

EXECUTIVE SUMMARY

UGC MINOR PROJECT ON SOCIAL CONSEQUENCES OF COGNITIVE AGEING: A STUDY AMONG THE SENIOR CITIZENS OF THIRUVANANTHAPURAM DISTRICT, KERALA

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The study aims to explore the social consequence of cognitive aging, how society responds to these challenges and also it reflects the value society places on older adults and how it views their continued involvement and contribution to their families, social networks, and communities. So the present study understands the role of social environment in cognitive ageing. From the review it is evident that social life of elderly has an impact on cognitive ageing. There are not many studies done in the Indian context and particularly in Kerala which try to locate the social consequences of cognitive ageing. So the present research made an attempt to understand social life of elderly in relation to their cognitive functioning.

The main objective of the study was to identify relationship between cognitive ageing and the social life of elderly. For this a Correlation study was employed. In the present study, population was senior citizens of Kerala. Snowball sampling method was used to identify the elderly. A total of 200 senior citizens were included with equal proportion of males and females. Participants were aged 60 or over; able to speak and read; living at home; and without a known history of mental illness. The study was conducted in Kerala as the state of Kerala in India is an ideal setting to study aging, given the dramatic population-aging phenomenon. This study was conducted in Thiruvananthapuram district, the capital, of Kerala state.

The study employed quantitative method for data collection. Different types of tools were employed for collecting the information. The first test of Vision having non-verbal pictures of very common objects or animals had five levels with 3 objects at each of these 5 levels. At least 3rd level was to be attained to let the participant to participate in this study so as to ensure that the participant has adequate vision to proceed with other tests where vision is essential. The minimum score was 3 and the maximum score obtained was 5 which was the maximum also possible. The cognition was assessed using Advanced Progressive Matrices. The Duke Social

Support Index (DSSI) score for Social Interaction, The Duke Social Support Index (DSSI) score for Satisfaction with Social Support, Memory for digits in the forward sequence or direct order, memory for digits in the backward sequence or reverse order scored, The Appraisal support scale, the Belonging Support, and the Tangible Support component of the Interpersonal Support scale were used. The Loneliness scale, the Oxford Happiness Questionnaire (OHQ), the Socio Economic Status (SES) scales was used. The Quality of Life of the sample of this study was assessed along four domains. The four domains with short-names D1, D2, D3, and D4 represent the Physical Health, psychological, social relationships, and Environment.

Variables of the study Social consequences variables include; 1. Social Interaction 2. Social Support 3. Appraisal Support 4. Belonging Support 5. Tangible support 6. Loneliness 7. Happiness 8. Physical health domain of quality of life 9. Psychological domain of quality of life 10. Social relationships domain of quality of life 11. Environment domain of quality of life

Mediator variables include;

1. Age 2. Sex 3. Urban-Rural 4. Socioeconomic status 5. Education 6. Marital Status 7. Illness

To assess Cognitive functioning; 1. Memory for digits-forwards (direct) & backwards (reverse) (Wechsler) 2. Intellectual capacity by Standard Progressive Matrices (Ravens): This test is a non-verbal test suitable for adults with low level of education also. 3. Nonverbal test of vision.

Analytic strategy include Descriptive statistics analyses were used to describe the characteristics of the study sample. A correlation analysis was used to address the relationships among demographic characteristics, social variables and cognitive function. Path analysis was used to develop a model on cognitive performance and social variables, and to validate the same. Path analysis is a statistical method which is an extension of multiple regressions for causal modeling of measured variables. The mediator or moderator relationship of variables can also be depicted, validated, and understood using path analysis. Quantitative data was analyzed using SPSS programme 21.0 version. Path Analysis was done using AMOS software. Frequency tables and cross tables were prepared to arrive at inferences and correlation of variables were analyzed. Further Charts like pie charts, bar diagrams were prepared to present the data more appealingly and for making the finding more understandable.

Findings shows that all the 24 variables of the study had a sample size of 200 indicating there was no experimental mortality or loss due to missing data, during the study. The participants of the study had adequate vision to perform other tests where vision is essential. This study was among the senior citizens and the minimum age was 60 and the maximum age observed was 88 with mean age being 70.06 (SD=6.878) thereby the sample representing the age range of the population of the study. Among the participants of the study, males and females were equal in number as well as those from urban and rural locality was also equal in representation. This indicates that the findings could be generalized to both the sexes as their representation is equal in the sample. As the sample of this study came equally from Urban and Rural locations (n=200) the findings could be generalized to both the locations as their representation is equal in the sample. The scores on Cognition were found to be almost normally distributed.

For memory of digits (forward or direct order), majority of the participants were having memory (direct order) for numbers with 4 or 5 digits. For memory of digits (backwards or reverse order), majority of the participants were having memory (reverse order) for numbers with 3 or 4 digits when the recall was in reverse order.

Majority (57.5%) were belonging to the Upper Middle class Socio Economic Status. This was followed by 24% participants belonging to the Lower Middle class. 14.5% of the participants (n=200) were belonging to High class, 3% were belonging to poor status, and 1% belonged to Upper High Socio Economic Status. Majority of the participants had secondary or at least

primary school education. Majority of the participants of this study were married. Majority of the participants were ailing with illness during the participation in this study.

Inter-correlation between the variables of this study found age is negatively correlated with Non-verbal vision ($r=-0.46$). Cognition and Age and Social variables are interrelated. Correlation between Cognitive and Social variables after partialling the association of Age, Sex, and Urban-Rural, found that memory for digits (direct or forward) and memory for digits (reverse or backwards) is having high correlation ($r=0.675$) which indicates that memory for digits irrespective of the order in which it is recalled is unitary in nature and not separate sub-systems. Moreover, the stability of the measure is also supported by the high correlation. The four dimensions of quality of life were found to be correlated to each other in this partial correlation analysis. This indicates that after partialling out the influence of Age, Sex, and location, the relationship between Cognitive variables and Social variables is robust.

Tests for joint significance for the mediation effects of; 1) Age, 2) Sex, 3) Urban-Rural, 4) Socioeconomic Status, 5) Education, 6) Marital Status, and 7) Current Illness in the relationship between the predictor variables; 1) Cognition, 2) Memory-Direct, and 3) Memory-Reverse on the dependent variables; 1) Social Interaction, 2) Social Support, 3) Appraisal Support, 4) Belonging Support, 5) Tangible Support, 6) Loneliness, 7) Happiness, 8) Physical health, 9) Psychological, 10) Social Relationships, and 11) Environment domain of quality of life, found that;

There is mediation effect of education on the effect of cognition on social interaction. Sex mediates the effect of cognition on social support. Sex as well as education mediates the effect of cognition on appraisal support. Sex and education mediates the effect of cognition on belonging support. Education mediates the effect of cognition on happiness. Education mediates the effect of cognition on physical health domain of quality of life. Sex and education mediates the effect of Cognition on Psychological domain of Quality of Life. Education mediates the effect of cognition on social relationships domain of quality of life.

Education mediates the effect of memory-direct on social interaction. Age mediates the effect of memory-direct on social support. Education mediates the effect of memory-direct on appraisal support. Marital status mediates the effect of memory-direct on tangible support. Education mediates the effect of memory-direct on happiness. Age and education mediates the effect of memory-direct on physical health domain of quality of life. Marital status and education mediates the effect of memory-direct on psychological domain of quality of life. Education and

marital status mediates the effect of memory-direct on social relationships domain of quality of life. Marital status and education mediates the effect of memory-direct on environment domain of quality of life.

Sex and education mediates the effect of memory-reverse on social interaction. Sex mediates the effect of memory-reverse on social support. Sex mediates the effect of memory-reverse on appraisal support. Sex mediates the effect of memory-reverse on belonging support. Marital status mediates the effect of memory-reverse on tangible support. Education mediates the effect of memory-reverse on happiness. Education mediates the effect of memory-reverse on physical health domain of quality of life. Sex, marital status, and education mediate the effect of memory-reverse on, psychological domain of quality of life. Education and marital status mediates the effect of memory-reverse on social relationships domain of quality of life. Marital status and education mediates the effect of memory-reverse on environment domain of quality of life.

It can be concluded that Sex and education mediates the effect of Cognition on social variables. Education, Age, and Marital status mediate the effect of memory-direct on social variables. Sex, education, marital status, and Sex mediates the effect of memory-reverse on social variables. The findings indicate that cognition, memory-direct, and memory-reverse has significant effect on social variables among the elderly.