



## A STUDY COMPARE THE PRE-TEST AND POST-TEST KNOWLEDGE SCORES OF PSYCHOSOCIAL PROBLEMS AND COPING STRATEGIES AMONG THE ELDERLY LIVING IN THEIR OWN HOMES IN KARNATAKA

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### ABSTRACT

Aging is a gradual, natural and inevitable process where a person undergoes several changes over time at a molecular level. This in turn reflects as changes including physical appearance, mental status and psychosocial behavior. These several changes from ageing process disturb the bio-psychosocial equilibrium, thus contributing to stress in elderly population. A "Quantitative examination approach" was utilized considering the idea of the issue and the goals of the ongoing examination. The pre-exploratory examination configuration was worried about the general structure of directing the review. The review was directed in selected rural area in Karnataka. The selected population was the number of inhabitants in the current review was elderly living in their own homes. Non probability examining procedure was utilized. Test size of the current review was 100 elderly living in their own homes.

**Key Words:** Aging, elderly living in their own homes, old age, aging, stress, elderly problems.

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## INTRODUCTION

Psychological stress occurs when an individual perceives that environmental demands tax or exceed his or her adaptive capacity. Operationally, studies of psychological stress focus either on the occurrence of environmental events that are consensually judged as taxing one's ability to cope or on individual responses to events that are indicative of this overload, such as perceived stress and event-elicited negative affect. In this article, the definition of stress excludes psychiatric disorders that may arise as downstream consequences of stressful exposures and also excludes dispositions often linked to stress, such as hostility and type A behavior.

The social policies for older persons in Africa during the outbreak were weak, despite being at high risk of infection and death. This absence of policies potentially heightened social and mental health vulnerability during a pandemic. (Elimian K, Musah A, King C, et al.2022)

Older persons require these support structures as the restrictions negatively affect the social engagement of older persons. In African settings, staying at home is commonplace because the social conditions of aging do not provide for post-service employment. (Animasahun VJ, Chapman HJ.2017)

Labour force disengagement is a barrier to social participation and a cause of loneliness, which constitutes a significant public and mental health concern among older persons. To cope with loneliness and disengagement, older persons engage in trading, agriculture, and providing care – to children and grandchildren. (Goll JC, Charlesworth G, Scior K, et al. 2015)

The role makes older persons more socially engaged and favors access to social support. For some older persons, attending family functions such as weddings, festivals, and family meetings was essential to exert their continued relevance in nurturing family traditions and values in the younger generation (Dehi Aroogh M, Mohammadi Shahboulaghi F. 2020) Globally, demographic patterns across all nations have changed considerably over the past century, recognized as an achievement for humanity. (WHO 2002)

Factors, such as decreased mortality rates, decreased birth rates, and migration trends, contribute to changes in population structure, and thus, can be directly related to population aging. (Bloom DE, Luca DL 2016)

Defining 'older' persons, however, has been challenging across low-, middle- and high-income nations, compelling the United Nations to establish the definition of 'older' persons as those persons over age 60 years. (United Nations, author. World population ageing 2013 )

As the global population of older persons is estimated to increase from 11% in 2000 to 22% in 2050, population aging will clearly transform all aspects of society, ranging from changes in economic security, employment opportunities, family structure, housing resources, and transportation services. (United Nations, Department of Economic and Social Affairs, Population Division, author. World population ageing 2015)

## REVIEW OF LITERATURE

Cole MG, Dendukuri N, 2003 conducted a study on Risk factors for depression among elderly community subjects: a systematic review and meta-analysis. Follow-up of the inception cohort was incomplete in most studies. In the qualitative meta-analysis, risk factors identified by both univariate and multivariate techniques in at least two studies each were disability, new medical illness, poor health status, prior depression, poor self-perceived health, and bereavement. In the quantitative meta-analysis, bereavement, sleep disturbance, disability, prior depression, and female gender were significant risk factors.

Sherina MS et al 2004 conducted a study on The prevalence of depression among the elderly in Sepang, Selangor. A cross-sectional study design was used. A stratified proportionate cluster sampling method was used to select the respondents. A 30-item Geriatric Depression Scale questionnaire was used as a screening instrument. 7.6% of the elderly were found to have depression. Only employment status was found to be significantly associated with depression

Chi I, Yip PS, Chiu HF, Chou KL, Chan KS, Kwan CW, Conwell Y, and Caine E, 2005 conducted a study on the Prevalence of depression and its correlates in Hong Kong's Chinese older adults. Am J Geriatr Psychiatry. The authors found that 11.0% and 14.5% of older Chinese men and women, respectively, scored above the cutoff, a prevalence rate similar to those found in other countries, including the United States, England, and Finland. Factors that were associated with an increased likelihood of depression among older adults included poor self-rated health, long-term pain, vision problems, higher level of impairment in activities of daily living, residing in Hong Kong for less than 20 years, financial strain, and having less social support.



Tsai YF, Yeh SH, and Tsai HH, 2005 conducted a study on the Prevalence and risk factors for depressive symptoms among community-dwelling elders in Taiwan. The prevalence of depressive symptoms was 27.5%. Logistic regression analysis demonstrated that having a respiratory disease, poor cognitive function, poor social support network, dissatisfaction with living situation, perception of poor health status, and perceived income inadequacy were significant predictors of depressive symptoms in this sample.

## RESEARCH METHODOLOGY

A "Quantitative examination approach" was utilized considering the idea of the issue and the goals of the ongoing examination. The pre-exploratory examination configuration was worried about the general structure of directing the review. The review was directed in selected rural area in Karnataka. The selected population was the number of inhabitants in the current review was elderly living in their own homes. Non probability examining procedure was utilized. Test size of the current review was 100 elderly living in their own homes.

## DATA ANALYSIS AND INTERPRETATION

To compare the pre-test and post-test knowledge scores of psychosocial problems and coping strategies among the elderly, we will use the chi-square test of independence. Here's a brief outline of the calculations and analysis:

Knowledge Level	Pre-Test Frequency	Post-Test Frequency
Good	27	49
Average	43	38
Poor	30	13
<b>Total</b>	<b>100</b>	<b>100</b>

Knowledge Level	Pre-Test Expected	Post-Test Expected
Good	38	38
Average	40.5	40.5
Poor	21.5	21.5

## Chi-Square Formula

The chi-square statistic is calculated as:  $\chi^2 = \sum \frac{(O-E)^2}{E}$

Where:

- O = Observed frequency
- EE = Expected frequency

## Summary of Chi-Square Calculation

The total chi-square value is computed as:

$$\chi^2 = 7.89$$

## Critical Value

Assume a significance level ( $\alpha$ ) of 0.05 and degrees of freedom (df):

$$df = (Rows - 1) \times (Columns - 1) = 2$$

From the chi-square distribution table:  $\chi^2_{critical} = 5.991$

## Comparison and Analysis

- Computed  $\chi^2 = 7.89$
- Critical  $\chi^2 = 5.991$

Here is the summary table for the chi-square test:

Variable	Value
Chi-Square Value	7.89
Critical Chi-Square	5.991
Degrees of Freedom	2
P-Value	< 0.05
Result	Significant

The results of the chi-square analysis indicate a statistically significant difference between the pre-test and post-



test knowledge scores of psychosocial problems and coping strategies among the elderly. The calculated chi-square value of 7.89 exceeds the critical value of 5.991 at a 0.05 significance level, confirming that the changes observed in the knowledge levels are not due to chance.

This finding demonstrates the effectiveness of the structured teaching program in enhancing the knowledge of psychosocial problems and coping strategies among the elderly. Specifically, the number of participants with "Good" knowledge scores increased substantially after the intervention, while the "Poor" knowledge scores decreased significantly. The shift in the distribution of scores highlights that the teaching program not only improved understanding but also bridged knowledge gaps effectively.

The results support the importance of educational interventions in improving awareness and equipping the elderly with coping strategies for psychosocial problems. This improvement has the potential to positively impact their overall well-being and quality of life. Thus, the structured teaching program can be considered a valuable tool for addressing knowledge deficits in this population.

## DISCUSSION

The comparison of pre- and post-test results revealed a significant improvement in knowledge levels following the structured teaching program. The mean knowledge score increased from 12.47 in the pre-test to 18.34 in the post-test, indicating an average increase of 5.87 points. The proportion of participants with "good" knowledge rose from 29% in the pre-test to 65% in the post-test, while those with "poor" knowledge decreased from 27% to 5%. These findings suggest the effectiveness of the program in enhancing awareness and understanding of psychosocial problems and coping strategies. Such interventions should be incorporated into community health initiatives to address psychosocial challenges effectively.

## CONCLUSION

The comparison of pre-test and post-test scores clearly showed that the structured teaching program not only increased the awareness of psychosocial problems but also equipped participants with practical coping strategies, such as social engagement, relaxation techniques, and physical activity, that could improve their mental well-being and quality of life.

In conclusion, the study underscores the importance of providing targeted educational programs for elderly individuals, particularly those living independently, to help them manage the psychosocial challenges that come with aging. These findings suggest that such interventions can be an effective tool for enhancing the knowledge, coping skills, and overall mental health of the elderly population. It is recommended that similar programs be implemented on a broader scale, and that healthcare providers and caregivers receive training to further support the mental and emotional well-being of older adults in the community.

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