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Assessing the Impact of Financial and Non-financial Rewards on Job Satisfaction: A Cross-sectional Study Among Employees of Health Secretariat Department of Khyber Pakhtunkhwa, Pakistan

Azmatullah Khan,[1] Naeemullah,[2] Muhammad Imran Marwat,[3] Muhammad Altaf,[4] Mashal Khan[3]

ABSTRACT

Background: An organization's ability to deliver quality services completely depends on its management of human resource in an efficient manner. To maximize potential of health-care professionals, job satisfaction becomes utmost significant.
Objectives: To assess the impact of financial and non-financial rewards on job satisfaction of employees of Health Secretariat department of Khyber Pakhtunkhwa.
Material and Methods: A cross-sectional study was conducted from June 2019 to August 2019. A pilot tested and validated semi-structured questionnaire was used to collect data from the employees of health secretariat department through convenience sampling technique. A total of 50 forms were analyzed through SPSS and AMOS. Satisfaction in job, financial and non-financial rewards were tested for their t-statistics and significance level using multiple linear regressions followed by determining effects of moderator of age, experience, and education when employed as an interaction variable.
Results: The study results demonstrate that non-financial rewards have more significant relationship ($p < 0.05$) in determining job satisfaction of employees compared to financial rewards. However, the moderators of increase in age, education and experience (AEE) were seen to enhance the job satisfaction-financial rewards (JS-FR) relationship while AEE had no impact on job satisfaction-nonfinancial rewards (JS-NFR) relationship.
Conclusion: The non-financial rewards (recognition, responsibility, autonomy and provision of skill enhancement opportunities) are shown to play a key role in job satisfaction of employees. Hence health organizations should consider them included in their management for more job satisfaction.
Keywords: Financial Rewards, Health Care, Human Resource, Job Satisfaction, Pakistan.

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INTRODUCTION

An organization's ability to provide quality services entirely depends on its management of human resource in an efficient manner.[1,2] While there are different types of rewards, it is the attractive ones that enhance job related satisfaction and motivation and hence lead to a better work by employees.[3] Human resource management describes employee satisfaction as one of its bedrocks because of its importance for a successful organization.

Rewards for employees are categorized into two types i.e., financial (monetary) and non-financial (non-monetary). While both types have their own significance for job satisfaction, an emphasis in our society on financial rewards often leads to overlooking of non-financial rewards.[3] A past study has shown that job satisfaction is a positive emotional state resulting from one's overall job experiences.[4] But despite its importance, non-financial rewards are not much clearly laid out in the past literature. While some studies consider autonomy, promotion and job enrichment as non-financial rewards, others are of the view that they are more multi-faceted and thus include, opportunity to develop oneself in terms of skills and career, getting acknowledgement, being given duty and authority, doing worthwhile work, and manifesting a harmony between life and work.[5] In addition, recognition which contributes to employees' motivation, plays an integral role in providing job satisfaction.[6] Varma C. demonstrated that an employees' performance can be improved if their motivation is lifted, thereby indirectly contributing to their job satisfaction.[7] A study by Andrade MS showed that determinants of job/work-life satisfaction of employees do not exhibit remarkable differences between male and females.[8]

This study aims to look for any impact of financial and non-financial rewards on job satisfaction among the employees of Health Department of Khyber Pakhtunkhwa, Pakistan. In the literature search there is lack of local evidence regarding this topic. We also tried to see how the moderators of age, education and experience affect these associations.

MATERIALS AND METHODS

A cross-sectional study was conducted from 3rd June 2019 to 21st August 2019 in the Health Secretariat department of Khyber Pakhtunkhwa in which the role of monetary and non-monetary rewards in satisfaction in job among employees was assessed. Sample size was computed with the help of online calculator of Raosoft Inc. (http://www.raosoft.com/samplesize.html). Keeping the margin of error and confidence interval at

1. Department of Health, Khyber Pakhtunkhwa, Pakistan.
2. Saidu Medical College, Swat, Pakistan.
3. Khyber Medical College, Peshawar, Pakistan.
4. University of Engineering and Technology, Taxila Pakistan.

Correspondence: Dr. Muhammad Imran Marwat
Assistant Professor,
Deprtment of Community Medicine and Public Health,
Khyber Medical College, Peshawar, Pakistan.
Email: imranmarwat_30@kmc.edu.pk

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5% and 95% respectively, and a population size of 200 total list employees with a response distribution of 50% which is a conservative assumption, the recommended sample size was obtained to be 132.[4] A pilot tested and validated semi-structured questionnaire covering all the domains of job satisfaction (as given in Figure 1) was used for data collection. Participants had to mark their agreeableness on a Likert scale. Final job satisfaction was calculated using the equation no. 3 (Given in section: Econometric Modelling). A convenience sampling technique was used for data collection based on the participants availability. A total of 76 filled questionnaires were returned. After exclusion of invalid and incomplete filled forms, 50 forms were finally considered for data analysis. Participants from both genders who were permanent employees in Health Secretariat department of Khyber Pakhtunkhwa were included in this study. Those who were not from the Health Secretariat or were working there only on temporary basis were excluded.

Ethical approval for this study was obtained from the Institutional Review and Ethical Board (No. 129/ADR/KMC) of Khyber Medical College, Peshawar. Informed consent was taken from all of the participants prior to the study. Every aspect of this study is in accord to the Declaration of Helsinki 1975, and the amendments that followed. The collected data was entered, cleaned and analyzed through SPSS version 2020 (IBM Corp. Armonk, NY) wherein multiple regression models were used to find the association between different variables. In addition, structural equation modelling and path analysis were conducted using AMOS to explore the relationships among the variables of models. $P < 0.05$ was considered as significant.

Research Paradigm

Conceptual framework of this study was largely influenced by the factors (financial and non-financial rewards) involved in job satisfaction of workers in health organizations as illustrated in Figure 01. It not only portrays the factors influencing job satisfaction, but it also focuses that whether age, education and experience moderate the job satisfaction or not. The conceptual framework depicts that the moderators of increasing age, experience and education have an enhancing impact on job satisfaction-financial rewards relationship while having no remarkable effect on how non-financial rewards affect job satisfaction.

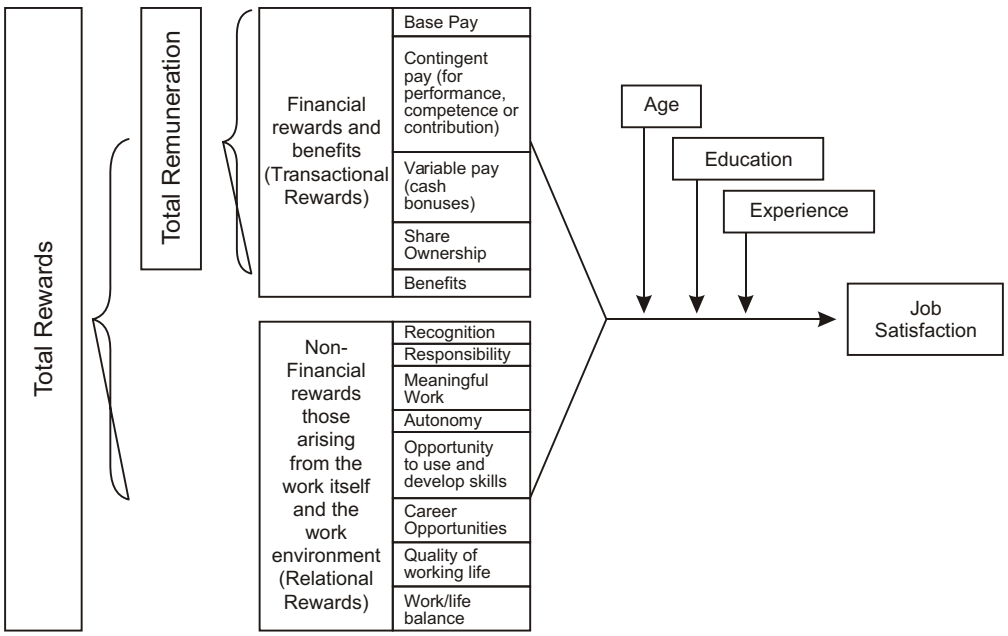


Figure 01. The Conceptual Framework showing relationship of financial and non-financial rewards on job satisfaction

Econometric Modelling

Following Multiple Regression Models were used to analyze the collected data.

$$FR = f(Bp, Cp, Vp, So, Bt)$$
$$FR = \alpha_0 + \alpha_1(Bp) + \alpha_2(Cp) + \alpha_3(Vp) + \alpha_4(So) + \alpha_5(Bt) \quad (1)$$

$$NFR = f(Rn, Re, Mw, Ay, Os, Co, Qw, Wb)$$
$$NFR = \beta_0 + \beta_1(Rn) + \beta_2(Re) + \beta_3(Mw) + \beta_4(Ay) + \beta_5(Os) + \beta_6(Mw) + \beta_7(Ay) + \beta_8(Os) \quad (2)$$

$$JS = f(FR, NFR)$$
$$FR = \gamma_0 + \gamma_1(FR) + \gamma_2(NFR) \quad (3)$$

$$JS = f(NF\hat{}R, F\hat{}R, AEE, NF\hat{}RM, F\hat{}RM)$$
$$FR = \delta_0 + \delta_1(NF\hat{}R) + \delta_2(F\hat{}R) + \delta_3(AEE) + \delta_4(NF\hat{}RM) + \delta_5(F\hat{}RM) \quad (4)$$

(**Abbreviations:** AEE = Interactional term of Age, education and experience as moderator, Ay = Autonomy, Bp = Base Pay, Bt = Benefits, Co = Career Opportunities, Cp = Contingent Pay, FˆR = Financial Rewards, JS = Job Satisfaction, Mw = Meaningful work, NFˆR = Non-Financial Rewards, Os = Opportunity to use and develop skills, Qw = Quality of working life, Re = Responsibility, Rn = Recognition, So = Share ownership, Vp = Variable Pay, Wb = Work / life balance).

Also α_0, β_0, $\delta_0 and\ \gamma_0$ are the constants of these models α_1, α_2, α_3, α_4, α_5, β_1, β_2, β_3, β_4, β_5, β_6, β_7, β_8, γ_1, γ_2, γ_3, δ_1, δ_2, δ_3, $\delta_4\ and\ \delta_5$ and are the required parameters to be estimated to determine how dependent variables are affected by independent variables in the above four equations.

RESULTS

The data collected from 50 employees were run through SPSS and the results obtained are as shown below:

Regression was run for job satisfaction according to equation no. 3, *JS = f (FR, NFR)* as given in Table 01 (a) and (b). Non-financial rewards (NFˆR) and job satisfaction (JS) were determined to have a significant relationship ($p < 0.05$).

Table 01. (a) Sufficiency of Regression Model 1 for Job satisfaction

Standard Error	Coefficient of Determination (R^2)			Adjusted R^2
0.61107	33.5%			29.7%
ANOVA Test				
Model	**Degree of freedom**	**Mean Squares**	**F-Score**	**p-value**
Regression Residual	2 35	6.573 13.069	8.801	0.001
Total	37			

Foot Note: The "*" shows the significance of the Regression model

Table 01. (b) Results of Regression Model 1 for Job Satisfaction

Parameters	Model Estimates	Standard Error	t-score	p-value
y_0	0.458	0.813	0.563	0.577
y_1	-0.036	0.155	-0.233	0.817
y_2	0.963	0.230	4.194	0.00*

Foot Note: The "*" shows the statistically significance result

Regression was also run for equation no. 4 [*JS = ƒ (NFˆR, FˆR, AEE, NFˆRM, FˆRM)*] as shown in Table 0 2 (a) and (b).

Table 02. (a) Model 2 sufficiency

Standard Error	Coefficient of Determination (R^2)			Adjusted R^2
0.59990	41.4%			32.2%
ANOVA Test				
Model	**Degree of freedom**	**Mean Squares**	**F-Score**	**p-value**
Regression Residual	5 32	1.625 0360	4.516	0.003*
Total	37			

FootNote: The "*" shows the significance of the Regression model

Table 02. (b) Model 2 results

Parameters	Model Estimates	Standard Error	t-score	p-value
S_0	1.090	3.393	0.321	0.750
S_1	-1.038	0.577	-1.862	0.072
S_2	1.655	1.020	1.623	0.114
S_3	-0.043	0.135	-0.306	0.762
S_4	0.041	0.022	1.904	0.066
S_5	-0.026	0.039	-0.664	0.511

AEE-FR (Age, education and experience moderator-Financial rewards) interaction term was found to be significant (p = 0.06) while moderator being not significant therefore following results was obtained using descriptive statistics (Table 03).

Taking derivative of Y (JS) with respect to FR:
dY/dFR = -1.038 + 0.043 (AEE)
Where AEE = -6.57505 (from description statistics), Thus:

= -1.038 + 0.043 (-6.57505) = -1.32072
= -1.038 + 0.043 (0) =-1.038
= -1.038 + 0.043 (-6.57505) = -0.75527

Thus, in the presence of moderator of increasing AEE in Health department, there is slight enhancement in job satisfaction-financial reward relationship while having no remarkable impact of the AEE moderator on job satisfaction-non-financial reward relationship.

Table 03. Descriptive Statistics

Variables	Minimum	Maximum	Mean	Std. Deviation
Job Satisfaction	1.40	4.40	3.3684	0.72861
FR	1.20	4.20	2.5263	0.64669
NFR	1.75	3.75	3.1184	0.43781
AEE	14.33	36	23	6.5705

DISCUSSION

In this study, results demonstrated non-financial rewards as having a more dominant hand in determining job satisfaction of employees when compared to financial rewards. However, the moderators of increase in AEE were seen to increase the job satisfaction-financial rewards relationship while having no remarkable impact on job satisfaction-nonfinancial rewards relationship demonstrated by slightly enhanced JS-FR relationship with introduction of AEE Moderator. Similar findings were also revealed by Sonawane[11] showing that job satisfaction of employees and non-financial rewards hold a remarkably significant relationship thereby later one enhancing the former one. Another study by Dambisya Y also proved that non-financial incentives such as autonomy, promotion, job enrichment and others enhance job satisfaction.[12]

Literature reveals that of all important assets of a successful and stable organization, human resources acquire one of the top squares.[7,9,10] Appropriate reward and recognition system has been established to be associated with increase in job satisfaction and motivation. Skilled, erudite employees with the tools of satisfaction with job and motivation are detrimental in improving performance of an organization and resultant value addition.[7,10]

Literature describes non-financial rewards as being highly multi-faceted and thus multiple different non-financial incentives have been associated with job satisfaction with some linking it to promotion system[13] while others to job design[14] showed that if an employee has been granted a promotion in previous two years, he/she comes out to have a high level of job satisfaction. A study

conducted in local settings, mentioned that employees can be enabled to perform their tasks in a better and more efficient manner if they are provided with proper and constructive feedback in working environment via job enrichment.[15]

Oladele et al. noticed that if an extra job duty is given to employees, it enhances their motivation for work thereby explaining the beneficial aspects of job enrichment.[16] Similarly, Eyupoglu et al. demonstrated that for any organization and its working environment, job satisfaction of employees is a matter of great importance.[17] Significant relationship between rewards, both financial, non-financial and job satisfaction has also been established previously. Results noted that rewards are closely and positively related to job and work-life satisfaction.[18] Many other researchers have also established the importance of association of non-monetary prizes with job satisfaction including John Tippet[19] and Stovall et al.[20] Regarding the effect of age, Ng TW et al. demonstrated that aged employees are more likely to be happy and motivated with job rewards than their counterparts i.e., young workers.[21]

CONCLUSION

The paper studied the important relationship of rewards, both financial and non-financial with job satisfaction. Results revealed non-financial rewards to be more significant than financial rewards as determinants of job satisfaction for the employees of Health Secretariat in Khyber Pakhtunkhwa. However, moderator of increasing age, experience and education in an organization is associated with a slight enhancement in job satisfaction-financial reward relationship while having no remarkable impact of this AEE moderator on job satisfaction-non-financial reward relationship.

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Ethical Consideration
This study was approved by the ethical review board of Khyber Medical College, Peshawar, Pakistan.

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Conflict of Interest
Authors declared no conflict of interest

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DATA SHARING STATEMENT: The data that support the findings of this study are available on request from the corresponding author. The data is not publicly available due to privacy or ethical restrictions.

AUTHORS' CONTRIBUTION
The following authors fullfill authorship criteria as per ICMJE guidelines;

Khan A, Naeemullah:	Substantial contribution to conception and design, drafting the manuscript, final approval, agreed to be accountable for all the work.
Marwat MI:	Substantial contribution to conception and design, data acquisition, drafting the manuscript, final approval, agreed to be accountable for all the work.
Altaf M:	Analysis and interpretation of data, drafting the manuscript, final approval, agreed to be accountable for all the work.
Khan M:	Analysis and interpretation of data, critical revision,final approval, agreed to be accountable for all the work.

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