

Psychosocial Correlates of Widows in Tribal Community in Idukki District, Kerala

Amalraj Mariaselvam^{1*}, Vellaiah Sethuramalingam²

ABSTRACT

Introduction: India is a country with the highest number of widows in the world (4.65 crores) and they are invisible and marginalised. It is assumed that the widows in the tribal community are highly marginalised that may lead to severe mental health problems. **Objectives:** To access the resilience, depression, anxiety, stress (DASS), quality of life (QOL) and its correlates with demographic and socioeconomic characteristics of the tribal widows. To identify the significant predictors of QOL in the study population. **Materials & Method:** The Idukki district in Kerala state was purposively selected where the concentration of Hill Pulaya tribe found more in number. The sample size constitutes 80 tribal widows. The individual respondents were selected by using Tippet number table. A 25 items Connor-Davidson Resilience Scale, DASS-21 and WHOQOL-BREF were used to collect the data. **Result:** The results show that the average current age of the tribal widows in the study area is 56.53 years. Their average years of schooling was 0.49 and 90% of them were illiterates. Majority of them were agricultural labourers (65%). Most (58%) of them were living in a joint family. About 79% of the widows were receiving a pension from the government. Majority of the tribal widows were scored high on resilience (61.3%), low on DASS (57.5%) and being equal (50% each) on QOL. The current age, years of widowhood, family income and resilience score increases, the quality of life score of the tribal widows' decreases. Further, depression, anxiety and stress scores increases, QOL score decreases. The regression analysis shows that resilience, monthly income, years of widowhood, current age and education together have a total of 54.2% influence on the QOL of the tribal widows, with resilience being the single largest significant predictor of the QOL of tribal widows. **Conclusion:** Findings reveal that there is a need for providing counselling to the tribal widows to increase their QOL.

Keywords: Resilience, quality of life, depression, anxiety, stress, tribal, widows

INTRODUCTION

Globally, there are 245 million (245,188,630) widows (Fields & Casper, 2001). This has been increased to 258.5 million with 584.6 offspring in 2017 (Batha, 2017). Almost one-half of women over the age of 65 years are widowed (Fields & Casper, 2001). In the year 2010, the country with the highest estimated number of widows was China, with India was an in second place; by 2015 this had reversed India as a country with the highest number of widows in the world at 46,457,516 and China with 44,590,560 and followed by the USA, Russia and Indonesia (The Loomba Foundation, 2015). Kerala has the largest widow population (6.67%) in India (The Times of India, 2015). The death of a spouse is the most stressful life event in human's experience (Amster & Krauss, 1974; Holmes & Rahe, 1967), and however, it is a common occurrence in the lives of middle-aged and older women (Fields & Casper, 2001). The failure to focus on the conditions in which widows live in many different cultures and countries is reprehensible; considering the seriousness of the deprivation, suffered, how badly it affects their welfare and that of their children (Sossou, 2002).

¹ PhD Research Scholar, ² Professor (Rtd.) and Former Head
Department of Social Work, Bharathidasan University, Tiruchirappalli, Tamil Nadu, India
*Email: amariaselvam@gmail.com

Various studies have been conducted on widows. Mishra et al. (2000) and Gupta (2010) reported that both tribal men and women have a high rate of stress and other mental problems. Wilcox et al. (2003) found that women widowed less than a year reported more mental and physical problems than women who were married and women who had been widowed for longer than a year. The women who remained married showed stability in mental health. The findings also underscore the resilience of older women and their capacity to re-establish connections. Bhugra & Ayonrinde (2004) highlighted that tribal group have a high level of depression than non-tribal. Bonanno et al. (2004) reported that the resilient and the depressed-improved groups showed remarkably healthy profiles and relatively little evidence of either struggling with or denying/avoiding the loss. Ong, et al. (2006) indicated that the levels of trait resilience predicted a weaker association between positive and negative emotions further, the experience of positive emotions functions to assist high-resilient individuals in their ability to recover effectively from daily stress. Fry and Debats (2010) reported that psychological resource factors have a significant effect on resilience and longevity. Sethuramalingam et al. (2010) found that there was a moderate level of quality of life, depression, anxiety, and stress among the widows in slums. Sethuramalingam and Sathia (2011) examined the quality of life of widows living alone and those who live with their parents/in-laws. The findings revealed that those who were living with their parents had a better quality of life than those who were living alone. Chaudhary and Chadha (2014) reported that the resilience level of widows in the first group (women who became a widow at the age of 25-35 years) was much lower and even the ways to recover were quite different when compared with the second group (women who lost their husbands after 55 years and above). Manjul (2017) found that depression is significantly higher among widow than the divorced participants both in case of tribal and non-tribal than the divorced tribal and non-tribal. Hendrickson, et al. (2018) reported that individual assets, social resources, social support and social participation contributed to the widows' resilient outcomes. From the review of earlier literature, it is found that there have been no recent studies among tribal widows with a specific focus on resilience, depression, anxiety, stress and quality of life, comprehensively. In view of this research gap, the researcher has proposed to conduct an in-depth study to examine the resilience, depression, anxiety, stress and quality of life of tribal widows. In order to fill this research gap, the present study was undertaken with the following objectives.

Objective: The objective of the present research work is (i) to study the resilience, depression, anxiety, stress (DASS), QOL and its correlates with demographic and socio-economic characteristics of the tribal widows, and (ii) to identify the significant predictors of QOL of the respondents.

Hypothesis: There will be no statistically significant relationship between the background characteristics in the mean scores of resilience, depression, anxiety and stress (DAS) and QOL of the tribal widows.

MATERIALS AND METHOD

Participants: The researcher purposively selected Idukki district in Kerala state where concentration Hill Pulaya tribe found in more in number. There are 201 widows among Hill Pulaya tribe. Due to constraint of time and money the researcher decided to select only 40% of the total tribal widows. Thus, the sample size constitutes 80 tribal widows. The individual respondents were selected by using Tippet number table.

Research Design: The study adopted a descriptive research design to describe the background characteristics and the significant predictors of resilience, DASS and QOL. The

present research is also cross-sectional in nature since data were used at only one point in time to assess the socio-demographic characteristics and the subject dimensions.

Tools of Data Collection: A semi-structured interview schedule was prepared to collect the personal information and socioeconomic conditions of the tribal widows. To measure resilience among the respondents, the 25 items Connor-Davidson Scale (2003) was administered. Depression, Anxiety and Stress of the respondent was measured with the help of DASS-21 developed by Lovibond and Lovibond (1995). To measure the Quality of Life of tribal widows, the WHOQOL-BREF-26 (1996) was used. The reliability (alpha) value of the Resilience, DASS-21, and WHOQOL-BREF- 26 scales were found to be 0.972, 0.908, and 0.956 respectively.

Methods of Data Collection: The data collection was done during the months of April - May 2019. The researcher collected the required data with the help of interview schedules through a face-to-face interview with the respondents. The respondents were interviewed at their home and in their workplace. On average, two respondents were interviewed per day by the researcher with duration of about 2 hours per person.

Analysis of Data: The collected data was analysed using SPSS-AMOS-24 (IBM Corp, 2017). Frequency distributions, correlation and regression analysis was done. Histogram and p-p plots were used to check the linearity, homoscedasticity, and normality of residuals. The distribution of the residuals was found to be normal to a certain extent. This can be observed in diagram 1 (histogram), diagram 2 (p-p plots), and diagram 3 (scatter plots).

Ethical Considerations: Official permission was obtained from the Director, Scheduled Tribes Development Department (STDD) of Kerala state. Verbal permission was also obtained from tribal leaders in the study areas. It was assured that the collected data will be kept confidential and used for research and academic purpose only. Verbal consent was also obtained from the respondent before the interview.

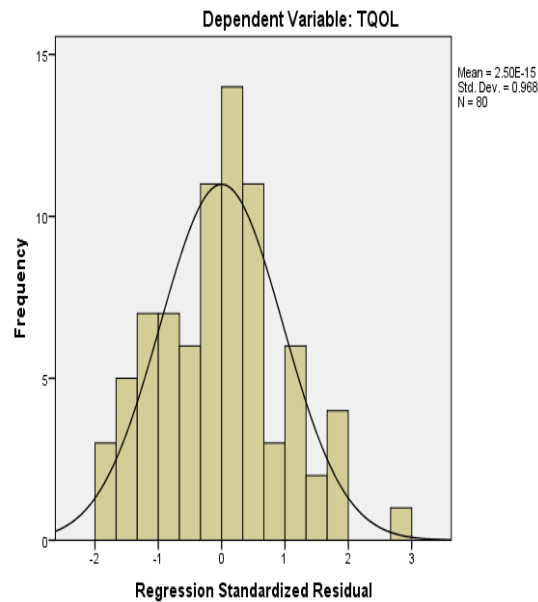
RESULT AND DISCUSSION

Background characteristic of the respondent: The results show that the average current age of the tribal widows in the study area is 56.53 years, with a minimum age of 27 years and a maximum age of 68 years. The average age at their time of husband's death was 46.86 with a minimum age of 24 years and a maximum age of 66 years. Their average years of schooling was 0.49 with a minimum of 1st standard to a maximum 8th standard and 90% of them were illiterates. Majority of them were agricultural labourers (65%) and farmers (33%). Their average monthly income was Rs. 10,103/-. About the 80% of them were landowners (mean acres of land 0.80) and remaining were agricultural labourers. Their average size of the family was 3.08 ranging from 1 to 7 members. Most (58%) of them were living in a joint family. Except for one family, all are living in their own houses. The majority (73%) of them are living in concrete houses with attached toilet facilities and the rest of them are in tiled houses. The average number of rooms in their home was 2.94. All the houses were electrified (Electricity 85%, Solar 15%) with adequate drinking water supply. It was reported that 70% of the respondents have access to a mobile phone. It was also noted that the vast majority (80%) of them were living in their husband's family itself after the death of their spouses. About 79% of the widows are receiving a pension from the government.

Level of Resilience, DASS and QOL: The mental health of the widows was classified into a low and high category based on the mean scores of resilience (59.40), DASS (62.70) and QOL (52.46). It was also reported that a majority of the tribal widows scored high on resilience (61.3%), low on DASS (57.5%) and being equal on QOL (50% each).

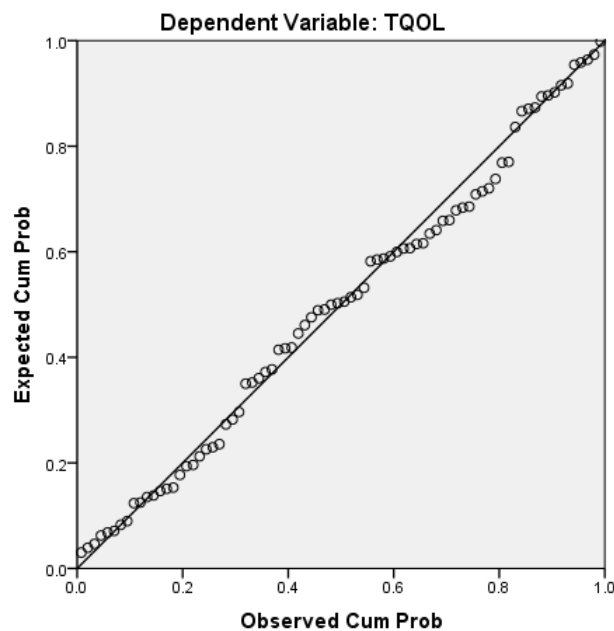
Test of Normality and Linearity

Figure 1: Histogram of regression standardised residual



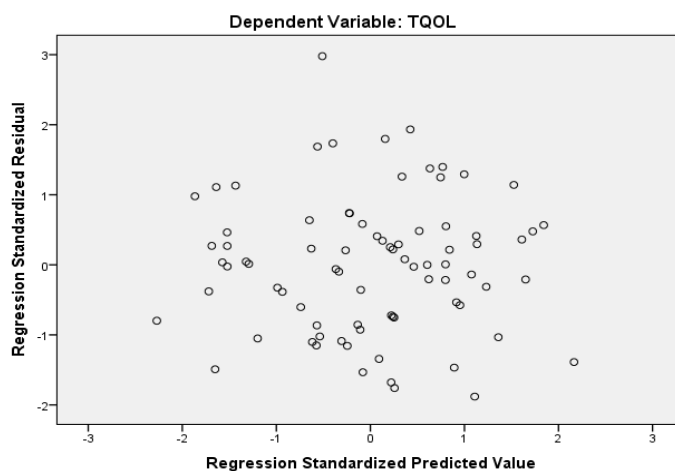
The histogram in figure - 1 indicates that the residuals approximate *a normal distribution*. Further, it shows that in linear regression analysis, there is *no tendency in the error terms* to a certain extent.

Figure 2: Normal P-P plot of regression standardised residual



A p-p plot in figure - 2 can also be used to assess the assumption that the residuals are *normally distributed*. It is good if residuals are lined well on the straight dashed line (Kim, 2015). The figure - 2 echoes the histogram and the data points all fall close to the ‘ideal’ diagonal line (Field, 2009 & 2016). The distribution is considered to be normal to a certain extent that the plotted points match the diagonal line with *no strong deviations*. ‘This indicates that the residuals are normally distributed’ (Statistical Solutions, 2019).

Figure 3: Scatter plot of regression standardised residual



To perform the linear regression analysis, there is a need to check whether there is a *linear relationship* in the data. The scatter plot is a good way to check whether the data are homoscedasticity (Statistical Solutions, 2019). The scatter plots in diagram-3 indicate good negative linear relationship between the predictor variables: resilience, DAS scores and family support score and the outcome variable: QOL. The correlations between these variables are significant and conclude that there is a linear relationship between these variables which allows us to conduct a linear regression analysis and not violating the linearity assumption.

Conceptual framework: It is proposed to treat resilience, depression, anxiety, and stress, scores as dependent variables, the background characteristics of the sample respondents will be treated as independent variables. On the other hand, when *QOL* is treated as a dependent variable, background characteristics including resilience, depression, anxiety, and stress scores of the sampled respondents will be treated as independent variables.

Correlation between the background characteristics and QOL of the respondents

The correlation test was carried between the background characteristics of the respondents and the QOL score to find out the relationship between these variables.

Table - 1: Correlation between the Background Characteristics, Resilience, Depression, Anxiety, Stress and QOL of the Tribal Widows

Variables	1	2	3	4	5	6	7	8	9
1. Current Age	1								
2. Yrs Widowhood	.359***	1							
3. Education	-.676***	-.165	1						
4. F. M. Income	-.101	.003	.069	1					
5. Resilience	-.213	.022	.168	-.057	1				
6. Depression	.200	.121	-.085	-.087	-.663***	1			
7. Anxiety	.142	.011	-.052	-.030	-.523***	.685***	1		
8. Stress	.095	-.101	.003	-.120	-.577***	.739***	.831***	1	
QOL	-.241*	.298**	.039	.346**	.501***	-.267*	-.287**	-.415***	1

The correlation analysis shows that current age ($r=-0.241$, $p<0.05$), depression ($r=-0.267$, $p<0.05$), anxiety ($r=-0.287$, $p <0.01$) and stress ($r=-0.415$, $p <0.001$) increases the quality of life of tribal widows decreases. Further, years of widowhood ($r=0.298$, $p <0.01$), family

income ($r=0.346$, $p<0.01$) and resilience score ($r=0.501$, $p <0.001$) increases the quality of life of tribal widows also increases.

Identification of major predictors of the quality of life of tribal widows

Table -2: Step-wise regression analysis on QOL score of the tribal widows

Model	Predictors	R	R ²	R ² Change	B	SEb	β	C.R. / t	p
1	2	3	4	5	6	7	8	9	10
Dependent Variable - QOL									
1	(Constant)	.501	.251	.251	39.081	2.722		14.360	.000
	Resilience				.225	.044	.501	5.113	.000
2	(Constant)	.626	.392	.141	35.990	2.574		13.985	.000
	Resilience				.235	.040	.523	5.873	.000
	F. M. Income				.000	.000	.376	4.229	.000
3	(Constant)	.688	.474	.081	33.208	2.544		13.054	.000
	Resilience				.232	.037	.516	6.190	.000
	F. M. Income				.000	.000	.375	4.500	.000
	Yrs of Widowhood				.307	.089	.285	3.427	.001
4	(Constant)	.722	.521	.047	43.873	4.613		9.510	.000
	Resilience				.207	.037	.461	5.580	.000
	F. M. Income				.000	.000	.347	4.302	.000
	Yrs of Widowhood				.401	.093	.374	4.331	.000
	Current Age				-.175	.064	-.242	-2.725	.008
5	(Constant)	.756	.572	.051	53.069	5.384		9.856	.000
	Resilience				.209	.035	.466	5.922	.000
	F. M. Income				.000	.000	.347	4.514	.000
	Yrs of Widowhood				.430	.089	.400	4.846	.000
	Current Age				-.332	.081	-.459	-4.097	.000
	Education				-1.518	.514	-.307	-2.953	.004

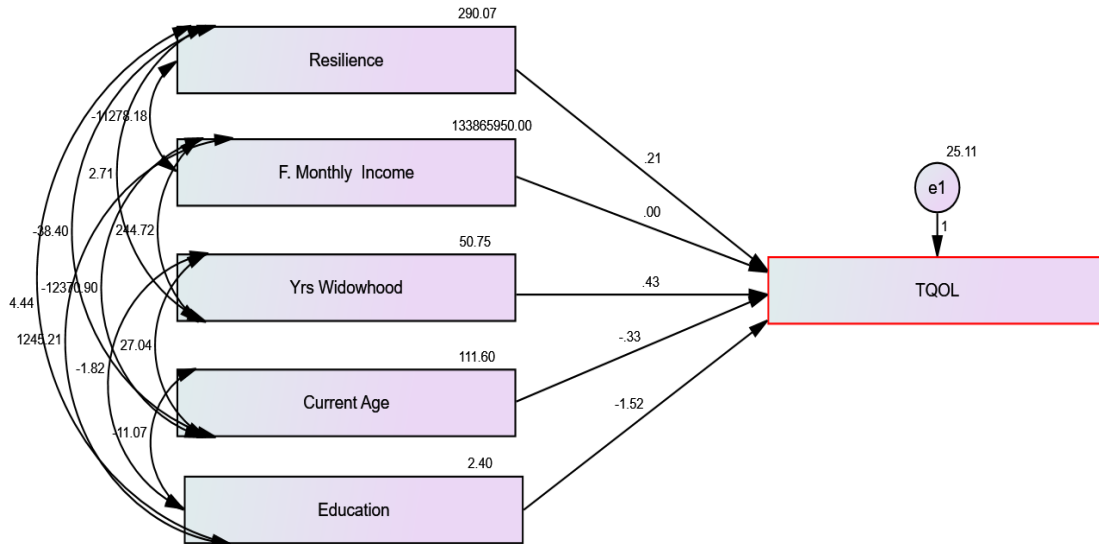
In table 2 of column 4 labelled R² which is a measure of how much of the variability in the outcome is accounted for by the predictor. For the first model, its value is 0.251, which means that resilience scores account for 25.1% of the variation in QOL. However, for the final model (model 5), this value increases to 0.572 or 57.2% of the variance in QOL. Therefore, whatever variables enter the model in step 2, step 3, step 4 and step 5, they account for an extra 14.1%, 8.1%, 4.7% and 5.1% of the variance in QOL score.

The values column 6 tells us about the relationship between QOL and each predictor. If the b value is positive, we can tell that there is a positive relationship between the predictor and the outcome, whereas a negative coefficient represents a negative relationship. For these data, current age and education have negative b values indicating negative relationships. So, as resilience, family income and years of widowhood increases, QOL also increases. This b values also tell us to what degree each predictor affects the outcome of the effects of all other predictors are held constant. Each of these beta values has an associated standard error (column 7) used to determine whether or not the b value differs significantly from zero. For this model, resilience, ($t = 5.922$, $p <0.001$), monthly income, ($t = 4.514$, $p <0.001$), years of widowhood ($t = 4.846$, $p <0.001$), current age ($t = -4.097$, $p <0.001$) and education ($t = -2.953$, $p <0.001$) are significant predictors of QOL. From the magnitude of the t-statistics, we can see that the resilience had slightly more impact than the other predictors.

Regression path analysis using structural equation modelling

Path analysis is a form of multiple regression statistical analysis used to evaluate causal models by examining the relationships between a dependent variable and two or more independent variables. Using this method one can estimate both the magnitude and significance of causal connections between variables (Crossman, 2017).

Regression Path Diagram: 1 Graphic output for Un-standardised Estimates (b)



Regression Path Diagram: 2-Graphic output for standardised Estimates (β)

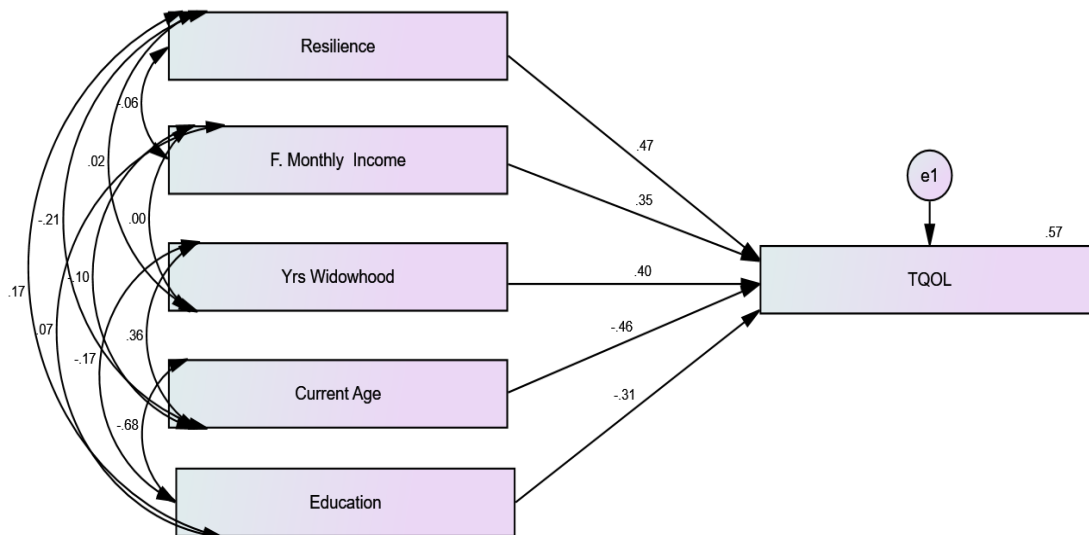
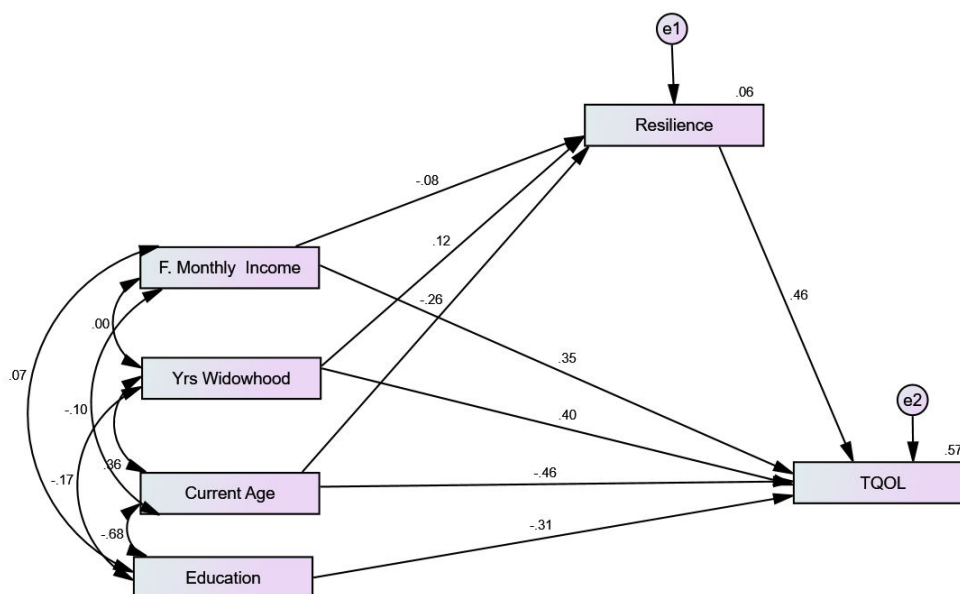


Table 2, path diagram 1 & 2 shows that resilience score (25.1%), followed by monthly income (14.1%), years of widowhood (8.1%), current age (4.7%) and education (5.1%) have influenced the QOL score of the tribal widows (see also column 5 of Table 2). Hence, on the whole, the five significant predictors, i.e., resilience, monthly income, years of widowhood, current age and education together have a total of 54.2% influence on the QOL of the tribal widows, with resilience being the single largest significant predictor of the QOL of tribal widows. However, both diagrams indicate that the model is not a perfect fit. Hence, the researchers modified the conceptual framework.

Model Fit Summary

Path Diagram - 3: Standardized graphic output



In the modified model both resilience and QOL scores acted as dependent variables. When resilience is acted as the dependent variable, current age ($\beta = -0.26$), years of widowhood ($\beta = 0.12$) and monthly income ($\beta = -0.08$) is acted as independent variables. When QOL is acted as dependent variable, education ($\beta = -0.31$), current age ($\beta = -0.46$), years of widowhood ($\beta = 0.40$), monthly income ($\beta = 0.35$) and resilience score ($\beta = 0.46$) are acted as independent variables. $\chi^2 = 0.035$, $df = 1$, $p = 0.851$, RMSEA: it is equal to 0.000 (< 0.05 is acceptable), GFI: 1.000 (0 = No fit - 1 = Perfect fit is acceptable) and it is concluded that the present model is supported by the sample data (Bian, 2011).

Limitations: The study was conducted only among the widows of Hill Pulaya tribe. Hence the findings of the study cannot be generalised to the widows with other tribal groups. The sample size was very small as the study was conducted as a pilot study of a major study on widows in Idukki district, Kerala.

CONCLUSION & SUGGESTIONS

The finding shows that almost all widows were illiterates as well as school dropouts at the primary level. Hence, there is a need for promoting non-formal education particularly adult and functional literacy programmes to the tribal widows in the study areas. It is also found out that there is no middle or high schools in the nearby localities of the tribal settlements. Hence there is a need for promoting formal education among the tribal girl children by admitting them in residential schools. In this regard, the government and NGOs can create awareness among the tribes about the importance of education for girl children. It is also found that about 39% tribal widows scored the low level of resilience and 42% of them were scored the high level of depression, anxiety, stress and another half of them scored the low level of QOL. The overall results suggest that the resilience score of the tribal widows have turned out to be the most powerful predictor of the QOL of the tribal widows. Hence, there is a need for reducing the DASS scores and to increase the resilience and QOL scores by providing counselling to the tribal widows. Finally, it is concluded that the modified model fit adopted in this study is appropriate and supported by the sample data.

Source of Funding: Nil

Conflict of Interest: None

Ethical Clearance: Taken

REFERENCES

- Amster, L. E., & Krauss, H. H. (1974). The relationship between life crises and mental deterioration in old age. *International Journal of Aging and Human Development*, 5, 51–55.
- Batha, E. (2017). Factbox: Global number of widows rises as war and disease take a toll, London: Thomson Reuters Foundation. Retrieved from <https://www.reuters.com/article/us-global-widows-factbox/factbox-global-number-of-widows-rises-as-war-and-disease-take-toll-idUSKBN19E04P>
- Bhugra, D., & Ayonrinde, O. (2004). Depression in migrants and ethnic minorities. *Advances in Psychiatric Treatment*, 10(1), 13-17.
- Bian, H. (2011). Structural Equation Modeling with AMOS II. Retrieved from http://core.ecu.edu/ofe/statistics_research/SEM%20with%20AMOS%20II.pdf
- Bonanno, G. A., Wortman, C. B., & Nesse, R. M. (2004). Prospective Patterns of Resilience and Maladjustment During Widowhood. *Psychology and Aging*, 19(2), 260-227.
- Chaudhary, N., & Chadha, N. K. (2014). Resilience: The power to recover from adversities. *Indian Journal of Health and Wellbeing*, 5(7), 43 - 45.
- Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and anxiety*, 18(2), 76-82.
- Crossman, A. (2017). Understanding Path Analysis: A Brief Introduction. Retrieved from <https://www.thoughtco.com/path-analysis-3026444>
- Fields, J., & Casper, L. M. (2001). America's families and living arrangements: March 2000 (Current Population Reports, P20–537). Washington, DC: U.S. Census Bureau.
- Fry, P. S., & Debats, D. L. (2010). Psychosocial resources as predictors of resilience and healthy longevity of older widows. *New Frontiers in Resilient Aging: Life-Strengths and Well Being in Later Life*, 185-212.
- Gupta, V. B. (2010). Impact of culture on healthcare-seeking behaviour of Asian Indians. *Journal of cultural diversity*, 17(1), 13-19.
- Hendrickson, Z. M., Kim, J., Tol, W. A., Shrestha, A., Kafle, H. M., Luitel, N. P., ... & Surkan, P. J. (2018). Resilience among Nepali widows after the death of a spouse: That was my past and now I have to see my present. *Qualitative health research*, 28(3), 466-478.
- Holmes, T. H., & Rahe, R. H. (1967). The Social Readjustment Rating Scale. *Journal of Psychosomatic Research*, 11, 213–218.
- IBM Corp. (2017). IBM, SPSS Statistics for Windows, Version 24.0. Armonk, NY: IBM Corp.
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33(3), 335-343.
- Manjul, M. (2017). Assessment of depression and socio-economic status of tribal and non-tribal widowed and divorced working women. *IJAR*, 3(2), 167-169.
- Misra, R., Patel, T. G., Davies, D., & Russo, T. (2000). Health promotion behaviours of Gujarati Asian Indian immigrants in the United States. *Journal of Immigrant Health*, 2(4), 223-230.

- Ong, A. D., Bergeman, C. S., Bisconti, T. L., & Wallace, K. A. (2006). Psychological resilience, positive emotions, and successful adaptation to stress in later life. *Journal of Personality and Social Psychology*, 91(4), 730-749.
- Sethuramalingam, V., Sathia, S., & Deivajothi, V. (2010). Widows in Slums of Tiruchirappalli City – A study. In K. Sathyamurthi (Ed.). *Contemporary Social Work Research* (pp145-151). New Delhi: Allied Publishers Pvt. Ltd.
- Sethuramalingam, V., & Sathia, S. (2011). Widows in Slums: Living with families and alone: A Comparative analysis. In R. Magaleswarn (Ed), *Social Development in India: New Vistas and Challenges*. New Delhi: Authors Press.
- Sossou, M.A. (2002). Widowhood practices in West Africa: the silent victims. *International Journal of Social Welfare* 11. Quoted in The Loomba Foundation (2015) *World Widows Report – A critical issue for the Sustainable Development Goals*. Retrieved from: <https://www.theloomba foundation.org/sites/ default/files/2019-06/WWR.pdf>
- Statistical Solutions, (2017). *Conduct and Interpret a Linear Regression*. Retrieved from <http://www.statisticssolutions.com/conduct-interpret-linear-regression/>
- The Loomba Foundation. (2015). *World Widows Report – A critical issue for the Sustainable Development Goals*. Retrieved from: <https://www.theloombafoundation.org/sites/default/files/2019-06/WWR.pdf>
- The Times of India. (2015, May 1). Widows head 12% of households in Tamil Nadu. Retrieved from: <https://timesof india.indiatimes.com/city/chennai/MCI-warns-medical-colleges-for-hiring-part-time-faculty/articleshow/47115751.cms>
- Wilcox, S., Evenson, K. R., Aragaki, A., Wassertheil-Smoller, S., Mouton, C. P., & Loevinger, B. L. (2003). The effects of widowhood on physical and mental health, health behaviours, and health outcomes: The Women's Health Initiative. *Health Psychology*, 22(5), 513.
- World Health Organization. (1996). *WHOQOL-BREF- Introduction, Administration, Scoring and Generic Version of the Assessment*. Field Trial Version. Programme on Mental Health. World Health Organization, Geneva. Retried from: https://www.who.int/mental_health/media/en/76.pdf

How to Cite this Article: Mariaselvam, A. & Sethuramalingam, V. (2020). Psychosocial Correlates of Widows in Tribal Community in Idukki District, Kerala. *National Journal of Professional Social Work*, 21(2), 81-90. doi: 10.29120/njpsw.2020.v11.i2.267