The Impact of Job Cadre on Psychological Wellbeing of Senior Citizens after Retirement – using Multivariate Analysis Approach: Key Findings & Policy Implications

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Abstract

This study aimed at assessing the psychological wellbeing and life satisfaction of senior citizens after retirement. This study is empirical in nature and employs the multivariate analysis approach to measure the impact of job cadre on mental health of retired elderly in Khyber Pakhtunkhwa province Pakistan. The conceptual design of this work is materialized by examining the significant relationship between the criterion variables and predictor variable. The dependent variable consists of multi-items standardized inventories, while the independent variable consists of various job categories. The result indicates that the combined dependent variable i.e. psychological wellbeing involving three outcome variables: self-esteem, life satisfaction, and perception about aging; is significantly influenced by the predictor variable. Further, the predictor variable has contributive qualities and strongly linked with the mental health and life satisfaction of senior citizens. The key findings and policy implications of this study are quite valuable for the government, policymakers, and donor agencies in devising the social welfare schemes for the betterment of senior citizens in Pakistan.

Keywords – Job Cadre, Retirement, Aging, Life Satisfaction, Psychological Wellbeing

I. Background

In recent years, several empirical studies have been emerged in support of Aristotle's two millennia old agenda about the satisfaction and happiness in life. Although the aspects of one's satisfaction and well-being may vary in almost all cultures and regions; people see satisfaction and well-being as one of the esteemed goals of life (Diener

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& Oishi, 2000; Lyubomirsky, 2000). Addressing a question, why some retired elderly are more satisfied than others; is a significant aspect of positive psychology. Aging and retirement are also an emerging area in the behavioral and social science space (Little et al., 2012; Mitchell, 1993). Both issues are closely associated and generate a feeling of triviality that leads to matter of social adjustment and financial needs (Osborne, 2012). Sadly, this remained a policy issue with low priority, particularly in developing countries. The longevity of the life span has spurred the accumulation of older people across the globe. The number of elder people is higher than ever before. The UN reports indicate that the proportion of aged people has increased from 8% in 1950 to 11% in 2007 and it will touch 22% by 2050. The aging population is augmenting at a ratio of 2.6 per year, higher than the entire population ratio which is at 1.1% per year. The population of the elderly is estimated to reach to two billion by 2050. The cases of disability, morbidity and mortality also tend to enhance by the increasing number of the elderly (Bhamani, Karim, & Khan, 2013). The long life or non-existence of illness does not mean the quality of life or satisfaction in life. Rowe and Kahn (2015) define healthy aging as the absence of disease and disability, the maintenance of high mental and physical function and continued activity in productive and social activities. The recent emerging aspects of the demography have modified socio-political and economic determinants. The issue of aging in Pakistan is influencing social policies, healthcare structure, social security and socio-economic conditions of a family (Jalal & Younis, 2014). Retirement is an inevitable part of life and so far, relatively neglected area in the field of Gerontology. The present society is coming across transitional changes including modern social trends, weakening of traditional family structure, and deviation from age-old social values, which gradually accelerate the problems of retired elderly. The financial independency is availed to a limited number of the elderly after retirement. Pension fund on the regular basis only offered to those, who are retired from the government sector. Normally, the people get retired from work in their sixties. The elderly people in the primitive societies were not extruded in the name of aging and retirement rather valued more with respect to age. They held important statuses and vital roles in their families and communities up to their last breath. But nowadays, the individuals who are performing job in formal sector get retire at a certain age. There are few studies, which relate retirement with grief and sorrow. Mosca & Barrett (2016) argues that retirement improves overall health, while forced retirement leads to negative impact on mental wellbeing. This negative impact can be reduced, if the elderly is married with supportive children and engaged in some physical activities (Dave, Rashad, & Spasojevic, 2006). Retirement affects the psycho-emotional state and financial position in addition to the ways, older people relate to their family and friends. Work provides opportunities for activities, social interaction, and utilization of energy – that all leads to a mental well-being and internal satisfaction. Knight et al. (2007) opines that some elderly find retirement a challenge. It also narrows down their overall interaction by extruding them from the mainstream labor force in which this affiliation is embedded. Kleiber & Nimrod (2009) opines that retirement is a sad experience for several people and they feel uncomfortable in this phase of life. Martin et al., (2014) suggests that activities provide opportunities for social relationships, income generation and physical fitness. In Pakistan, the formal age for retirement is sixty years, the older individuals after age of 60 years are unable to do job in any public sector and become dependent on others to meet their needs after retirement. The scarce financial resources after retirement make them suffer from low self-respect and dignity. In addition, the older people suffer from a relatively higher rate of physical problems, poverty, lack of access to health services and work opportunities (Jalal & Younis, 2014). The pension scheme in Pakistan was launched in 1954, but rarely upgraded keeping the inflation rate and other financial aspects. The income

security is the most critical issue of the older persons across the globe. Salahuddin and Jalbani, (2006) explained that many Pakistani pensioners are dependent on their relatives, which eventually hurt their self-esteem and economic independency. A great number of retirees in Pakistan are deprived of social security and health coverage. The existing pension scheme do not cover the entire older population. The older people with adequate economic recourses are more likely to live a satisfied and healthy life than their peers, who have insufficient wealth (Kleiber & Nimrod, 2009). Financial assets are also associated with psycho-emotional wellbeing in retirement. Lastly, the professional status is an important determinant of the psychological well-being and satisfaction in life after retirement (Martin et al., 2014).

II. Methodology

2.1 Data Collection

The sample for this study was taken from the Khyber Pakhtunkhwa, province. It was ensured that the respondents, who had to be interviewed belong to same province. According to the Auditor General statistics reported in 2014, the retired population consist of around 92875 personals in the Khyber Pakhtunkhwa province; out of which 28872 personals were living in the Peshawar city. The data was collected from the population with stratified random sampling method. Overall, 500 questionnaires were distributed (via e-mail, postal mail, and in person), but the total filled questionnaires were around 312 (62%), which is an acceptable response rate (Richardson, 2005). Only those respondents included, who were living a normal functional life and not suffering from severe health problems. Finally, the selected respondents were categorized into four groups w.r.t. their job cadre that includes the Executive, Managerial, Ministerial, and Supporting staff – as shown in Table 1.

Table 1

Job Cadre, Pay Scale and Participants

S.no.	Job Cadre	Pay Scale	Population	Participants
1	Supporting	1~4	6061	59
2	Ministerial	5~16	19415	125
3	Managerial	17~19	2963	88
4	Executive	20~22	433	40
	Total		28872	312

Source: Auditor General Office, Khyber Pakhtunkhwa (2014)

Only those respondents were included into the study, who got retired at the age of 60 years or so. Further, on account of gender segregation, large scale of socio-economic gender inequality and cultural barriers regarding

recruitment and retention of retired women into research, only male respondents were selected. The informed consent was taken from the participants of this study.

2.2 Data Screening

The data screening is a critical phase of statistical analysis. In order to represent the actual data, sorting out the missing values and outliers was necessary – otherwise it could negatively affect our results (Saidin, 2014). The case summary and box-plot approach (Krzywinski & Altman, 2014) was adopted to indicate the missing values and outliers and discard them accordingly. To ensure the reliability, a pilot test was conducted and upon respondents' feedback, necessary changes were made in instrument i.e. simplifying difficult terms, rephrasing questions, altering response options. To ensure the internal consistency, Cronbach alpha test was performed. The content validity was checked by analyzing the consistency of responses in pilot testing. The questionnaire was designed both in English and Urdu language with large font size to make it understandable by the old people.

2.3 Measures and Analysis

The subjective information of the sample group was collected through a survey instrument. The conceptual framework was developed to evaluate the relationship between dependent variables and determinant variable.

Figure 1. The Conceptual Model of the Study

For exhibiting relationship between the independent variable and dependent variables, we adopted three standardized psychological scales i.e. Life Satisfaction, Self-Esteem, and Aging Perception. For measuring life satisfaction, a scale constituted by Diener, Emmons, Larsen and Griffin (1985) was adopted. The Satisfaction with life instrument "SWLF" was used as a criterion variable to access the level of satisfaction and overall judgment of life of elderly (Diener et al., 1985). This scale is based on self-assessing criterion that comprised of five-point Likert scale. Further, the Rosenberg Self-Esteem measure was utilized to quantify the self-worth and dignity of retired elderly. This scale was developed by Rosenberg (1965) and widely used in different psychological researches. It consists of ten items based on the Likert scale. Lastly, the Perception of Aging Scale was used to examine the aging perception of elderly. This measurement instrument was taken from "B-APQ". It is a short version of the APQ which addresses psychometric properties of the elderly. A thorough discussion was conducted on B-APQ with a group of retired

elderly and after that only eight items of B-APQ questionnaire using a Likert scale were used to avoid redundancy in the responses. The higher aggregate sum indicates a higher degree of subjective wellbeing among the elderly

III. Results & Discussion

Table 2 shows multivariate analysis of Basic Pay Scale (BPS_CATG) considering together on the dependent variables including Life satisfaction "L_S", Self-esteem "S_E" and Perception about aging "PoA". The **Pillai's Trace** F-value shows that the combined dependent variables (DVs) significantly different in relation to BPS, $= 0.359$, **F (9, 924) = 13.95, P > 0.001, Partial Eta^2 of 0.13.**

Table 2

Multivariate Tests[a] between Occupational Basic Pay Scale (BPS) and measurement Variables (L_S, S_E and PoA)

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta^2
BPS_CATG *	**Pillai's Trace**	**.359**	**13.950**	**9.000**	**924.000**	**.000**	**.130**
	Wilks' Lambda	.651	15.988	9.000	744.874	.000	.133
	Hotelling's Trace	.523	17.688	9.000	914.000	.000	.148
	Roy's Largest Root	.494	50.675[c]	3.000	308.000	.000	.330

* Basic Pay Scale Category

i. Intercept + BPS_CATG,

i.ii. The effect of **pillai's Trace** was used due to protection against non-normality an heterogeneity of covariance matrices. (Chester L Olson, 1974)

Table 3 indicates that dependent variables contributing to the independent variable, ANOVA test carried out for all the outcome variables and evaluated at an Alpha level of 0.01. A significant difference was found in all four groups of BPS on **Life Satisfaction** F (3,308) = 41.41, P = 0.001, **Partial Eta^2 =0.29**; **Self-esteem** F (3,308) = 44.24, P = 0.001, **Partial Eta^2 =0.30** and **Perception about aging** F (3,308) = 25.04, P = 0.001, **Partial Eta^2 = 0.19.**

Table 3

Effect Between Independent and dependent Variables

Source	Dependent Variable	Type III Sum of Square	D.F	Mean Square	F value	Sig	Partial Eta ^{2}
	L_S	85758.557	1	85758.557	6376.086	.000	.954
Intercept	S_E	334423.179	1	334423.179	11490.494	.000	.974
	PoA	124660.713	1	124660.713	8275.420	.000	.964
	L_S	1670.878	3	**556.959**	**41.410**	**.000**	**.287**
BPS_CATG	**S_E**	3862.785	3	**1287.595**	**44.241**	**.000**	**.301**
	PoA	1131.754	3	**377.251**	**25.043**	**.000**	**.196**
	L_S	4142.609	308	13.450			
Err	S_E	8964.135	308	29.104			
	PoA	4639.704	308	15.064			

a. R^2 = .287 (Adjusted R^2 = .280)

b. R^2 = .301 (Adjusted R^2 = .294)

c. R^2 = .196 (Adjusted R^2 = .188

Table 4

Multiple Comparisons

Dependent Variable	(I) BPS Category	(J) BPS Category	Mean Diff (I-J)	Stand. Error	**Significance**	99% Confidence Interval	
						Lower Bound	Upper Bound
L_S	1	2	-2.406*	.577	**.000**	-3.90	-.91
		3	-5.202*	.614	**.000**	-6.79	-3.61

	(I)	(J)	Mean Diff.	Std. Error	Sig.	Lower	Upper
		4	-7.175*	.749	.000	-9.12	-5.23
	2	1	2.406*	.577	.000	.91	3.90
		3	-2.796*	.511	.000	-4.12	-1.47
		4	-4.769*	.667	.000	-6.50	-3.04
	3	1	5.202*	.614	.000	3.61	6.79
		2	2.796*	.511	.000	1.47	4.12
		4	-1.973*	.699	.005	-3.79	-.16
	4	1	7.175*	.749	.000	5.23	9.12
		2	4.769*	.667	.000	3.04	6.50
		3	1.973*	.699	.005	.16	3.79
	1	2	-1.962	.848	.021	-4.16	.24
		3	-7.152*	.903	.000	-9.49	-4.81
		4	-10.158*	1.101	.000	-13.01	-7.30
	2	1	1.962	.848	.021	-.24	4.16
		3	-5.189*	.752	.000	-7.14	-3.24
		4	-8.196*	.981	.000	-10.74	-5.65
S_E	3	1	7.152*	.903	.000	4.81	9.49
		2	5.189*	.752	.000	3.24	7.14
		4	-3.007*	1.029	.004	-5.67	-.34
	4	1	10.158*	1.101	.000	7.30	13.01
		2	8.196*	.981	.000	5.65	10.74
		3	3.007*	1.029	.004	.34	5.67

		2	-1.508	.610	**.014**	-3.09	.07
	1	3	-4.438*	.650	**.000**	-6.12	-2.75
		4	-5.258*	.792	**.000**	-7.31	-3.20
		1	1.508	.610	**.014**	-.07	3.09
	2	3	-2.930*	.541	**.000**	-4.33	-1.53
		4	-3.751*	.706	**.000**	-5.58	-1.92
PoA		1	4.438*	.650	**.000**	2.75	6.12
	3	2	2.930*	.541	**.000**	1.53	4.33
		4	-.820	.740	**.268**	-2.74	1.10
		1	5.258*	.792	**.000**	3.20	7.31
	4	2	3.751*	.706	**.000**	1.92	5.58
		3	.820	.740	**.268**	-1.10	2.74

*. The difference is Sig. at the 0.01 level

IV. Key Findings & Policy Implications

The association of job rank (BPS) and three dependent variables were assessed through multivariate analysis. The categories of BPS which were split up into four groups including Supporting, Ministerial, Managerial and Executive class examined by cross-factors technique. Findings indicate that the combined dependent variables showed statistically significant difference in almost all conditions. The Post-Hoc test (LSD) results confirmed the significant difference across different level of BPS i.e. 1, 2; 2, 3; 3, 4; and 1, 4 on Life satisfaction **"L_S"** (P < 0.01). The conditions of BPS on Self-esteem **"S_E"** were also significant except condition 1 and 2 as P > 0.01. The BPS conditions 1,2; 2,3 and 1,4 on Perception about aging **"PoA"** were significant from each other while in condition 3 in respect to the condition 4, no difference found **as** P = 0.26 > alpha 0.01.The findings show that the individuals who retired from lower basic pay scales have fairly less socio-economic status which ultimately leads toward low self-esteem, low satisfaction in life and low mental well-being. The retirees belong to higher cadres tend to have more optimistic and positive view that implies that they are more satisfied and happier in comparison to lower scale workers. The results of the current study are in line with a number of studies. Ross and Wu (1995) postulates that highly littered

individuals tend to be appointed at higher ranks and subsequently they earn more than their low ranked peers. The professional status according to Kleiber and Nimrod (2009) is a significant predictor of mental well-being. As far the income effects on health are concerned, minorities have poorer health status in comparison to higher earning people. The individuals retired from higher ranks of job are likely to live healthier. In comparison to lower scale workers, higher occupational employees tend to have more healthy views about aging and feel themselves useful and happy. The earlier studies postulate that there is more likely hood that the people with sufficient income and resources are likely to have good health, higher life expectancy and tend to experience less harsh events in their life (Martin et al., 2014; Wilson et al., 2002). Dienner suggests that who earned adequate wealth and have more resources is likely to be more contended and live a successful life than the poorer companions (Ed Diener & Biswas-Diener, 2002). Kasser and Ryan (1993), contrary to the finding of the present work, observed that the individuals who have a money-oriented mindset pursue higher worldly possessions but have lower contentment and less pleasure in life. Conversely, they maintained that the lower job rank elderly live more satisfied and successful life. Depp and Jeste (2006) observe that the association in mental well-being and income is weaker in respect of the older adults. The multivariate analyses (Post–Hoc test) indicated that the retired elderly who belonged to higher job rank tend to have good mental health. The findings of the current work are harmonious with previous studies which disclosed that low level employees are likely to have limited resources which trigger the problem of mental stress and social adjustment (Kleiber & Nimrod, 2009; Minkler, 1981). It is also observed that the elderly from low level of jobs live fairly less satisfied life due to their weak economic resources and insufficient pension (Ed Diener & Biswas-Diener, 2002; Knight et al., 2007). However, most of the prior studies conducted in the developed countries are inline and supporting the present work which indicated that the retired elderly belongs to lower level of job (BPS-CATG) have poor economic status and subsequently have less satisfaction and mental well-being. They lack self-esteem, feeling of competence and distinct identity which leads to suppress the avenue for renewed activities and roles in life.

V. Conclusion & Future Direction

The Pashtun society is coming across transitional changes including modern social trends, weakening of the traditional family structure and deviation from age-old social values which gradually accelerating the problems of the elderly. The financial independency is availed to a limited number of elderly after their retirement. Pension fund on the regular basis only offered to those who are retired from the government sector. Many of the low ranked pensioners are dependent on their relatives which ultimately hurt their self-esteem and economic independency. The current work showed that the older people with adequate economic recourses were more likely to live a satisfied and healthy life than their poor peers. The respondents who were receiving more pension found more contended and living a successful life than the poorer companions. Sufficient financial assets indicated the association with psycho-emotional wellbeing in retirement. It was found that the professional status is an important determinant of psychological well-being and satisfaction in life after retirement. The professional status was a significant predictor of mental well-being. The individuals retired from higher cadres of job tended to have more healthy views about aging and feel themselves useful and happy. It was also observed that the elderly from low level of jobs live relatively less satisfied life presumably

due to weak economic resources and insufficient pension. They lack self-esteem, feeling of competence and distinct identity which leads to suppress the avenue for renewed activities and roles in life.

The limitation of the study was related to the gender factor as it targeted only male participants due to the socio-cultural barriers, socio economic variations and minimal number of retired female respondents which makes result less generalizable. Another limitation, which makes the findings less generalizable, was concern with the stratification of the respondents of the sample group i.e. only retired people. This strategy limits the generalizability of the findings to all of the elderly of Pakistan. Future studies in different part of Pakistan may yield more accurate estimate across population.

A large number of the respondents in the target population had a high level of technical and educational background but these precious human resources were being wasted. There was no such proper policy and strategy existed to make good use of their knowledge, skill and expertise. It is required to design a comprehensive and well thought out plan at public as well as private level to develop a resource pool of the skillful retired people. The expertise of the elderly, on one side, can be hired in the larger benefits of the society and on other side, this inventiveness certainly instills the feeling of usefulness, self-worth and belongingness.

Conflicts of Interest:

None

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