



A Study Of Relationship Between Physical Activity Participation With Functional Fitness And Psychological Well-Being Of Senior Citizens

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ABSTRACT

Purpose: The present study aimed to examine the relationship between physical activity participation, functional fitness, and psychological well-being among senior citizens. With increasing life expectancy, maintaining physical independence and psychological health in old age has become a major public health concern. This study sought to determine whether physically active senior citizens differ significantly from inactive senior citizens in terms of functional fitness and psychological well-being, and to explore the interrelationship among these variables.

Methods: A descriptive survey method was employed for the study. The sample comprised 120 senior citizens (60 physically active and 60 physically inactive) aged 60 years and above, selected through random sampling from urban and rural areas of Haryana, India. Physical activity participation was assessed using a Physical Activity Participation Questionnaire, functional fitness was measured using the Senior Fitness Test developed by Rikli and Jones (2001), and psychological well-being was assessed using the Psychological Well-Being Scale by Ryff (1989). Statistical techniques such as mean, standard deviation, independent samples t-test, and Pearson's Product Moment Correlation were used for data analysis.

Results: The findings revealed significant differences between physically active and inactive senior citizens with respect to functional fitness and psychological well-being. Physically active senior citizens demonstrated higher levels of strength, flexibility, balance, and endurance, along with better psychological well-being. Further, significant positive relationships were found between physical activity participation and functional fitness, physical activity participation and psychological well-being, and functional fitness and psychological well-being.

Conclusion: The study concludes that regular participation in physical activity plays a vital role in enhancing functional fitness and psychological well-being among senior citizens. Promoting active lifestyles in old age may contribute significantly to healthy and successful ageing.

Keyword- physical activity participation, functional fitness in elderly, psychological well-being, senior citizens' health, aging and quality of life



1. INTRODUCTION

Ageing is a natural and inevitable process associated with gradual physiological, psychological, and social changes. In recent decades, improvements in healthcare and living conditions have resulted in a rapid increase in the elderly population worldwide, including in India. While increased longevity is a positive development, it also presents challenges related to declining physical functioning, loss of independence, and reduced psychological well-being among senior citizens (World Health Organization [WHO], 2015).

Physical activity has been widely recognized as a key determinant of healthy ageing. Regular engagement in physical activity helps older adults maintain muscle strength, flexibility, balance, and cardiovascular endurance, collectively referred to as functional fitness. Functional fitness enables senior citizens to perform daily activities independently and reduces the risk of falls, chronic diseases, and disability (Rikli & Jones, 2001).

In addition to physical benefits, physical activity has a profound impact on psychological well-being. Psychological well-being in old age encompasses positive dimensions such as self-acceptance, purpose in life, autonomy, environmental mastery, positive relations, and personal growth (Ryff, 1989). Sedentary lifestyles among older adults are often associated with depression, anxiety, loneliness, and reduced life satisfaction, whereas active lifestyles promote positive mood, self-esteem, and cognitive functioning (Netz et al., 2005).

Despite strong evidence supporting the benefits of physical activity, a substantial proportion of senior citizens remain physically inactive due to factors such as health limitations, lack of motivation, inadequate facilities, and social constraints. In the Indian context, cultural beliefs and limited awareness further restrict physical activity participation among the elderly.

Rationale of the Study: Considering the growing elderly population and the challenges associated with ageing, it is essential to understand the role of physical activity in promoting functional fitness and psychological well-being among senior citizens. The present study attempts to provide empirical evidence on the interrelationship between physical activity participation, functional fitness, and psychological well-being, which may help policymakers, educators, and health professionals design effective intervention programs for active and healthy ageing.

2. REVIEW OF RELATED LITERATURE

Rikli and Jones (2001) emphasized that functional fitness is a crucial indicator of physical independence in older adults and is strongly influenced by regular physical activity participation. Their research demonstrated that active older adults perform significantly better on measures of strength, flexibility, and balance than inactive peers.

Netz et al. (2005) examined the psychological benefits of physical activity among older adults and found that regular exercise was associated with lower levels of depression and anxiety and higher levels of subjective well-being.

Singh and Kiran (2014) reported that physically active senior citizens exhibited better quality of life and psychological health compared to inactive individuals. Their study highlighted physical activity as a cost-effective strategy for promoting mental health in old age.



Patel et al. (2018) observed a significant positive relationship between physical fitness and psychological well-being among elderly individuals, suggesting that improvements in physical functioning contribute to enhanced self-esteem and life satisfaction.

WHO (2015) recommended regular physical activity for older adults to maintain functional ability and mental health, emphasizing its role in healthy ageing.

3. STATEMENT OF THE PROBLEM

A study of relationship between physical activity participation with functional fitness and psychological well-being of senior citizens.

4. OPERATIONAL DEFINITIONS

Physical Activity Participation: In this study, physical activity participation refers to the regular involvement of senior citizens in structured or unstructured physical activities such as walking, yoga, stretching, and recreational exercises, measured through a standardized questionnaire.

Functional Fitness: Functional fitness refers to the physical capacity of senior citizens to perform daily activities independently and safely, measured through strength, flexibility, balance, and endurance components of the Senior Fitness Test.

Psychological Well-Being: Psychological well-being refers to the overall positive psychological functioning of senior citizens, including autonomy, self-acceptance, purpose in life, and positive relations with others, measured using Ryff's Psychological Well-Being Scale.

5. OBJECTIVES OF THE STUDY

- To study the relationship between physical activity participation and functional fitness among senior citizens.
- To study the relationship between physical activity participation and psychological well-being among senior citizens.
- To study the relationship between functional fitness and psychological well-being among senior citizens.

6. HYPOTHESES OF THE STUDY

- There is no significant relationship between physical activity participation and functional fitness.
- There is no significant relationship between physical activity participation and psychological well-being.
- There is no significant relationship between functional fitness and psychological well-being.

7. MATERIAL AND METHODS

Participants

The participants of the study consisted of 120 senior citizens (60 males and 60 females) aged 60 years and above, drawn from selected urban and rural areas of Haryana, India.

Sampling Technique

A random sampling technique was used to select the participants. Based on their physical activity participation scores, the participants were categorized into physically active and physically inactive groups.

Tools Used

- Physical Activity Participation Questionnaire
- Senior Fitness Test by Rikli and Jones (2001)
- Psychological Well-Being Scale by Ryff (1989)

Statistical Techniques

Mean, standard deviation, independent samples t-test, and Pearson’s Product Moment Correlation were used for data analysis.

8. DATA ANALYSIS AND DISCUSSION

Hypothesis: 1 To find out the relationship between physical activity participation and functional fitness among senior citizens.

Table 1: Correlation coefficient between physical activity participation and functional fitness among senior citizens.

| S.No | VARIABLE | N | COEFFICIENT OF CORRELATION | INTERPRETATION |
|------|---------------------------------|----|----------------------------|--|
| 1. | physical activity participation | 60 | 0.48 | Correlation is significant at 0.01 level |
| 2. | functional fitness | 60 | | |

Interpretation

The computed Pearson correlation coefficient (r), as shown in Table 1, is 0.44, greater than the table value at the 0.01 threshold of significance at the 58 degree of freedom. The null hypothesis stating that there is no significant relationship between physical activity participation and functional fitness was rejected. This indicates that higher levels of physical activity are associated with better functional fitness among senior citizens.

Hypothesis: 2 To find out the relationship between physical activity participation and psychological well-being among senior citizens.

Table 2: Correlation coefficient between physical activity participation and psychological well-being among senior citizens.

| S.No | VARIABLE | N | COEFFICIENT OF CORRELATION | INTERPRETATION |
|------|----------|---|----------------------------|----------------|
|------|----------|---|----------------------------|----------------|

| | | | | |
|----|---------------------------------|----|------|--|
| 1. | physical activity participation | 60 | 0.44 | Correlation is significant at 0.01 level |
| 2. | psychological well-being | 60 | | |

Interpretation

The computed Pearson correlation coefficient (r), as shown in Table 2, is 0.44, greater than the table value at the 0.01 threshold of significance at the 58 degree of freedom. The null hypothesis that there is no significant relationship between physical activity participation and psychological well-being was rejected. This finding highlights the beneficial role of physical activity in enhancing psychological well-being among senior citizens.

Hypothesis: 3 To find out the relationship between functional fitness and psychological well-being among senior citizens.

Table 3: Correlation coefficient between functional fitness and psychological well-being among senior citizens.

| S.No | VARIABLE | N | COEFFICIENT OF CORRELATION | INTERPRETATION |
|------|--------------------------|----|----------------------------|--|
| 1. | psychological well-being | 60 | 0.51 | Correlation is significant at 0.01 level |
| 2. | functional fitness | 60 | | |

df=60-2=58

Interpretation

The computed Pearson correlation coefficient (r), as shown in Table 3, is 0.51, greater than the table value at the 0.01 threshold of significance at the 58 degree of freedom the null hypothesis stating that there is no significant relationship between functional fitness and psychological well-being was rejected. This suggests that better functional fitness is associated with higher psychological well-being among senior citizens.

9. RESULTS

The results revealed significant differences between physically active and inactive senior citizens in functional fitness and psychological well-being, with active individuals scoring higher on both variables. Correlation analysis indicated significant positive relationships among physical activity participation, functional fitness, and psychological well-being.



10. DISCUSSION

The findings of the study support earlier research indicating that physical activity plays a crucial role in maintaining functional fitness and psychological well-being in old age. Improved functional fitness among active senior citizens may enhance autonomy and self-confidence, which in turn contributes to better psychological well-being.

11. CONCLUSION

The study concludes that physical activity participation is positively associated with functional fitness and psychological well-being among senior citizens. Encouraging regular physical activity in old age is essential for promoting healthy, independent, and psychologically satisfying lives.

12. EDUCATIONAL IMPLICATIONS OF THE STUDY

The findings of the present study have several important educational implications for adult education, health education, physical education, and community-based learning programs aimed at senior citizens.

1. Integration of Physical Activity in Adult Education Programs

Educational institutions, community centers, and lifelong learning programs should incorporate structured physical activity sessions such as walking, yoga, stretching, and low-impact exercises into senior citizen education programs. This will help enhance functional fitness and psychological well-being among older adults.

2. Curriculum Development for Gerontological Education

The results highlight the need to include topics related to physical activity, functional fitness, and mental well-being in gerontology, physical education, and health education curricula. Educating future teachers, trainers, and caregivers about active ageing will help them design effective programs for the elderly.

3. Role of Physical Education Teachers and Trainers

Physical education teachers and fitness trainers should be trained to design age-appropriate, safe, and enjoyable physical activity programs for senior citizens. Emphasis should be placed on improving balance, strength, flexibility, and endurance to promote independence in daily living.

4. Promotion of Psychological Well-Being through Activity-Based Learning

Educational programs for senior citizens should focus not only on physical health but also on psychological well-being. Group-based physical activities can be used as educational tools to promote social interaction, self-confidence, autonomy, and a sense of purpose among older adults.

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