# Understanding the Effects of Job Classification on Retirees' Mental Health: Multivariate Insights and Policy Consequences

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**Abstract:** *This study aimed to assess the post-retirement psychological health and life satisfaction among senior citizens. The current empirical research measures the effect of job classification on the mental well-being of retirees using the multivariate analysis approach. Multi-item standardized inventories make up the dependent variable, while an extensive number of job categories make up the independent variable. The findings demonstrate that the predictor variable significantly affects psychological health, comprising three outcome variables: perceptions of ageing, life satisfaction, and self-esteem. The data was collected employing stratified random sampling from 312 senior respondents (62% response rate). The Brief Ageing Perceptions (B-APQ) Scale measured ageing perceptions, the Satisfaction with Life Scale rated overall satisfaction, and the Rosenberg Self-Esteem Scale examined self-esteem. The results show that retirees in lower-level employment groups have comparatively less satisfaction, likely due to limited financial resources and insufficient pensions. Conversely, many respondents' expertise and advanced technical and educational credentials go untapped due to a lack of regulations for knowledge-sharing positions. The recommendation includes a comprehensive governmental and private plan to enhance the elderly's well-being, sense of purpose and belonging, thereby enriching society through their creativity and experience. By addressing these gaps, the study can be utilized by the government, policy-makers, parliamentarians, and donor organizations to develop efficient social welfare initiatives for the satisfied and well-adjusted life of the elderly in Pakistan.*

**Key Words:** Job Classification, Psychological Wellbeing, Ageing, Retirement, Life Satisfaction

## Introduction

Numerous empirical researches came to light in recent years to bolster Aristotle's two-thousand-year-old philosophy of life's contentment and happiness. According to Diener and Oishi (2000) and Lyubomirsky (2000), individuals consider happiness and well-being to be among the most important life goals, despite the fact that these factors may differ in practically every culture and location. Understanding the question of why some elderly individuals who have retired are happier than others is an important part of positive psychology. Another emerging subject in behavioural and social science is ageing and retirement (Little et al., 2012). According to Argyle and Furnham (2013) and Osborne (2012), both problems are strongly related and create a sense of insignificance, resulting in challenges with integrating into society and meeting monetary requirements. Unfortunately, this has remained a policy issue that has not been given much importance, particularly in developing nations. Globally, the number of elderly individuals has increased

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due to the expansion of life expectancy. There are more elderly individuals than ever before. According to UN estimates, the share of the elderly has risen from 8% in 1950 to 11% in 2007, while In 2020, there were approximately 1 billion aged people accounting for 13.5% and is expected to reach 22% (approximately 2 billion) of the global population by 2050 (Michel et al., 2021). The ageing population is growing at a rate of 2.6% annually, outpacing the overall population growth rate of 1.1% per year. Bhamani et al. (2013) assert that the increasing number of elderly people also tends to increase the cases of disability, illness, and mortality. Physical limitations can erode self-confidence, ultimately affecting an elderly person's self-worth and overall well-being (Minkler & Estes, 2020). Happiness and quality of life have nothing to do with longevity or the absence of illness. Rowe and Kahn (2015) propose that successful ageing involves preventing illness, preserving mental and physical health, and staying involved in social and productive activities.

Choi et al. (2011) noted that enhanced self-esteem can improve overall mental health and life satisfaction. This narrow viewpoint limits our understanding of how self-worth can influence, positively or negatively, various aspects such as disposition, mental habits, and psycho-physical well-being (Feeney & Collins, 2015).

Recent developments in demographics have influenced sociopolitical and economic parameters. Social policies, healthcare systems, social security, and family socioeconomic status have all been adversely affected by Pakistan's ageing population (Jalal & Younis, 2014). Retirement is a natural stage of life, but the study of gerontology has primarily overlooked it. Today's society is undergoing transitional shifts involving modern social trends, the decline of family structures, and a move away from long-established values and norms, all of which are steadily increasing the challenges faced by the elderly. Following retirement, only a small minority of the elderly achieve financial independence. Money, according to Argyle and Furnham (2013), brings beneficial improvements in a person's life. Regular pension funds are exclusively available to retirees from the government service. Generally, people retire from their jobs at the age of sixty. In primitive societies, the elderly were cherished more for their age rather than being expelled in the name of ageing and retirement. Tsytsarev and Krichmar (2000) stated that age-related losses contribute to depression and a decline in self-worth. They kept their significant positions and played essential roles in their immediate families and societies until their death. Holt-Lunstad et al. (2010) discovered a positive relationship between social integration levels and the average lifespan of older adults. However, individuals employed in the public sector are now mandated to retire at a certain age. Some studies link retirement to feelings of sadness and grief. Mosca and Barrett (2016) state that retirement enhances the general health of the older individual, but forced retirement has a detrimental effect on mental health. Dave et al. (2006) suggest that the negative effects of retirement on mental and emotional well-being can be eased if the elderly are married, have supportive children, and stay physically active. Employment offers social engagement, activity, and a sense of purpose, all of which support mental health. According to Knight et al. (2007), some senior citizens may experience retirement problems.

Additionally, excluding them from the mainstream workforce, where this association is ingrained, limits their entire engagement. Kleiber & Nimrod (2009) noted that many find retirement to be a difficult and unsettling time. Martin et al. (2014) emphasize that staying active helps build relationships, generate income, and improve health. In Pakistan, individuals who retire at sixty from the public sector must rely on others for their socioeconomic needs. In this scenario, their inadequate financial resources after retirement force them to endure low dignity and self-respect. Jalal and Younis (2014) state that poverty, limited access to work and healthcare, and a relatively higher prevalence of physical problems are also experienced by older persons. Since its inception in 1954, Pakistan's pension plan has hardly been updated to account for inflation and other financial factors. Financial constraints and sources of income are the most serious apprehensions for older people.

Salahuddin and Jalbani (2006) observed that many elderly individuals in Pakistan depend on family members, which undermines their self-esteem and financial independence. A large portion of the senior population lacks access to social security or health insurance, and the existing pension system fails to adequately support their needs. According to Kleiber and Nimrod (2009), older persons who have enough money are more likely to lead happy and healthy lives than their counterparts who don't have enough money. In retirement, monetary resources are also correlated with psycho-emotional well-being.

Retirement satisfaction and psychological health are significantly influenced by one's professional standing (Martin et al., 2014). The study by Shah et al. (2021) emphasizes that retirees who maintain supportive networks are more likely to face the challenges of post-work life with ease, leading to a more contented and fulfilling retirement experience. These aspects play an important role in fostering life satisfaction and emotional resilience during this transitional phase.

## Methods

### Sampling Process

The data was collected from Peshawar, Khyber Pakhtunkhwa. The Accountant General reported that there were about 199801 retired people in Khyber Pakhtunkhwa province, with 37858 of them residing in Peshawar. Stratified random sampling was employed to collect data from the elderly population. Although 500 questionnaires were distributed to respondents in total (by mail, email, and in-person), only about 312 (62%), or a satisfactory response rate, were completed. Only those respondents were encompassed if they had no significant health issues and led normal, functional lives. Finally, as presented in Table 1, the selected respondents were divided into four categories based on their job roles: ministerial, supporting, executive, and managerial staff.

### Table 1

*Pay Scale Classification & Population*

| No. | Job Classification | Pay Scale | Participants |
|-----|--------------------|-----------|--------------|
| 1 | Executive | 20~22 | 40 |
| 2 | Managerial | 17~19 | 88 |
| 3 | Ministerial | 5~16 | 125 |
| 4 | Supporting | 1~4 | 59 |
| | **Total** | | 312 |

*Origin:* Office of the Auditor General, Khyber Pakhtunkhwa, 2014

Only those participants who retired at the age of 60 were included in the study. Additionally, due to substantial socio-economic gender disparities, cultural restrictions, and gender segregation that hinder the recruitment of retired women for research, only male participants were selected for the study. These barriers made it challenging to include women, particularly in this context. Informed consent was obtained from all individuals involved in the research to ensure ethical standards were upheld.

### Data Validation

Screening the data was an essential part of the statistical analysis process. In order to ensure the integrity of the data, it was essential to address missing values and outliers, as neglecting these issues could negatively impact the findings (Saidin, 2014). Techniques such as case summaries and box plots (Krzywinski & Altman, 2014) were utilized to identify and remove these discrepancies from the dataset. A pilot test was conducted to enhance reliability, and based on participant feedback, adjustments were made to the instrument, such as simplifying complex terms, rewording questions, and modifying response options. Internal consistency was measured using Cronbach's alpha test. The validity of the content was established by analyzing the consistency of responses during the pilot testing phase. To accommodate elderly participants, the questionnaire was made available in both English and Urdu, utilizing a larger font size for improved readability.

### Quantification and Assessment

Data reflecting the perspectives of the sample group was gathered using a survey method. A conceptual framework was created to explore the relationship between the predictor variable and the outcome variables.

**Figure 1**
*The Study's Framework*
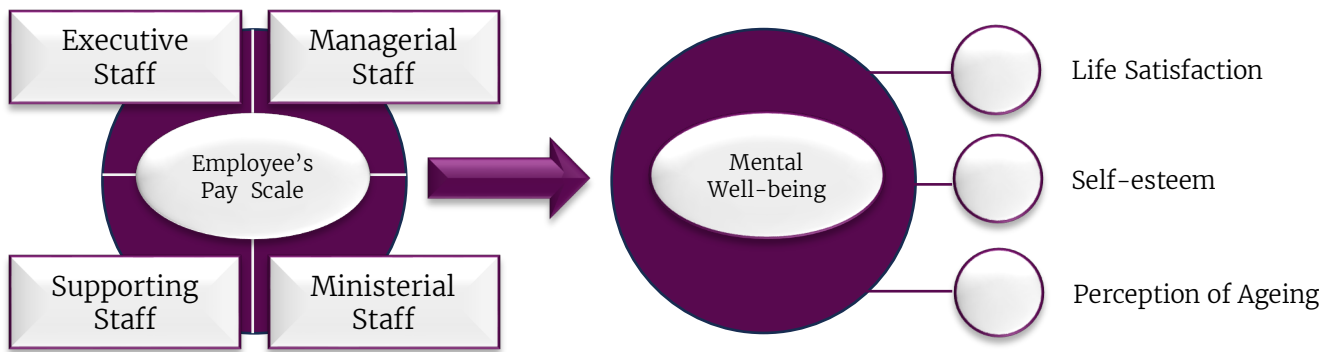


The Figure shows that employees' pay scales across different staff categories affect their psychological well-being, which, in turn, affects their self-esteem, life satisfaction, and perception of ageing. It demonstrates the connection between the predictor variable and the outcome variables; three established psychological assessments were used: Self-Esteem, Perception of Ageing, and Life Satisfaction. The Rosenberg Self-Esteem Scale was applied to evaluate the self-respect and sense of worth among senior citizens. Originally created by Rosenberg in 1965, this scale is commonly employed in psychological research and includes ten statements rated on a Likert scale.

To evaluate life satisfaction, we utilized the Satisfaction with Life Scale (SWLS) created by Diener (2002). This scale served as the key measure to assess the level of satisfaction and overall life evaluation among elderly individuals. The SWLS uses a self-assessment method based on a five-point Likert scale.

Lastly, the Perception of ageing Scale was employed to gauge how older adults perceive the ageing process. This instrument was adapted from the Brief Ageing Perceptions Questionnaire (B-APQ), a shortened version of the APQ, which is designed to address the psychometric needs of older adults. A thorough discussion about the Brief Ageing Perceptions Questionnaire (B-APQ) was held with a group of retired seniors, resulting in the selection of eight items from the original questionnaire. A Likert scale was employed to minimize redundancy in responses. A higher overall score on these scales reflects a greater level of subjective well-being among elderly individuals.

## Outcomes and Analysis

Table 2 shows the multivariate values of 0.36, 0.52, 0.65, and 0.49. Presented in the table are test statistics used to assess the impact of the predictor variable (Pay Scale) on multiple outcome variables simultaneously at a significant level of 0.01. These values indicate significant variation, signifying that changes in the outcome variables can be attributed to the influence of the Pay Scale in the MANOVA analysis. This value of Pillai's Trace is (0.36), which analyzes the proportion of variance in the outcome variables explained by the predictor (pay scale) variable. The value 0.36 suggests that the Pay Scale explains 36% of the variance in the dependent variables.

**Table 2**
*Multivariate test between Pay Scale "BPS" and Outcome Measures "S.E, L.S and POA."*

| Influence | | Multivariate Value | F Value | Err. DF | Significance | Partial Eta² |
|---|---|---|---|---|---|---|
| Pay Scale | Pillai's Trace | 0.36 | 13.95 | 924.00 | .000 | 0.13 |
| | Hotelling's Trace | 0.52 | 17.68 | 914.00 | .000 | 0.15 |
| | Wilks' Lambda | 0.65 | 15.98 | 744.87 | .000 | 0.13 |
| | Roy's Largest Root | 0.49 | 50.67[c] | 308.00 | .000 | 0.33 |

Table 3 illustration that the predictor variables have a significant effect, with the MANOVA test applied to all target measures. Significant differences were observed across the four Pay Scale categories for Life Satisfaction, $F(3, 308) = 41.41$, $p = 0.001$, Partial Eta² = 0.29; for Self-Esteem, $F(3, 308) = 44.25$, $p = 0.001$, Partial Eta² = 0.31; and for Perception of Ageing, $F(3, 308) = 25.06$, $p = 0.001$, Partial Eta² = 0.19.

**Table 3**

*Significance Level of Predictor and Outcome Variables*

| Pay Scale | Outcome Variable | D.F | F value | Sig | Partial Eta ² |
|---|---|---|---|---|---|
| Intercept | L_S | 1 | 6376.08 | .000 | 0.95 |
| | S_E | 1 | 11490.49 | .000 | 0.97 |
| | PoA | 1 | 8275.42 | .000 | 0.96 |
| **BPS_CATG** | L_S | 3 | 41.41 | .000 | 0.29 |
| | S_E | 3 | 44.25 | .000 | 0.31 |
| | PoA | 3 | 25.06 | .000 | 0.19 |
| Err | L_S | 308 | | | |
| | S_E | 308 | | | |
| | PoA | 308 | | | |

c. $R^2$ = .196 (Adjusted $R^2$ =0.188)

Table 4 demonstrates that multivariate analysis was used to examine the relationship between three dependent variables and job rank (BPS). The cross-factors approach was used to study the BPS categories, which were divided into four groups: executive, managerial, ministerial and supporting class. Results demonstrate that in nearly every scenario, there was a statistically significant distinction in the total dependent variables. The findings of the post-hoc test (LSD) verified that there was a substantial difference in life satisfaction (or "L_S") between the various BPS levels, namely 1, 2, 3, 4, and 1, 4 (P < 0.01). All BPS conditions on self-esteem (or "S_E") were significant, with the exception of conditions 1 and 2, where P > 0.01. The PayScale conditions 1, 2, 3, and 4 on the perception of ageing were significant from one another, although condition three did not differ from condition 4 (P = 0.26 > 0.01).

**Table 4**

*Multiple Comparisons*

| Outcome Variable | Pay Scale Category (I) | Pay Scale Category (J) | Mean Dif. (I-J) | Stand. Err | Significance Level | 99% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | | | | Lower Bound | Upper Bound |
| L_S | 1 | 2 | −2.41* | .577 | .000 | −3.90 | −.91 |
| | | 3 | −5.20* | .614 | .000 | −6.80 | −3.61 |
| | | 4 | −7.17* | .749 | .000 | −9.12 | −5.23 |
| | 2 | 3 | −2.8* | .511 | .000 | −4.12 | −1.47 |
| | | 4 | −4.77* | .667 | .000 | −6.50 | −3.04 |
| | 3 | 4 | −1.97* | .699 | .005 | −3.80 | −.16 |
| S_E | 1 | 2 | −1.96 | .848 | .021 | −4.16 | .24 |
| | | 3 | −7.15* | .903 | .000 | −9.50 | −4.90 |
| | | 4 | −10.16* | 1.101 | .000 | −13.01 | −7.30 |
| | 2 | 3 | −5.19* | .752 | .000 | −7.14 | −3.24 |
| | | 4 | −8.2* | .981 | .000 | −10.74 | −5.65 |
| | 3 | 4 | −3.00* | 1.029 | .004 | −5.67 | −.34 |
| PoA | 1 | 2 | −1.51 | .610 | .014 | −3.10 | .07 |
| | | 3 | −4.44* | .650 | .000 | −6.12 | −2.75 |
| | | 4 | −5.26* | .792 | .000 | −7.30 | −3.20 |
| | 2 | 3 | −2.93* | .541 | .000 | −4.33 | −1.53 |
| | | 4 | −3.75* | .706 | .000 | −5.60 | −1.92 |
| | 3 | 4 | −.82 | .740 | .268 | −2.75 | 1.10 |

*Sig. level at 0.01.

## Key Findings & Policy Implications

The results indicate that people who retired from low-wage jobs had a relatively poorer socioeconomic status, which ultimately led to negative mental health, decreased life satisfaction, and lower self-esteem. Higher-ranking retirees tend to have more positive and optimistic viewpoints, implying that they are happier and more pleased than lower-ranking retirees.

Several studies have been consistent with the current study's results. Highly ranked people are more likely to be promoted to higher positions and, as a result, get more money than their counterparts with lower rankings, according to Ross and Wu's (1995) theory. Kleiber and Nimrod (2009) found that a person's career standing is a strong indicator of their mental health. When it comes to the relationship between income and health, minorities' health is worse than that of those with greater incomes. Higher-ranking employees who retire are likely to have healthier lives. Furthermore, higher-level employees are more likely to feel valued and fulfilled, as well as to have a favourable attitude toward ageing, than lower-level employees. Wilson et al. (2002) found that individuals with adequate income and resources tend to be healthier, enjoy longer lives, and face fewer adversities. Diener (2002) argues that individuals with ample wealth and resources are more likely to attain satisfaction and lead a successful life compared to those with fewer financial means. Contrary to the current study's findings, Kasser and Ryan (1993) discovered that those with a money-oriented perspective desire more worldly items while having less happiness and pleasure in life. Conversely, they argued that older adults with lower employment ranks had happier and more prosperous lives.

Depp and Jeste (2009) indicated that elderly persons have a lesser correlation between income and mental health. The post-hoc test, a multivariate analysis, showed that older retirees with higher work ranks usually had better mental health. The results of this study are consistent with earlier research that found low-level employees can have fewer resources, which leads to issues with social adjustment and psychological stress (Kleiber & Nimrod, 2009; Minkler, 1981). Knight et al. (2007) also argued that older adults in low-level jobs tend to experience lower life satisfaction due to their limited financial resources and insufficient pensions. The current analysis, however, indicated that older retirees with lower-level jobs (BPS-CATG) had a lower economic status, which in turn resulted in lower levels of job satisfaction and mental health. This is in line with and supported by the majority of previous studies from industrialized nations. Because they lack self-worth, a sense of competence, and a distinctive personality, they limit their opportunities for new pursuits in life.

## Summary and Future Prospects

The traditional family structure is eroding, new social tendencies are becoming more prevalent, and the Pashtun society is experiencing transitory changes that are causing a steady acceleration of the elderly's issues. After retirement, only a small percentage of older people are able to achieve financial independence. Regular pension funds are exclusively available to retired government employees. Due to their reliance on family members, many low-ranking seniors suffer from a lack of self-worth and financial independence. According to the current study, older adults with sufficient financial resources had a higher chance of leading happy and healthy lives than their less fortunate counterparts. Respondents with higher pensions reported being happier and leading more prosperous lives than their less fortunate peers. The correlation between adequate financial resources and psycho-emotional well-being in retirement was demonstrated. Professional position was revealed to be a significant predictor of psychological health and post-retirement life satisfaction. Mental well-being was significantly predicted by one's professional status.

Retirees from higher organizational levels tended to feel helpful and content and to have more positive attitudes about ageing. It was also shown that older people with lower-level employment have comparatively less contented lives, most likely as a result of their limited financial means and inadequate pensions. They lack a sense of competence, self-worth, and unique identity, which prevents them from engageing in new activities and responsibilities in life. Due to sociocultural hurdles, socioeconomic differences, and a small number of retired female respondents, the study's gender component limited its generalization by focusing exclusively on male participants. Another drawback that reduces the generalization of the results is the sample group's stratification of respondents, which solely included

retirees. This approach restricts how far the results can be applied to all elderly Pakistani citizens. Future research in other regions of Pakistan might produce more precise population-wide estimates.

Despite having a high degree of technical and educational background, many of the respondents in the selected population were wasting these valuable human resources. There were no appropriate policies or strategies in place to effectively utilize their knowledge, expertise, and skills. A thorough and well-thought-out plan must be created at both the public and private levels in order to create a pool of knowledgeable retirees. While the creativity of the elderly fosters a sense of purpose, self-worth, and belonging, their knowledge can also benefit for society as a whole.

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