

The Role of Demographic Factors in the Relationship between High Performance Work System and Job Satisfaction: A Multidimensional Approach

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Abstract

This study explores the role of demographic factors in relationship between HPWS and job satisfaction. The data was collected from 674 academic faculties across 23 public sector universities of Pakistan. Kruskal-Wallis Test reveals that perception of HPWS and Job satisfaction among academic faculty varies with rank, nature of job and age while gender has no significant difference in response. The results showed positive and significant correlation between HPWS and Job satisfaction. The demographic variables, rank and nature of tenure found to moderate the relationship between perception of the existence of HPWS and Job Satisfaction. While moderating effect of gender and age were not confirmed.

Key words: HPWS, job satisfaction, demographic factors, academic faculty, universities of Pakistan

1. Introduction

The organizations use human resource management practice to furnish employees attitude and behaviour to achieve their goals and as a competitive advantages. The resource based theory reveal that firm cannot compete in the market until or unless organization adopt those practices which cannot be imitated easily and motivate employees to add values in production process of firm (Wright and McMahan, 1992). There are several HR system that are beneficial for organization and employees, like High involvement HR system (Guthrie, 2001) and High Performance Work System (HPWS) (Huselid, 1995). In many countries around the world, HPWS has been subject of discussion. The organizations implements HPWS to enhance work performance, productivity and employee's job satisfaction. Through a growing body of research from various disciplines, HPWS has been promoted as a modern approach for productive enterprises and characterized as form of human resources management (HRM) that enhances firm performance outcomes. Attempts are being made to explore the links of HPWS with different employees attitude in respect of theories and circumstance according to region and demographic factors that how it effect the firm high performance(Bowen and Ostroff, 2004).

It has been an established fact that at organization level, combination of different HR practices like selectivity, employees training, internal career opportunity, performance appraisal, empowerment, incentive pay (Alam et al., 2005; Bae and Lawler, 2000; Delaney and Huselid, 1996; Wu and Chaturvedi, 2009; Youndt et al., 1996), self managed team, flexible job assignment, open communication, and performance contingent compensation contribute in HPWS (Becker and Huselid, 1998; Evans and Davis, 2005; Guthrie, 2001; Pfeffer, 1998).

The organizations which use HPWS are investing in their human resource to provide training, empowerment, improve knowledge, skill and abilities of employees which enhance motivation level, reduce shirking, and decrease turnover rate of potential employees while encouraging non performer to quit the job and is being used as potential source of competitive advantages (Becker and Huselid, 1998; Huselid, 1995; Jones and Wright, 1992). With passage of time globalization, privatization, competition and technological advancement effect on human resource management practices which force organization to make new strategies to maintain the level of high performance. High performance practices not only helps employer to compete in market but also beneficial for employees through increased job satisfaction (Gürbüz, 2009).

Job satisfaction of employees plays a vital role for organization performance both in developed and developing economy. Researcher found that employees who are satisfied with their job are preferred to stay with their employers. According to SHRM survey report 2009, important aspects of job satisfaction are Job security, Benefits, compensation/pay, opportunity to use skills/ability, feeling safe in the work environment along with other individual job satisfaction aspect like career development, employee's relation with management and work environment. Employees job satisfaction is effected by both intrinsic variable related to personal growth and development that contribute to increase satisfaction while extrinsic factors are related to security of the work environment called hygiene factors, cause job dissatisfaction (Hertzberg et al., 1959; Ssesanga and Garrett, 2005). Because various factors influence on job satisfaction so it has become indefinable and mythical concept (Lacy and Sheehan, 1997; Ssesanga and Garrett, 2005). There is a strong relation between HR Practices and Job satisfaction (Wu and Chaturvedi, 2009). Employees feel satisfaction in those organization who use HPWS by giving them opportunity to participate in decision making processes, improve their skills and knowledge, internal career opportunity and autonomy in work (Guest, 1999, 2004).

Perception regarding HR practices and job satisfaction varies with demographic factors like gender, rank, tenure as well as with region. e.g. in most developed world countries, younger employees derive satisfaction from extrinsic reward while counterpart from intrinsic reward (Oshagbemi, 1996; Ronen, 1978; Siassi et al., 1975). In underdeveloped countries like Uganda, older employees derive satisfaction both from extrinsic and intrinsic reward (Ssesanga and Garrett, 2005). Due to less expectation in promotion and salary female in underdeveloped countries are more satisfied than male employees (Alam et al., 2005; Santhapparaj and Alam, 2005). The satisfaction level also varies with ranks (Eyupoglu and Saner, 2009). In Pakistan employees are protected by laws and money is not available to motivate employees (Salman, 2005). We base our arguments on two theories, first on social exchange theory (Blau, 1964) to explain the relationship between HPWS and job satisfaction which referred that create diffuse future obligation, not precisely specified ones, and the nature of return cannot be bargained about but must be left to the discretion of the one who make it. Second on the basis of Herzberg's (1959) motivation hygiene theory or two factor theory which explained that factors cause job satisfaction is different from those causing dissatisfaction.

1.1 The Context: HPWS in Pakistan

Pakistan is passing through transition phase of education improvement and technology transfer. To accomplish the education goal, government increase the number of universities within last ten years from 2000 to 2010. The university academic faculty play a key role for education development and research improvement. Different measures and strategies are being used to hire and motivate highly educated employees in universities. Through HPWS this target can be achieved. Usually in Pakistan, the HR practices being used in private organization are different from Government sector. Similarly HR practices which are being used in the universities are different from the government sector in respect of their selection criteria, evaluation system, decentralization of power, internal career opportunity etc. These practices also affected by culture. The Pakistan is highly power distance and collectivist country that shows power is unequally distributed among hierarchies and groups are being supported and awarded. This cause frustration and stop the changing process which is necessary for technological and education advancement (Hofstede, 1980). Khilji, (2004) found that Work related values of Pakistan have been changed that predict the modernization and exposes the variation in level of HR satisfaction and expectation among employees.

In most of the organization female still perceive different level of job satisfaction than male that shows the discrimination among gender (Hunjra, 2010). The use of HR practices is different and shows very wretched condition in government sector of Pakistan as compared to private organization. Employees feel discrimination due to unnecessary interference of authorities and politician in selection process. The only benefit employees have from government is job security, which is being used by employees as threat to government and encourage non performer to stay as long as they wish without major contribution in growth (Salman, 2005). The public pension and social security scheme is not enough to satisfy the older age population while number of elderly population working in informal sector still unprotected by social security scheme. So there is need to implement reform of public pension and programs of social protection. (Naushin and Zafar, 2008) Pakistan is also facing economic and political problem. Instead of these problems, Government has been investing a huge amount for infrastructure and faculty development for higher education sector from last 10 years. Pakistan higher education commission takes various measures to attract highly skilled and qualified employees in universities of Pakistan.

The measures include revision of grades, improve selection system by introducing various preliminary test before appear interview, different pay packages according to ranks, qualification, experience and research publications, provide clear internal career opportunity by introducing performance based evaluation and selection, introduce various faculty development program like Scholarship for higher education, training, grant and reward for research in shape of money etc. Moreover to attract the new foreign qualified scholar HEC offer very attractive package for one year (HEC Pakistan) The purpose of this study to explore the level of perception regarding these practices in shape of HPWS and job satisfaction in respect of Demographic factor (Academic faculty ranks, gender, nature of tenure and age) in public sector universities of Pakistan as no study found which has explored the relationship between HPWS and job satisfaction in relation with demographic factors in private as well as in government sector at least to extent of this author knowledge specifically in Pakistan universities.

Although all the above mentioned studies have made excellent scholastic contributions by explaining the significance relationship between HPWS, job satisfaction and demographic factors by using data from western and European countries. Most of studies targeted private sector organisations and showed positive relationship between High performance work system and job satisfaction (Appelbaum, 2000; Bailey and Berg; Bailey et al., 2000; Bauer, 2004; Hallowell, 1996; Harmon et al., 2003). So this relationship needs to be explored in developing countries like Pakistan. This research also contribute in HRM literature by integrating Demographic factor into unifying framework to understand the relationship of HPWS and job satisfaction in presence of demographic factors. It will also be driving force for underdevelop countries who are facing such kind of problem to make best combination of HRM practices in shape of HPWS to satisfy their highly qualified employees to stop the brain drain. The overall conceptual model is depicted in figure 1.

Insert Figure (1) about here

2. Literature Review and Hypothesis

2.1 HPWS and demographic variable

HPWS provides architecture for employer and employees to align the organizational goals through development and motivation of employees by adopting High selection staffing, performance based pay, decentralization, provide opportunity for promotion and result oriented appraisal. Organizations shape these HR practices in different combination keeping in view demographic factors like Ranks, gender, experience, age and nature of appointment. Huselid (1995) argued that “recruitment procedure that provide large pool of qualified applicants, paired with reliable and valid selection regimen, will have a substantial influence over the quality and type of new employee’s possess”. The human resource management practices motivates employees to work harder and efficiently otherwise effectiveness of even highly skilled employees will be limited if they are not motivated enough to perform. Moreover these practices should be aligned with the interest of employees with those of share holder. He also stated that “theoretical literature clearly suggests that the behaviour of employees within firm has important implication for the organization performance and that human resource management practices can effect individual employees performance through their influence over employees skills and motivation and through organizational structure that allow employees to improve how their jobs are performed”. Along with positive effect of HPWS on firm performance, criticism also prevail in literature regarding Strategic fit model of HPWS that employees are treated as a sheer resource in order to increase economic performance so the organization just concentrate on their benefits without considering the employees well being (Gust,2002).

There is dire need to concentrate on employees experience and attitudes toward HPWS, otherwise if it remains neglected can cause critical situation for organization's performance (Edgar and Geare, 2005; Qiao et al., 2009; Schuler et al., 1993). The theoretical literature also reveals that the employees perception regarding organization culture , job security , demographic factors (e.g age, gender, education) influence the turnover(Cotton and Tuttle, 1986; Huselid, 1995). Moreover the perception of existence of HPWS varies with dimorphic factors like Chinese employees were significantly more effected by the existence of HR practices than female and married employees(Qiao et al., 2009). So we assume that

- Hypothesis 1a: Perception regarding the existence of HPWS is higher among academic faculty with higher rank than academic faculty with lower rank in universities of Pakistan.
- Hypothesis 1b: Perception regarding the existence of HPWS is higher among male academic faculty than female academic faculty in universities of Pakistan.
- Hypothesis 1c: Perception regarding the existence of HPWS is higher among academic faculty with regular tenure than academic faculty with contract tenure in universities of Pakistan..
- Hypothesis 1d: Perception regarding the existence of HPWS is higher among older academic faculty than younger academic faculty in universities of Pakistan.

2.2 JOB satisfaction and demographic factors

Perceptions of employees regarding job satisfaction also very important which varies with respect to age, tenure, gender, ranks and nature of appointment. (Bilgiç, 1998)found that various demographic factors like tenure, age, education, sex are significant predictor of job satisfaction. In addition to these demographic factors, rank is strongly link with organization environment, HRD climate and job satisfaction (Hassan et al., 2006; Nazir, 1998; Ravichandran, 2011). BAS and ARDIC (2002) found that women are more satisfied with their career as compared to male, age have positive relation with job satisfaction but the rank has weak relationship. This condition varies according to culture, economic and political condition of the countries. The study based on developing countries like Malaysia, Bangladesh, Uganda , Pakistan showed that female are more satisfied than their counterpart (Hunjra et al., 2010; Santhapparaj and Alam, 2005; Ssesanga and Garrett, 2005) .While it is also observed that in Australian higher education sector female feel discrimination as compared to male(Subramaniam, 2003). So we assumed that:

- Hypothesis 2a: The higher rank academic faculty is more satisfied with their job than lower rank academic faculty in universities of Pakistan.
- Hypothesis 2b: The male academic faculty is more satisfied with their job than female academic faculty in universities of Pakistan.
- Hypothesis 2c: The academic faculty with regular tenure is more satisfied with their job than academic faculty with contract tenure in universities of Pakistan.
- Hypothesis 2d: The older academic faculty is more satisfied with their job than younger academic faculty in universities of Pakistan.

2.3 HPWS and Job Satisfaction

On the basis of previous research Evans and Davis (2005), define HPWS as an integrated system of HR practices that are internally consistent (alignment among HR practices) and externally consistent (align with organization strategies). It includes selective staffing, self managed team, decentralization decision making, extensive training, flexible job design, open communication and performance contingent component. HPWS shape the architecture for employees to participate in decision making, motivation of employees, improve knowledge and skill, and increase ability to perform their duties for firm performance. (Lepak et al., 2006).It also effects on employees turn over, laboured productivity, firm performance productivity and firm financial performance (Guthrie, 2001; Huselid, 1995). HPWS can be used to reduce administrative expenses by decentralization of hierarchies (Pfeffer, 1998). These management systems evaluate different policies and practices so researcher are striving hard to find the specific nature of relationship between HR practices and firm performance. HRM practices plays a very important role in employees job satisfaction (Harley, 2002; Macky and Boxall, 2007). Worker feel satisfaction when organization provide them opportunity to take part in decision making process, provide training to increase their knowledge and skill , clear communication between hierarchies (Guest, 1999; Guest, 2004; Guzzo and Noonan, 1994).The situation is not always the same, some studies also found negative relationship between HPWS and job Satisfaction(Gürbüz, 2009).

This shows that various factors can influenced the relationship between HPWS and job satisfaction and it need to be explored in different culture and situation. On the basis of these finding we expect that:

Hypothesis 3: There is a positive relationship between HPWS and job satisfaction in universities of Pakistan.

2.4 Demographic factors as moderator

The study from Asian countries like China, India and Pakistan shows that education and globalization increase awareness among employees regarding their rights and expectation to evaluate their performance according to inputs. The knowledge of Western HR management practices change the behavior of employees toward HR management practices being used in Asian countries.(Chatterjee and Pearson 2000;Warner 2004; Herbert, Chatterjee and Hueure 2006;Khilji and Wang 2007).However the level of perception regarding existence of HPWS varies with demographic feature e.g. in China age , marital status, education are important predictor to define the relationship between HR practices and employees outcome(Qiao,et al, 2009).The presence and effectiveness of HPWS entirely depend upon the perception of employees especially in diverse culture of organization in term of socioeconomics composition (Cooke, 2005)There is also significant relationship between demographic factors like gender, race and job satisfaction (Hunjra,2010,Scott et al, 2005). So we can assumed that

- Hypothesis 4a: Academic faculty ranks moderates the relationship between HPWS and job satisfaction.
 Hypothesis 4b: The gender moderates the relationship between HPWS and job satisfaction.
 Hypothesis 4c: The nature of tenures moderates the relationship between HPWS and job satisfaction.
 Hypothesis 4d: Age of academic faculty ranks moderates the relationship between HPWS and job satisfaction.

3. Method

This study based on data collected from academic staff of 23 public sector universities of Pakistan. We used simple random sampling technique to select the sample from different ranks, gender, nature of tenure and age group. Questionnaires were distributed among academic faculty with covering letter in which the purpose of research was explained and assured them that their response would be kept confidential. The questionnaire was designed in English. Out of 900 distributed questionnaires 674 complete and usable were received. The response rate was 75% in which regular and contract employees were 463 and 209 respectively. Out of which 72 were professors, 67 were Associate Professors, 206 were Assistant Professors and 328 were lecturer. There were 224 female and 448 male respondents. The difference in sample regarding ranks and gender is due to appointment ratio in the universities. The literature reveals that to evaluate HPWS, mostly HR manger were used to take information but some researcher pointed out that HR manger might exaggerate the amount of HPWS being used in their organization. Due to this reason, it might be less dependable to measure HPWS. The employees can be used as best source of information to evaluate HPWS in an organization(Wu and Chaturvedi, 2009). It has been found an alternative measure to evaluate the extent of execution of HPWS(Kuvaas,2008) as well as found highly correlated with HPWS evaluated by HR manger(Takeuchi et al., 2007). So we take response from academic faculty to evaluate HPWS being used in universities of Pakistan.

3.1 Measures

The item used in this study to measure HPWS, and Job satisfaction were taken from previous published and validated instruments. For HPWS we used 5-point likert-type scale ranging from 1 (Strongly disagree) to 5 (strongly agree) and for job satisfaction items 1 (Strongly dissatisfied) to 5 (Strongly satisfied).

HPWS: Five HRM practices were measured i.e. highly selective staffing, Performance based pay, empowerment, internal career opportunity, result oriented appraisal ($\alpha=.80$). Five to seven statements were used to evaluate each practice and respondents were asked to respond by using scale from 1(strongly Disagreed) to 5 (Strongly agree). The item were taken from (Bae and Lawler, 2000) and (Delery and Doty, 1996). In literature HPWS has shown mixed behavior between correlations among its subscale. It varies from moderate to strong correlation. Due to this mix behavior some study has suggested to use some additive scales for HPWS (Bae and Lawler, 2000; Delery and Doty, 1996; Takeuchi et al., 2007). We found high correlation coefficients between 5 items of HPWS in line with (Bae and Lawler, 2000; Delery and Doty, 1996; Wu and Chaturvedi, 2009).

Job Satisfaction: To evaluate job satisfaction, items were adopted from (Warr et al., 1979). In this study the 15 item of job satisfaction were found highly correlated with each other.

Therefore we generated one aggregate index by combining these entire 15 items to reflect job with ($\alpha=.87$). The items were used to find employees' job satisfaction level both with intrinsic and extrinsic facets of their job.

Demographic variables: we use demographic factors, rank (Professor=1, Associate Professor=2, Assistant Professor=3, Lecturer=4), Gender (male =1, female=2), nature of tenure (Regular academic faculty=1, Contract academic faculty=2) and age (less than 30 years=1, (31-35)=2, (36-40)=3, (41-45)=4, (46-50)=5, (above 50 years)=6).

3.2 Control variable.

Because sample is taken from public sector universities of Pakistan, without considering the size and nature of universities so we controlled for university location (1 = situated in home town(58.5 %), 2= other city(41.5%). We also controlled for marital status (1=married (67%), unmarried (33%) because previous studies showed that marital status has significant effect on HPWS and employees' attitude (Qiao, et al, 2009).

4. Analysis

In this study, first to analyze the perception regarding existence of HPWS and job satisfaction, Kruskal-Wallis test was used to find possible difference between responses of the groups of demographic variables under study. Kruskal-Wallis is nonparametric test equivalent to the one-way ANOVA and an extension of the Mann-Whitney Test to allow the comparison of more than two independent groups. It is used when we wish to compare three or more sets of scores that come from different groups. Second, Descriptive statistics explored the properties of data and Pearson's product moment correlation coefficients was used to test the relationship of study variables. Third hierarchical regression analysis was conducted to estimate the effect of demographic variable on the relationship between HPWS and Job satisfaction.

5. Results

Hypothesis 1a predicted that perception of HPWS varies with ranks. To test the possible differences in responses against the entire HPWS variable, demographic factors were controlled. Kruskal-Wallis test was applied to analyze the level of responses with rank of employees, and results are reported in Table 1.

Insert Table (1) about here

Chi-square-test indicates significant statistic for all the ranks (Professor, Associate professor, Assistant professor and lecturer) in response to HPWS variable. It shows that perception regarding existence of HPWS is significantly different among ranks. The mean rank of professor for highly selective staffing was highest (430) against lowest mean rank of Assistant professor (305). While for the rest of items of HPWS, Professor are the highest and the lecturer possesses the lowest ranks. Thus hypothesis 1a is supported. The differences of responses in case of gender were also analyzed as reported in Table 2. Results indicate that in response to perception regarding existence of HPWS, gender shows insignificant difference except response against result oriented appraisal. Therefore hypothesis 1b is not supported.

Insert Table (2) about here

The third demographic factors, nature of tenure (regular and contract academic faculty) was included to further explore relationship with HPWS. Results as shown in Table 3 indicate that result oriented appraisal, empowerment, and performance base pay have no significant differences between two categories. In case of highly selective staffing and internal career opportunity there is difference between contract and regular academic faculty. These findings partially supported hypothesis 1c.

Insert Table (3) about here

In hypothesis 1d, we assumed that perception of HPWS varies with age. The responses regarding age were also analyzed as reported in Table 4. The Kruskal-Wallis test for HPWS variables indicating that age groups are significantly different from each other in case of performance base pay, empowerment and result oriented appraisal while rest of two variables of HPWS are not significantly different from each other. Thus hypothesis 1d is partially supported.

Insert Table (4) about here

In hypothesis 2a, we assumed that higher rank academic faculty is more satisfied than lower academic faculty. Results are reported in Table 1. Chi-square-test shows a significant statistic for ranks (Professor, Associate professor, Assistant professor and lecturer) and job satisfaction. It shows that the responses of employee's ranks against job satisfaction are significantly different from each other.

Professor attaining highest ranks (495) and lecturer with lowest rank (301) indicating that Professor are most satisfied followed by Associate professor, Assistant professor and lecturer. Thus Hypothesis 2a is fully supported. In case of gender results showed (Table 2) insignificant difference between male and female responses to job satisfaction. Thus hypothesis 2b is not supported. We also hypothesized that academic faculty with regular tenure is more satisfied than academic faculty with contract tenure. The responses were analyzed as reported in Table 3. Results present significant difference between two groups (regular and contract) in case of job satisfaction. Regular employees are more satisfied than contract employees with mean ranks (354) and (296) respectively. These findings are fully supported hypothesis 2c. In case of age as result reported in Table 4, age groups are significantly different from each other. The age group of <30 year is least satisfied (298) along with 46-50 years age group with highest mean rank for job satisfaction (420). This means that younger academic faculty is less satisfied than older academic faculty. Thus hypothesis 2d is fully supported.

In hypothesis 3 we assumed that there is positive relationship between HPWS and job satisfaction, the partial correlation coefficient were estimated to explore the relationship

Insert Table (5) about here

The descriptive statistic, reliability scale and correlation coefficient are presented in table 5. The mean and standard deviation for all variables are in acceptable range. The reliability score for two composite variable HPWS and Job satisfaction were .75 that is presented in Diagonal column of Table 5. The demographic factors like rank, nature of tenure negatively and significantly correlated with HPWS ($r = -.23, p < .01$ for rank; $r = -.08, p < .05$ for nature of tenure) and job satisfaction ($r = -.27, p < .01$ for rank; $r = -.12, p < .01$ for tenure). The gender insignificantly correlated with HPWS while positively and significantly correlated with job satisfaction ($r = .06, p < .01$). The age positively and significantly correlated with HPWS ($r = .11, p < .01$) and job satisfaction ($r = .14, p < .01$). The correlation coefficient of HPWS and Job satisfaction ($r = .62, p < .01$) shows that there exists positive and significant correlation between two variable. Thus hypothesis 3 is supported.

Insert Table (6) about here

In order to test moderating effect of demographic variables (hypothesis 4a to 4d) we performed Hierarchical regression. To perform this analysis first we generated interacting variable by multiplying demographic variables with independent variable HPWS. For regression analysis we first enter the control variables followed by independent variables and then interactive variables. The results are reports in Table 6. Results showed that the control variables collectively explained 1% of variance in job satisfaction variable ($\Delta R^2 = .01, \Delta F = 3.39, p < .01$). The independent variables, demographic characteristics and perception of HPWS existence, explained 41% of variance of dependent variable Job Satisfaction. These findings are in line with above partial correlation analysis that most of these independent variables correlate with job satisfaction. The results showed in Table 6 indicates that rank and nature of tenure moderate the relationship between perception of HPWS and Job Satisfaction ($\beta = -.11, p < .01$ for designation; $\beta = .19, p < .05$ for nature of tenure) hence hypothesis 4a and 4c are supported. While moderating effect of gender and age were not confirmed ($\beta = .08, p > .05$ for gender; $\beta = .04, p > .05$ for age). Thus hypothesis 4b and 4d are rejected.

6. Discussion

There were different purposes of this study. First explore the perceptions of academic faculty regarding the presence of HPWS and their job satisfaction in universities of Pakistan. Second analyse the relationship between HPWS and job satisfaction in Pakistan environment. Third finds the moderating role of demographic factor on the relationship between HPWS and job satisfaction. The results for the perception of demographic features regarding the existence of HPWS and job satisfaction report various outcomes. In case of rank results fully supports hypothesis 1a and 2a indicating that the perception regarding existence of HPWS and the level of job satisfaction is higher among academic faculty with higher ranks than the remaining one. Our finding also support previous studies that rank is strongly related to organization environment (Hassan et al., 2006; Nazir, 1998; Ravichandran, 2011) In case of gender there is insignificant difference among the perception of male and female academic faculty regarding existence of HPWS and level of Job satisfaction. This rejects hypothesis 1b and 2b that indicates transformation of western HR practices in universities culture of Pakistan. These findings are also align with the findings of (Khilji, 2004; Subramaniam, 2003) and partially disagree with previous studies showed difference in level of job satisfaction among male and female in developing countries (Hunjra et al., 2010; Santhapparaj and Alam, 2005; Ssesanga and Garrett, 2005) This uncover the underlying change in behaviour of female due to education and interaction with male on equal level.

Moreover equal employment opportunity provides them chance to compete on the basis of education and skill rather than on gender discrimination. We find full support (Hypothesis 1c and 2c) for difference in perception of existence of HPWS and different level of job satisfaction among regular and contract tenure academic faculty in universities of Pakistan. This indicates that economic situation of Pakistan, where unemployment has severe threat for the contract tenure employees. These findings also aligns with the SHRM survey report 2009 where job security, benefits, compensation, career development are the important aspects of employees job satisfaction. The results regarding perception of HPWS and level of job satisfaction with respect to age partially supports hypothesis 1d and are fully supported hypothesis 2d. Our findings could contribute to Herzberg's dichotomy theory and literature that both intrinsic and extrinsic factors can effects on academic faculty job satisfaction. The results of this study also provide strong support for previous findings with respect to positive and significant influence of HPWS on job satisfaction. Align with past research we also find that HPWS displays a direct and positive relationship with job satisfaction. (Appelbaum, 2000; Chang, 2005; Guest, 1999; Lawler, 1986; Wu and Chaturvedi, 2009). Our results also contribute to social exchange theory that when firms use HPWS as incentive, it effect on employees job satisfaction.

Finally we find the impact of demographic factors on the relationship between HPWS and job satisfaction. The results reveal that academic faculty rank and nature of tenure moderate the relationship between HPWS and job satisfaction. We did not find that gender and age had any moderating effect on the relationship between perception of existence of HPWS and job satisfaction. Which is partially aligned with the findings of (Qiao et al, 2009) that demographic variable are important predictor to explain the relationship between HPWS and job satisfaction. These findings show that the process of social transformation has been started in Pakistan. On the basis of above findings we can conclude that positive relationship between HPWS and job satisfaction is contingent with demographic values prevailing within the organization.

7. Implication and conclusion

This study has practical implication for policy makers and administration in universities of Pakistan. The findings highlighted some important aspect of relationship between HPWS, job satisfaction and demographic factors. Keeping in view the findings regarding perception of HPWS's existence, the universities need to improve performance based pay by defining clear and well communicated performance evaluation system; improve selection criteria because contract academic faculty is less satisfied than the regular employees which are alarming situation that can affect the performance of academic faculty and universities. We found that well managed HPWS is important in shaping the fairness perception experienced by academic faculty. The universities should be careful before implementing HPWS practices in a sense that these practices be implemented without any discrimination with respect to ranks, gender, nature of tenure and age. This can cause harmony, increase productivity and performance as well as job satisfaction of academic faculty and universities. Our findings showed a significant difference of job satisfaction between academic ranks, regular and contract academic faculty and different age groups which indicated that measures to satisfy for universities academic staff are not perceived equally. So universities are needed to frame the policies which can cause both intrinsic and extrinsic satisfaction equally for all ranks, gender, regular and contract employees as well as age groups.

The difference in attitude with respect to HPWS in different countries is due to uniqueness of each society (Ralston, et al 1993; Khilji 2003). The policy makers should also consider the culture values for framing HPWS. This study confirms the direct link between HPWS and job satisfaction. However other factors can also influence the firm performance, that need to be explored. (Wu and Chaturvedi, 2009). These findings also useful for policies makers of Higher education and government institutions in developing countries that they needs to consider demographic factors as an important predictor to frame HPWS (high selection staffing, performance based pay, empowerment of employees, internal career opportunity) for their employees job satisfaction and to avoid brain drain of highly educated person of the society. This study is an important induction in the current literature which can be regarded as to some extent new approach to explore the relationship between HPWS, Job satisfaction with respect to demographic factors in universities of Pakistan. Future research is needed to explore these finding in different environment and culture to validate the authenticity of the findings.

References

- Alam, S. S., Talha, M., Sivanand, C., & Ahsan, M. N. (2005). Job Satisfaction of University Woman Teachers in Bangladesh. *Journal of Social Sciences*, 1(2), 88-91.
- Appelbaum, E. (2000). *Manufacturing advantage: Why high-performance work systems pay off*, Cornell Univ Pr.

- Bae, J., & Lawler, J. J. (2000). Organizational and HRM strategies in Korea: Impact on firm performance in an emerging economy. *The Academy of Management Journal*, 43(3), 502-517.
- Bailey, T., & Berg, and P. C. Sandy (2001). The Effect of High-Performance Work Practicess on Employee Earnings in the Steel, Apparel, and Medical Electronics and Imaging Industries. *Industrial and Labor Relations Review*, 54, 525-543.
- Bailey, T., Berg, P., & Sandy, C. (2000). Effect of High-Performance Work Practices on Employee Earnings in the Steel,' Apparel and Medical Electronics and Imaging Industries, *Indus. & Lab. Rel. Rev.*, 54, 525.
- BAS, T., & ARDIC, K. (2002). The impact of age on job satisfaction of Turkish academicians. *G.U.I.I.B.F. Dergisi*, 3, 89-102.
- Bauer, T. (2004). High performance workplace practices and job satisfaction: Evidence from Europe: IZA.
- Becker, B. E., & Huselid, M. A. (1998). High performance work systems and firm performance: A synthesis of research and managerial implications. *Research in personnel and human resource management*, 16, 53-101.
- Bilgic, R. (1998). The relationship between job satisfaction and personal characteristics of Turkish workers. *The Journal of Psychology: Interdisciplinary and Applied*, 132(5), 549-557.
- Blau, P. (1964). *Exchange and power in social life*. New York: Wiley.
- Bowen, D. E., & Ostroff, C. (2004). Understanding HRM-firm performance linkages: The role of the " strength" of the HRM system. *The Academy of Management Review*, 29(2), 203-221.
- Chang, E. (2005). Employees' overall perception of HRM effectiveness. *Human Relations*, 58(4), 523.
- Chatterjee, S., & Pearson, C. (2000). Indian managers in transition: The value of different paradigms. *Management international Review*, 39(3), 45-64.
- Cooke, F. L. (2005). *HRM, Work and Employment in China*, New York: Rutledge.
- Cotton, J. L., & Tuttle, J. M. (1986). Employee turnover: A meta-analysis and review with implications for research. *The Academy of Management Review*, 11(1), 55-70.
- Delaney, J. T., & Huselid, M. A. (1996). The impact of human resource management practices on perceptions of organizational performance. *The Academy of Management Journal*, 39(4), 949-969.
- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *The Academy of Management Journal*, 39(4), 802-835.
- Edgar, F., & Geare, A. (2005). HRM practice and employee attitudes: different measures—different results. *Personnel Review*, 34(5), 534-549.
- Evans, W. R., & Davis, W. D. (2005). High-performance work systems and organizational performance: The mediating role of internal social structure. *Journal of Management*, 31(5), 758.
- Eyupoglu, S. Z., & Saner, T. (2009). Job satisfaction: Does rank make a difference? *African Journal of Business Management*, 3(10), 609-615.
- Guest, D. E. (1999). Human resource management the workers' verdict. *Human Resource Management Journal*, 9(3), 5-25.
- Gust, D.E. (2002). Human resource management, corporate performance and employees well being: Building the worker into HRM. *Journal of Industrial Relations*, 44(3), 335-358.
- Guest, D. E. (2004). The psychology of the employment relationship: An analysis based on the psychological contract. *Applied psychology*, 53(4), 541-555.
- Gürbüz, S. (2009). The effect of high performance HR practices on employees' job satisfaction. *Journal of the School of Business Administration, Istanbul University*, 38,2, 110-123.
- Guthrie, J. P. (2001). High-involvement work practices, turnover, and productivity: Evidence from New Zealand. *The Academy of Management Journal*, 44(1), 180-190.
- Guzzo, R. A., & Noonan, K. A. (1994). Human resource practices as communications and the psychological contract. *Human Resource Management*, 33(3) 447-462.
- Hallowell, R. (1996). The relationships of customer satisfaction, customer loyalty, and profitability: an empirical study. *International Journal of Service Industry Management*, 7(4), 27-42.
- Harley, B. (2002). Employee responses to high performance work system practices: An analysis of the AWIRS95 data. *The Journal of Industrial Relations*, 44(3), 418-434.
- Harmon, J., Scotti, D. J., Behson, S., Farias, G., Petzel, R., Neuman, J. H., et al. (2003). Effects of high-involvement work systems on employee satisfaction and service costs in veterans healthcare,' *Journal of Healthcare Management*, 48(6), 393-405.
- Hassan, A., Hashim, J., & Ismail, A. Z. H. (2006). Human resource development practices as determinant of HRD climate and quality orientation. *Journal of European Industrial Training*, 30(1), 4-18.
- Herbert, J. D., Chatterjee, S., & Heuer, M. (2006). *Managemnt in India: Trends and Transition*, New Delhi: Sage.
- Hertzberg, F., Mausner, B., & Snyderman, B. (1959). *The motivation to work*. New York, itd: Wiley.
- Hofstede, G. H. (1984). *Culture's consequences...* Google Books: Sage.
- Hunjra, A. I., Chani, M. I., Aslam, S., Azam, M., & Rehman, K. U. (2010). Factors effecting job satisfaction of employees in Pakistani banking sector. *African Journal of Business Management*, 4(10), 2157-2163.

- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *The Academy of Management Journal*, 3(3), 635-672.
- Jones, G. R., & Wright, P. M. (1992). An economic approach to conceptualizing the utility of human resource management practices. *Research in personnel and human resources management*, 10, 271-299.
- Khilji, S. E. (2002). Modes of convergence and divergence: an integrative view of multinationals in Pakistan. *The international Journal of Human Resource Management*, 13(2), 232-253
- Khilji, S. E. (2003). To adapt or not Adapt? Exploring the role of national culture in HRM, *The international Journal of Cross-culture Management*, 3(2), 121-144
- Khilji, S. E. (2004). Whither Tradition? *International Journal of Cross Cultural Management*, 4(2), 141.
- Khilji, S. E. & Wang, X. (2007). New evidence in old debate: Investigating the relationship between HR satisfaction and turnover. *International Business Review*, 16(3), 377-395.
- Kuvaas, B. (2008). An Exploration of How the Employee–Organization Relationship Affects the Linkage Between Perception of Developmental Human Resource Practices and Employee Outcomes. *Journal of Management Studies*, 45(1), 1-25.
- Lacy, F. J., & Sheehan, B. A. (1997). Job satisfaction among academic staff: An international perspective. *Higher Education*, 34(3), 305-322.
- Lawler, E. E. (1986). *High-involvement management*: Jossey-Bass Inc Pub.
- Lepak, D. P., Liao, H., Chung, Y., & Harden, E. E. (2006). A conceptual review of human resource management systems in strategic human resource management research. *Research in personnel and human resources management*, 25(1), 217–271.
- Macky, K., & Boxall, P. (2007). The relationship between ‘high-performance work practices’ and employee attitudes: an investigation of additive and interaction effects. *The International Journal of Human Resource Management*, 18(4), 537-567.
- Naushin M., & Zafar M. N. (2008). Pension and Social Security Schemes in Pakistan: Some Policy Options. Policy Planning Cell, Labour and Manpower Division, Islamabad, Pakistan Institute of Development Economics. PIDE Working Papers, 2008:42
- Nazir, N. A. (1998). Perceived Importance of Job Facets and Overall Job Satisfaction of Bank Employees. *Indian Journal of Industrial Relations*, 479-496.
- Oshagbemi, T. (1996). Job satisfaction of UK academics. *Educational Management Administration & Leadership*, 24(4), 389.
- Pfeffer, J. (1998). *The human equation: Building profits by putting people first*: Harvard Business Press.
- Qiao, K., Khilji, S., & Wang, X. (2009). High-performance work systems, organizational commitment, and the role of demographic features in the People's Republic of China. *The International Journal of Human Resource Management*, 20(11), 2311-2330.
- Ralston, D.A., Gustafson, D.J., Cheung, F.M., & Terpstra, R.H. (1993). Difference in managerial values: A study of Hong Kong and PRC Managers. *Journal of International Business Studies*, 24(2) 249-239
- Ravichandran, A. (2011). Organizational Structure, HR Practices and its Outcomes: A Conceptual Model.
- Ronen, S. (1978). Job satisfaction and the neglected variable of job seniority. *Human Relations*, 31(4), 297.
- Salman, A. K. (2005). How to motivate good performance among government employees. *Pakistan Journal of Social Sciences*, 3(9), 1138-1143.
- Santhapparaj, A. S., & Alam, S. S. (2005). Job satisfaction among academic staff in private universities in Malaysia. *Journal of Social Sciences*, 1(2), 72-76.
- Schuler, R. S., Dowling, P. J., & De Cieri, H. (1993). An integrative framework of strategic international human resource management. *Journal of Management*, 19(2), 419.
- Scott, M., Swartzel, K. A., & Taylor, W. N. (2005). The Relationships between Selected Demographic Factors and the Level of Job Satisfaction of Extension Agents. *Journal of Southern Agricultural Education Research*, 55(1), 102
- Siassi, I., Crocetti, G., & Spiro, H. R. (1975). Emotional health, life and job satisfaction in aging workers. *Industrial Gerontology*.
- Ssesanga, K., & Garrett, R. M. (2005). Job satisfaction of university academics: Perspectives from Uganda. *Higher Education*, 50(1), 33-56.
- Subramaniam, N. (2003). Factors affecting the career progress of academic accountants in Australia: Cross-institutional and gender perspectives. *Higher Education*, 46(4), 507-542.
- Takeuchi, R., Lepak, D. P., Wang, H., & Takeuchi, K. (2007). An empirical examination of the mechanisms mediating between high-performance work systems and the performance of Japanese organizations. *Journal of Applied Psychology*, 92(4), 1069.
- Warner, M. (2004). Human Resource Management in China Revisited: Introduction. *The International Journal of Human Resource Management*, 15(4), 617-634.
- Warr, P., Cook, J., & Wall, T. (1979). Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology*.

Wright, P. M., & McMahan, G. C. (1992). Theoretical perspectives for strategic human resource management. *Journal of Management*, 18(2), 295.

Wu, P. C., & Chaturvedi, S. (2009). The role of procedural justice and power distance in the relationship between high performance work systems and employee attitudes: a multilevel perspective. *Journal of Management*, 35(5), 1228.

Youndt, M. A., Snell, S. A., Dean, J. W., & Lepak, D. P. (1996). Human resource management, manufacturing strategy, and firm performance. *The Academy of Management Journal*, 39(4), 836-866.

Figure 1: The conceptual Model

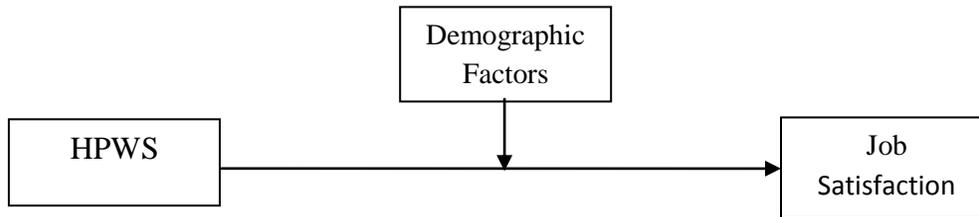


Table 1: Kruskal-Wallis Test (Rank)

Rank	N	Highly Selective staffing	Performance-based pay	Empowerment	Internal career opportunity	Result oriented appraisal	Job Satisfaction
Mean Ranks							
Professor	72	430	426	463	446	425	495
Associate professor	67	364	339	361	367	365	386
Assistant professor	206	305	338	323	330	328	324
lecturer	329	331	316	313	311	318	301
Chi-Square		23.92	19.20	37.50	30.61	20.18	63.89
Asymp. Sig.		0.00	0.00	0.00	0.00	0.00	0.00

Table 2: Kruskal-Wallis Test (Gender)

Gender	N	Highly Selective staffing	Performance-based pay	Empowerment	Internal career opportunity	Result oriented appraisal	Job Satisfactions
Mean Ranks							
Male	448	342	337	329	337	324	328
Female	224	324	335	349	334	359	353
Chi-Square		1.38	0.01	1.57	0.04	4.91	2.44
Asymp. Sig.		0.24	0.91	0.21	0.84	0.03	0.12

Table 3 Kruskal-Wallis Test (Nature of Job)

Nature of Job	N	Highly Selective staffing	Performance-based pay	Empowerment	Internal career opportunity	Result oriented appraisal	Job Satisfaction
Mean Rank							
Regular	463	353	339	344	347	338	354
contract	209	298	330	319	312	331	296
Chi-Square		11.89	0.25	2.31	4.78	0.21	12.81
Asymp. Sig.		0.00	0.61	0.12	0.02	0.64	0.00

Table 4 Kruskal-Wallis Test (Age)

Age	N	Highly Selective staffing	Performance-based pay	Empowerment	Internal career opportunity	Result oriented appraisal	Job Satisfaction
Mean Rank							
< 30	235	327	323	324	325	318	298
31 to35	162	335	320	311	318	317	318
35 to 40	91	329	348	329	344	362	373
41 to 45	54	305	394	374	338	355	359
46 to 50	72	366	366	403	374	404	420
>50	60	387	335	357	377	331	369
Chi-Square		7.83	9.11	15.16	7.82	14.85	29.45
Asymp. Sig.		0.16	0.10	0.01	0.16	0.01	0.00

Table 5: Descriptive statistics and correlation coefficients

	Mean	S.D	Rank	Gender	Nature of tenure	Age	HPW S	Job Satisfaction
University location	1.41	.493						
Marital status	1.33	.47						
Rank	3.17	.99						
Gender	1.33	.47	.06***					
Nature of tenure	1.31	.46	.25*	-.01				
Age	2.62	1.68	-.67*	-.04	-.27*			
HPWS	3.09	.55	-.23*	.02	-.08**	.11*	(.80)	(.75)
Job Satisfaction	3.39	.68	-.27*	.06***	-.12*	.14*	.62*	(.88)

Note: N=674; * p<.01(two tailed);** p<.05(two tailed);*** p<.10(two tailed); the available reliability Alphas are presented along the diagonal of the correlation matrix in italic; university location: 1=situated in hometown, 2=other city; Marital status: 1=married, 2=unmarried; Rank: 1=Professor,2= Associate Professor,3= Assistant Professor, 4=Lecturer; Gender: 1=male, 2=female; Nature of tenure: 1=Regular Employees, 2= Contract Employees; Age: 1=less than 30 years,2= (31-35),3= (36-40),4=(41-45), 5=(46-50),6= (above 50 years)

Table 6: Hierarchical Regression Analysis

Variables	Job Satisfaction		
	1	2	3
Control variables			
University location	-.04	.06	.05
Marital status	-.14*	-.04	-.03
Independent variables			
Rank		-.11*	.24
Gender		.09**	-.18
Nature of tenure		-.07	-.67*
Age		-.01*	-.09
HPWS		.74*	.64**
Interactive variables			
Rank ×HPWS			-.11**
Gender × HPWS			.08
Nature of tenure × HPWS			.19**
Age × HPWS			.04
ΔR ²	0.01	0.41	0.01
ΔF	3.39**	93.80*	3.19*
Adjusted R ²	0.01	0.41	0.42

Note: * p<.01(two tailed);** p<.05(two tailed); Un-standardized regression coefficients are reported; university location: 1=situated in hometown, 2=other city; Marital status: 1=married, 2=unmarried; Rank: 1=Professor,2= Associate Professor,3= Assistant Professor, 4=Lecturer; Gender: 1=male, 2=female; Nature of tenure: 1=Regular Employees, 2= Contract Employees; Age: 1=less than 30 years,2= (31-35),3= (36-40),4=(41-45), 5=(46-50),6= (above 50 years).