optimism and depression in the victims of natural disaster. The researchers found that pessimists nurtured little hope for the future and were more at risk for depressive and anxiety disorders compared to optimists. Similarly Joshi and Tomar[23] found that optimists and pessimists differ from each other on the level of depression. Pessimists have a higher level of depression as compared to optimists. The level of apathy, pessimism, and tendency of fatigability, irritability, social withdrawal, self-dislike, self-acquisition, self-harm, social reoccupation and indecisiveness is higher among pessimist adolescents as compared to optimists. Depressive state was strongly influenced by pessimistic attitude among female elderly, those whose spouses were not alive and those living in rural as well as urban settings. The state of depression among male elderly and those whose spouses were alive was influenced by both optimistic as well as pessimistic attitude.

Further we found that male and female elderly groups were similar on depression and optimistic attitude but in case of pessimistic attitude female elderly were more pessimistic than the male elderly person. The living status of spouse plays an important role in developing the mental situation of an older adult. Those elderly, whose spouses were not alive, were more depressed and pessimistic as compared to those who were living with their spouses. Here we can assume that feeling of loneliness and lack of companionship may lead the lonely individuals to become pessimistic and depressed. It can be stated from the results that aged elderly whose life partners were alive were found more optimistic and less depressed. The finding supports the human nature and gives importance to the idea that life partner plays a dynamic role to the life in old age of an individual. It is obvious that in old age a person needs a company more as compared to in the young age. The support of the partner can make life happier; it helps in reducing loneliness and depression and makes a person optimistic. While a person

who don't have his life partner alive, felt alone, don't have anyone to share his problems and feelings which results in development of pessimistic attitude. It can be concluded that a living life partner may reduce the possibility of becoming depressed, feeling loneliness, and increases the optimistic attitude in old age. So a living life partner leads the other partner to the positive sight of the thinking.

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