

**MEASURING MODERATING EFFECT OF POWER DISTANCE
BETWEEN FACETS OF JOB SATISFACTION AND OVERALL
JOB SATISFACTION: A COMPARISION OF PUBLIC AND
PRIVATE SECTOR PAKISTANI ORGANIZATIONS**

Saqib Yaqoob Malik
MS (Management Sciences)

Professor Dr. Anwar Fazil Chishti
City University of Science and Information
Technology, Peshawar

Saqib Shahzad
City University of Science and Information
Technology, Peshawar
Corresponding Author
Cell Phone: 0345-9301328
Email: saqibshahzad26@gmail.com

Abstract

This study aims to find out the satisfaction of employee with regards to various facets (pay, promotion, supervision, benefits, contingent rewards, operating procedures, coworkers, nature of work, communication) of job satisfaction in public and private sector organizations located in twin cities Rawalpindi and Islamabad. The study uses the Spector's (1985) Job Satisfaction Survey for the purpose. Furthermore the moderating role of power distance has been investigated between facets of job satisfaction and overall job satisfaction. In addition to using the Spector's own methodology of evaluating employees responses by adding scores obtained through a 6-items Likert scale and evaluating those at three levels (Dissatisfaction, Ambivalence/Neutral and Satisfaction), this study extends the evaluation methodology by generating variables of interest, through statistical way of taking means of the employees responses and comparing it with the mid-points (One-Sample t-test). The results indicated that the interaction terms in all nine job satisfaction facets cases have turned out statistically insignificant ($p > 0.10$), suggesting that 'Power distance' does not moderate between job satisfaction facets and overall job satisfaction for the study area.

Key Words: *job satisfaction, power distance, pay, promotion, supervision, benefits, contingent rewards, operating procedures, coworkers, nature of work, communication*

INTRODUCTION

Employees' Job satisfaction is generally referred to as the employees' position which reflects how content or satisfied employees are with their positions or jobs. Ivancevich et al. (1997) define job satisfaction as the feeling and perception of an employee regarding his work and how he feels himself well in an organization. Spector (1997), while referring job satisfaction, mentions as to how simply the workers feel about their jobs and different aspects of their jobs and the extent to which workers like (satisfaction) or dislike (dissatisfaction) their jobs. Researchers also talk about the job satisfaction related outcomes. The often referred outcomes include employees' commitment (Meyer & Allen, 1997; Francesso and Chen, 2002), absenteeism and turnover (Yousef, 2000; Ali, 2008) and work motivation (Ayub, 2011). Satisfied employees are believed to perform their work more effectively (Shipton et al., 2006).

Spector (1985) has proposed measuring job satisfaction through nine facets of job satisfaction, including pay, promotion, supervision, benefits, rewards, operation procedure, co-workers relations, work itself and communication. His measure is generally referred to as Job Satisfaction Survey (JSS). This Job Satisfaction Survey (JSS) scale is considered one of the well developed job satisfaction instruments (Giri & Kumar, 2010; Yelboga, 2009; Watson et al., 2007). One of the cultural dimensions - power distance - is generally defined and referred to as the situation of social acceptance of unequal distribution of the power, based on the prestige, wealth and power (Hofstede 2001). Powerful people should try not to look too powerful in lower power distance cultures. In higher power distance cultures, people try to look as powerful or impressive as possible, since power gives privileges. The role of employees is focused in low power distance cultures while the role of managers is emphasized in high power distance cultures. High power distance cultures tend to respect a hierarchy in an organization (i.e. centralization), whereas low power distance cultures exhibit relatively a few layers (i.e. decentralization).

Among the important cultural characteristics of Pakistan are vast differences in socioeconomic status of both at societal and organizational levels. Pakistani culture characterizes by relatively more conservative and traditionalist rural. Hence, cultural dimension - power distance - is being included as a moderator, in this study, to check whether this variable moderates the relationship between job satisfaction facets and employees' total satisfaction.

PROBLEM STATEMENT

As introduced earlier, this research study intends to investigate whether different facets of job satisfaction determine employees' total job satisfaction in Pakistani public and private sector organizations, and the cultural dimension power distance moderates between 'job satisfaction facets' and 'total job satisfaction'.

For this particular research, Spector's (1985) Job Satisfaction Survey (JSS) is used as a base, and his proposed nine facets of job satisfaction, namely Pay, Promotion, Supervision, Benefits, Co-workers, Nature of work, and Communication are measured. The measures of these nine facets of job satisfaction are then used to determine total satisfaction, as per Spector's own suggested methodology. In addition to using the Spector's methodology of evaluating employees responses by adding scores obtained through a 6-items Likert scale (1, 2,6) and evaluating those at three levels of 'Dissatisfactory', 'Ambivalence/Neutral' and 'Satisfactory', this study extends the Spector's evaluation methodology by generating variables of interest, through statistical way of taking means of the employees responses and comparing it with mid-points (One-Sample t-test). Consequently, the study would find the mean values of the Pay satisfaction, Promotion satisfaction, Supervision satisfaction, Benefit satisfaction, Co-worker satisfaction, Work itself satisfaction, Communication satisfaction and Total satisfaction. Another extension, this study would make over the Spector's way, is regressing the Spector's own variable of 'total satisfaction' and independently developed scale of 'Overall Job Satisfaction' over the nine job satisfaction facets, just to check whether each of the nine job satisfaction facets positively and significantly contributes towards total satisfaction of the employees. The research would specifically intend to pursue the following questions, with the aim of achieving objectives stated in an incoming section.

RESEARCH QUESTIONS

1. Whether Spector (1985) Job Satisfaction Survey and its nine facets measure total job satisfaction and overall job satisfaction?

2. Does the Hofstede national culture's dimension 'power distance' exist in Pakistani public and private sector organizations? If it does, does power distance moderates relationship between job satisfaction facets and employees overall job satisfaction?

RESEARCH OBJECTIVES

1. To measure employees' job satisfaction, using Spector (1985) Job Satisfaction Survey and its nine facets.
- 1 To econometrically determine total satisfaction and overall job satisfaction, using Spector's (1985) nine job satisfaction facets.
- 2 To check whether the Hofstede national culture's dimension 'power distance' exists in Pakistani public and private sector organizations.
- 3 To evaluate whether power distance moderates relationship between job satisfaction facets and employees overall job satisfaction.
- 4 To suggest policy prescriptions based on research findings

SIGNIFICANCE OF THE STUDY

This study has special significance on several counts. First, it would validate the use of Spector's (1985) nine job satisfaction facets for measuring of employees' job satisfaction. Second, it would econometrically determine whether the nine job satisfaction facets determine total satisfaction and overall job satisfaction. Third, it would determine the existence of cultural dimension power distance in Pakistani situation, and whether the power distance moderates between the nine facets and employees overall job satisfaction.

LITERATURE REVIEW

The six-dimensions Hofstede model of national culture is based on his long and widely referred work (Hofstede, 1991, Hofstede, 2001, Hofstede & Hofstede, 2005, Hofstede, 2010, www.geerthofstede.nl). Power distance is the degree to which differences in power and status are accepted in a culture (Hofstede, 2001). According to Hofstede definition, the power distance is connected with the social acceptance of unequal distribution of the power. This inequality can be connected with prestige, wealth and power (Hofstede 2001). In higher power

distance cultures, people try to look as powerful or impressive as possible, since power gives privileges. Bialas (2009) has found that power is based on authority and differences in the level of power distance influence relations between managers and employees. A number of researchers carried out research on effects of various dimensions of Hofstede national culture. These included: Burgmann, Kitchen and Williams (2006) entitled “Does culture matter on the web?” Yoo, Rao and Hong (2005) entitled “A comparative study on cultural differences and quality practices – Korea, USA, Mexico and Taiwan”. Ojo (2009) entitled “Impact Assessment of Corporate Culture on Job Performance”. Hussain and Yousaf (2009) entitled “Organizational Culture: Impact on Female Employees’ Job Performance”. According to Hofstedes research, the country-wise scores, developed on the basis of the six referred dimensions, are relative - societies are compared to other societies. These relative scores have been proven to be quite stable over decades. Hofstedes website provides scores secured by Pakistan (relative to some other countries) on the basis of the Hofstede model on 6-dimensions national culture, as follows.

Country	Power Distance	Individualism versus Collectivism	Masculinity versus Femininity’	Uncertainty Avoidance	Long-Term Orientation	Indulgence versus Restraint
Pakistan	55	14	50	70	50	0
India	77	48	56	40	51	26
U.S.A.	40	91	62	46	26	68
U.K.	35	89	66	35	51	69
Germany	35	67	66	65	83	40
Japan	54	46	95	92	88	42

Oloka and Ogutu (2011) found that power distance moderates the relationship between employee empowerment and outcome variables job autonomy and job satisfaction while power distance does not moderate the relationship between employee empowerment and the organization commitment.

Locke (1976) defined job satisfaction as “pleasurable or positive emotional state resulting from the appraisal of one’s job or job experience”. Job satisfaction is widely discussed in literature. It has got great attention and extensively researched topic in organizational research and numerous articles have been published on job satisfaction. Spector (1997) defined job satisfaction simply as the degree to which people like their jobs. Job satisfaction can be defined as positive affect towards employment (Mueller & McCloskey, 1990). According to (Kamal and Hanif, 2009) job

satisfaction linked to outcomes such as reduce absenteeism, intention to quit. In general HR professional have made a distinction between affective and cognitive job satisfaction. Affective job satisfaction representing overall positive emotional feeling of individuals about their job. It is different from cognitive job satisfaction which is the extent to which a person is satisfied and contented from specific job facets e.g pay, pension, working hours etc. Satisfied employees are believed to perform their work more effectively (Shipton et al., 2006). According to Bibi et al. (2003) job satisfaction level can enhance through implementation of effective human resource management practices and policies. Ali (2008) overall job satisfaction has significantly negatively linked with turnover intention. There are different number of instruments and analytical tools which have been developed to measure satisfaction level. To improve job satisfaction and productivity managers have to consider both hygiene factors and motivators.

Critics have pointed out that theory does not state how motivator and hygiene factors would measure (Daft & Noe, 2001). Spector (1997), while referring job satisfaction, mentions as to simply how workers feel about their jobs and different aspects of their jobs and the extent to which workers like (satisfaction) or dislike (dissatisfaction) their jobs. Many researchers identified that job satisfaction is comprised of various facets. The results indicated that all facets determine job satisfaction. (Opkara, 2002 & Akinboye, 2001) described various factors of job satisfaction such as pay, co-workers relations, supervision, promotion, professional development and commitment. The nine facets of Job Satisfaction Survey included pay, promotion, supervision, benefits, contingent rewards, operating procedures, co-workers relations, nature of work and communication. The score of all facets of job satisfaction are summed together to represent total job satisfaction. The findings of Lumley et al. (2011) revealed that there was a significant and positive relationship between job satisfaction (measured by Job Satisfaction Survey) and organizational commitment.

Rosales, R.A., Labrgue, L.J. & Rosales, G.L. (2013) used Job Satisfaction Survey (JSS) to measure the level of job satisfaction and burnout among nurses in government hospitals and found validation. Ayub (2011) studied the relationship between work motivation and job satisfaction in banking sector employees of Pakistan. Pay refers to employees salary and remuneration (Spector, 1994). Pay is a form of periodic payment or to make due return against services rendered to the employee from employer. Naval and Srivastava (2004) fair pay method

is positively associated with job satisfaction. Pay satisfaction is strongly connected with overall job satisfaction. Pay is considered as very vital organizational reward (Heneman and Judge, 2000). The findings of Sharma and Bajpai (2011) revealed that pay satisfaction increases job satisfaction in public and private sector employees. Hanif and Kamal (2009) pay is leading predictors for job satisfaction. Card et al. (2010) job satisfaction directly depends on relative pay comparisons. Pay is important motivator for employees. Munjuri (2011) concluded that pay for performance and training have most significant impact on performance level of employees. Malik et al (2012) pay has significant influence upon employee job satisfaction. Zoubi (2012) suggests increase in the pay certainly increases employee job satisfaction and its also effect on employee performance and lift up the motivation level in employees. Promotion is considered as the essential aspect and important factor for enhancing the job satisfaction. Promotion is defined as shifting of an employee to a higher rank job (Edward, 2000).

Promotion satisfaction determines employee satisfaction when employees feel numerous chances for promotion in organization (De Souza, 2002). Promotion is an important component in an employee career. According to Kostea (2011) promotions may be used as a system to increase employee satisfaction by employers. Shahzad et al. (2008) have found significant relationship between HR practices i.e. promotion, performance evaluation, compensation and perceived employee performance. Naval and Srivastava, 2004 suggest that fair promotion strategy offer chances for individual growth which increases employee satisfaction and organizational commitment. Being general trend promotions, fringe benefits, pay, and rewards have positive impact on employee job satisfaction. Supervision satisfaction defined as employees satisfaction with immediate supervisor of employee (Spector, 1985). According to (Robbins et al, 2003) supervision defined as “the ability of the supervisor to provide emotional and technical support and guidance with work related tasks. A supervisor is defined as front-line manager who is responsible for supervision of employees (Heery & Noon, 2001).

According to Mudor and Tooksoon (2011) human resource management practices i.e. supervision, pay practice & job training have significant impact on job satisfaction. Mbah and Ikemefuna (2012) found that satisfaction with supervision is negatively related to turnover intention. According to Bhamani (2012) supervision, promotion and coworkers are most important facets and the leading predictors for job satisfaction. Fringe benefits are set of different

benefits given by an employer. Fringe benefits defined as “the monetary and non monetary benefits that might exist within the employee's position” (Spector, 2007). According to research report (SHRM, 2011) benefits as major contributor to job satisfaction. Artz (2010) has examined the relationship between fringe benefit and worker job satisfaction. The result indicates positive relationship between fringe benefits and job satisfaction. Benefits can increase job satisfaction. According to (Goyal and Shrivastava, 2012) HR practices like employee benefits, promotions, employee schemes and transfers have positive impact on job satisfaction. Benefits are considered to be important aspect of job satisfaction. Ali (2008) results of the study indicated that all nine facets of job satisfaction i.e. fringe benefits, pay, promotion, supervision, contingent rewards, working condition, coworkers, nature of work and communication has been found significantly related with turnover intention. Benefits factor add more strongly towards job satisfaction. Marjan (2011) found positive relationship between fringe benefits and job satisfaction. Benefits are very important to increase employee satisfaction. According to Teoh et al. (2011) benefits and compensation, relationship with management and working condition has positive and significant relationship with job satisfaction.

Rewards are conceived as function of employee's satisfaction. Contingent rewards defined as “the recognition and appreciation for a well done job” (Spector, 2008). Effective reward system includes both extrinsic reward (pay, benefits, incentives, promotions etc) and intrinsic rewards are intangible rewards (recognition, appreciation, participation, meeting new challenges, autonomy etc). Reward system is used as important technique to retain employees in the organization and to increase their productivity. Reio and Callahan (2004) suggests that both intrinsic and extrinsic rewards increased productivity and employee satisfaction. Employee commitment can be increased through reward and recognition (Andrew and Kent, 2007). According to Rehman et al. (2010) job rewards are most important determinant contributing job satisfaction and extrinsic rewards are strongly important for job satisfaction in employees. (Sharaf et al., 2008) measured job satisfaction level among health physicians through job satisfaction survey (JSS) and found that they were satisfied with co-workers, work itself, communication and supervision while dissatisfied with pay, promotion, benefits and contingent rewards. Javed et al. (2012) analyzed the impact of human resource practices (i.e. rewards, recognition, training & development) on job satisfaction in public sector organizations of Pakistan and results indicated that rewards and training & development are significantly correlated with job satisfaction but

recognition does not significant impact on job satisfaction. As Pakistan is developing country and employees of public sector give highly importance to monetary rewards as compare to recognition. Hence rewards are extremely significant towards employees job satisfaction of public sector in Pakistan. According to (Spector, 1994) operating procedures defined as “the governing rules, policies, procedures and workload involving the paper work affecting employees job satisfaction”. (Shurbagi and Zahari, 2012) have studied the relationship between organizational culture and five facets of job satisfaction five i.e. operating procedures satisfaction, supervision satisfaction, benefits satisfaction, rewards satisfaction and co-workers satisfaction and used (JSS) to measure job satisfaction and results revealed significant relationship between organizational culture and all five facets of job satisfaction. Lumley et al. (2011) employees commitment may not essentially relates to operating procedures satisfaction because of their commitment with particular organizations. Danish and Usman (2010) explore the relationship between operating procedures, promotion, work itself, recognition, sense of achievement, compensation, coworker, supervision, growth satisfaction and motivation & work satisfaction in private and public divisions in an industrial city of Pakistan.

According to Akinbobola (2011) operating procedures are the significant predictor of job involvement. Bhamani (2012) investigate nine facets i.e. operating procedures, pay, promotion, benefits, rewards, co-workers relations, supervision, communication and nature of work which determine job satisfaction. Co-workers satisfaction is defined as employees’ satisfaction with coworkers (Spector, 1985; Spector, 1997). It indicates how an employee works with his colleague. Coworkers are people and colleagues an employee is working with (Spector, 1994). Rast and Tourani (2012) finding suggests that co-workers relations, supervision, pay and nature of work are factors that have impact on organizational commitment and found employees mainly satisfactory factors. Hussin (2011) found positive relationship between co-workers, promotion, work itself, supervision and job performance. Parvin and Kabir (2011) analyzed job satisfaction factors which effect overall job satisfaction of the employees of pharmaceutical companies and results disclosed that co-workers relations, pay, supervision are major determinants of job satisfaction.

According to (Spector, 1985) nature of work satisfaction may defined as employees satisfaction with the type of work they do. Generally variety of tasks, job challenge and autonomy basis of more job satisfaction. Therefore, Saari and Judge (2004) states that “to understand what causes people to be satisfied with their jobs, nature of work is first place to look.” A study by Shah et al. (2012) reported positive correlation between satisfaction with work itself, reward and recognition, supervision and job satisfaction. Castillo (2004) suggests work itself as most motivating aspect of job satisfaction. Srivastava (2002) found positive correlation between work adjustment and job satisfaction. Nature of work determines job satisfaction. Bhutto et al. (2012) suggest that satisfaction with the nature of work, coworkers relations and supervision are main aspects of job satisfaction. Communication satisfaction defined as employees’ satisfaction with communication within the organization (Spector, 1985). It explains the communication between the employees within the organization. Communication is motivator factor to meet goals of organization. According to (Jorfi et al., 2011) communication effectiveness has vital role in job satisfaction. Giri and Kumar (2010) studied the relationship between organization communication on job satisfaction and job performance and it has been found that organization communication has significant impact on job satisfaction & performance and it is dependent on behavior of communication of an organization. Rad and Moraes (2009) found that communication, pay, promotion and benefits are significantly associated with job satisfaction. Organizational communication has positive impact on worker job satisfaction (Tuzun, 2013). Westlund and Hannon (2008) measured the job satisfaction level among software developers and they used job satisfaction survey for the collection of data. Ali and Haider (2012) found that internal organizational communication has significant impact on job satisfaction.

Conceptual Model

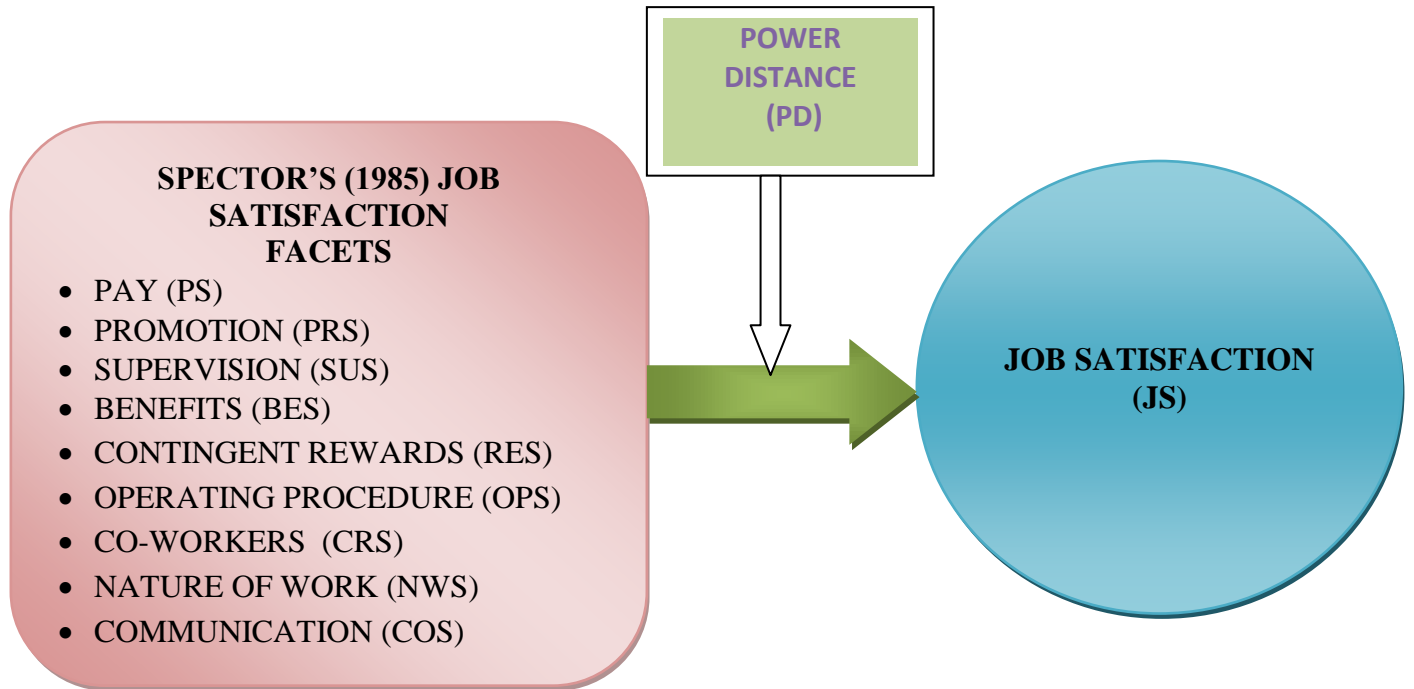


Figure 1: Conceptual model

Analytic framework

To measure and analyze the relationship between variables shown in conceptual model (Figure 3.1), the nine dimensional measuring scale of job satisfaction developed by Spector (1985) and cultural dimensional scale of 'Power distance' developed by Dorfman and Howell (1988) were used. In addition to the Spector's (1985) 36-item scale of employees' 'total satisfaction', an alternative 3-item 'overall job satisfaction' measure developed by Cammann, Fichman, Jenkins, & Klesh (1983) was also used to reinforce (or otherwise) the results of the Spector's (1985) employees' total satisfaction'. The following paragraphs provide a detailed account of the techniques used for measuring and analyzing the various stated scales.

Spector's (1985) measure of 'job satisfaction facets' and 'total satisfaction'

3.2.1 Spector's (1985) measures were used as the basis of questionnaire to collect data on nine job satisfaction facets, namely:

- a. Pay satisfaction (PS),
- b. Promotion satisfaction (PRS),
- c. Supervision satisfaction (SUS),
- d. Benefits satisfaction (BES),
- e. Contingent Rewards satisfaction (RES),
- f. Operating procedure satisfaction (OPS),
- g. Co-workers (CRS),
- h. Nature of work satisfaction (NWS)/ Work itself satisfaction , and
- i. Communication satisfaction (COS).

According to Spector (1985), each of the above reported nine job satisfaction facets consists of four items (questions). In all, there are 36 items in the Spector’s (1985) job satisfaction measure.

Spector’s own way of analyzing scale

According to Spector’s own way of analyzing scale (January, 2013. Job Satisfaction Survey, JSS: retrieved from <http://shell.cas.usf.edu/~pspector/scales/jsspag.html>), whereas the four items of each of the nine sub-scales will measure the respective variables (PS, PRS, SUS, BES, RES, OPS, CRS, NWS and COS), the all 36 items together (collectively) will also measure employees’ total job satisfaction (JS). Since each item uses 6-point agree-disagree response choices, a score equal to 3 or less would therefore represent ‘dissatisfaction’ and 4 or above would represent ‘satisfaction’ with the job’s respective facet, in each case of the nine job facets. For each of the nine 4-item sub-scales (PS, PRS, SUS, BES, RES, OPS, CRS, NWS and COS), as well as, for the 36-items total satisfaction (JS), the respondents’ scores would be summed up and evaluated on the following basis (Spector, 1985, 2013).

Scales	Dis-satisfactory	Ambivalence	Satisfactory
For every 4-item subscale	4 – 12 score	12 – 16 score	16 – 24 score
For 36-item JS scale	36 – 108 score	108 – 144 score	144 – 216 score

Source: Developed on the basis of materials available on: Spector’s Job Satisfaction Survey, JSS: retrieved from <http://shell.cas.usf.edu/~pspector/scales/jsspag.html>, on January 17, 2013)

Alternate measure of ‘Overall job satisfaction’ (developed by Cammannet al., 1983)

3 As already referred, Model 3.1 would be measured using two measures of employees’ total or overall job satisfaction. The first measure would be that originally suggested by Spector,

that is, the use of employees' responses on his 36 items as a one collective measure, as already introduced and discussed earlier. Additionally, and for comparing with the first one, a 3-item 'overall job satisfaction' measure developed by Cammann, Fichman, Jenkins, & Klesh (1983; Appendix I; Part III) would also be used. As a principle, the results of the two models should be similar and reinforce to each other.

Cultural dimension 'Power distance' (PD) measure (developed by Dorfman & Howell, 1988)

As discussed in the literature reviewed in earlier sections, and shown in Figure 3.1 also, cultural dimension 'Power distance' (PD) is expected to moderate the effects of various job satisfaction sub-facets, the nine 'job satisfaction facets' in this case. Though the power distance measure developed by Dorman and Howell (1988; Appendix I; Part IV) is being used for the basic nature of various items included; its items have been adapted with minor changes, for capturing the existing situation of power distance in local condition.

Alternate way of analyzing Spector's (1985) 'job satisfaction facets' and 'total satisfaction'

In addition to what has been suggested above for evaluation of the responses on various subscales/facets of job satisfaction (Spector's way of analyzing, where scores of responses are added), a relatively more statistically-advanced way of evaluating the resultant scores is to take mean scores of each subscale and determine its significance level, comparing it with the mid-point using one-sample t-tests. In the same way, the significance of means score of employees' 'total satisfaction' can also be evaluated, using one-sample t-test. This thesis research has also adopted the stated alternative way of analyzing the results (measuring mean scores and its significance level, comparing with mid-point).

Comparing employees responses across public and private sector

To check whether the mean values of various facets of job satisfaction and 'total satisfaction', as well as, the effect of moderating variable 'Power distance' differ across public and private sectors, the famous Dummy-variable econometric approach (Gujarati, 2007; pp. 304-331) was used, which required regressing variable depending variable Y over dummy-variable D.

$$Y = \beta_0 + \beta_1 D \quad (3.1)$$

Where $D = 1$ for public sector employees and $D = 0$ for private sector employees. The intercept term β_0 measures the mean value of the variable where we kept $D = 0$, private sector organization employees in this case, and β_1 measure the magnitude by which mean value of public sector employees' responses differ from that of the private sector responses. However, while evaluating the coefficient carrying with D (that is, β_1), β_1 should be checked for statistical significance, and the sign carrying with it. A statistical significant coefficient carrying plus sign would mean that the mean response of the public sector employees is statistically higher by the magnitude of the coefficient. While coefficient carrying negative sign would indicate that mean response would be lower.

Regressing 'total satisfaction' over 'job satisfaction facets'

A discussion on how Spector (1985, 2013) advocates to analyze and interpret the respondents scores has already been provided in one of the earlier section; from that discussion, it reveals that Spector has not asked for regressing 'total satisfaction' on 'job satisfaction facets'. However, it would be more appropriate and interesting to econometrically prove that the employees' responses on nine job satisfaction subscales determine employees' total job satisfaction; so econometrically specifying such a relationship would require:

$$JS_{(Spector)} = \beta_0 + \beta_1PS + \beta_2PRS + \beta_3SUS + \beta_4BES + \beta_5RES + \beta_6OPS + \beta_7CRS + \beta_8NWS + \beta_9COS + e \quad (3.2)$$

Model 3.2 would estimate whether the Spector's nine 'job satisfaction facets' econometrically determine Spector's 'total satisfaction'.

And to reinforce the same type of results of the effects of Spector's nine 'job satisfaction facets' on an independently developed 'overall job satisfaction' measure (developed by Cammann et al., 1983), we would also estimate the following model.

$$JS_{(Overall)} = \beta_0 + \beta_1PS + \beta_2PRS + \beta_3SUS + \beta_4BES + \beta_5RES + \beta_6OPS + \beta_7CRS + \beta_8NWS + \beta_9COS + e \quad (3.3)$$

Incorporating the effect of moderator ‘Power distance’

The following model (3.4), wherein moderator ‘power distance’ has been incorporated in our earlier models (especially model 3.3), will help to estimate the effectiveness or otherwise of the moderator.

$$JS_{(Overall)} = \beta_0 + \beta_1 JSS\text{-SUBSCALE}_i + \beta_2 PD + \beta_3 JSS\text{-SUBSCALE}_i \times PD + e \quad (3.4)$$

Model 3.4 would be used to capture the effectiveness of power distance for each of the nine ‘job satisfaction facets’ ($JSS\text{-SUBSCALE}_i$). This model would capture the effect of moderator (PD) in its interactional form, when the coefficient β_3 would happen to be statistically significant; the effect then will be measured as:

$$\delta JSS / \delta JSS\text{-SUBSCALE}_i = \beta_1 + \beta_3 PD + e \quad (3.5)$$

Equation 3.5 would be evaluated at three value-levels (mean of PD, one-standard deviation–minus, and one-standard deviation–plus).

Population

The employees of public sector and private organizations of Islamabad/Rawalpindi was our target population from which the sample was taken. The estimated number of employees in both sectors is (1248). The feedback was obtained using convenience sampling technique. The list of Federal Ministries of Government of Pakistan are given in Appendix II. The following 04 ministries were selected from the given Appendix II using Random sampling method and for this purpose blind draws were taken.

- i- Ministry of Labour & Manpower (150 employees);
- ii- Ministry of Housing and Works (120 employees);
- iii- Ministry Information Technology (142 employees);
- iv- Ministry of Human Rights (80 employees);

The target population of private sector includes companies of Rawalpindi/Islamabad listed in Islamabad Stock Exchange (ISE). The list is given in Appendix III. Random sampling method was used to find 04 local listed companies of private sector from the given Appendix III and for this purpose blind draws were taken. The following companies were selected:

- i- Attock Refinery Limited (500 employees);

- ii- Murree Brewery Company Limited (114 employees);
- iii- NIB Bank (Local Head Office Branch) (55 employees);
- iv- Punjab Oil Mills Limited (87 employees)

Structured questionnaire was used for generation of required data from respective respondents

Sample

The research has been narrowed down by taking sample of population. We obtained sample of 25% (n 312) of the total population (1248), as the total population is large enough and due to time constraints and lack of resources it is not possible to get feedback from all. The details of questionnaires were placed in the admin offices of selected organizations and received 244 filled questionnaires. The anonymity of the employees was assured.

Sample distribution

Organization wise sample distribution is provides as under:

Table 1
Detail of Organizations

Public & Private Organizations	Sample	Response rate
Ministry of Labour & Manpower	39	33
Ministry of Housing and Works	39	27
Ministry of Information Technology	39	36
Ministry of Human Rights	39	32
Attock Refinery Limited	39	33
Murree Brewery Company Limited	39	35
NIB Bank	39	25
Punjab Oil Mills Limited	39	23
Total	312	244

The above table 1 represents that 312 questionnaires were distributed out of which 244 received. Twelve questionnaires were incomplete which were not used in data analysis. So, response rate is 74.5 percent which included those 232 questionnaires which were filled correctly.

Analysis and Results

Data and reliability test

Cronbach's alpha is widely used method to testing reliability of the scales used. The value of alpha varies from zero to 1, and its satisfactory value requires alpha to be having a value of 0.6 and higher (Malhotra, 2000; Cronbach, 1951). In addition, Sekaran (2003) comments on different levels of Cronbach's alphas, saying that the Cronbach's alpha coefficient reliability nearer to 1 is considered excellent, whereas reliability estimates over 0.80 is considered good, 0.70 range is acceptable and less than 0.60 is considered poor. The results of reliability test, in case of scales used in this study are obtained and provided in Table 2.

Table 2
Results of Reliability Test

Scales	No. of items	Cronbach's Alpha	Source
Pay satisfaction	04	0.770	Spector (1985)
Promotion satisfaction	04	0.795	//
Supervision satisfaction	04	0.663	//
Benefit satisfaction	04	0.886	//
Reward satisfaction	04	0.633	//
Operation satisfaction	04	0.752	//
Coworker satisfaction	04	0.667	//
Work itself satisfaction	04	0.803	//
Communication satisfaction	04	0.856	//
Spector's 36-items total satisfaction	36	0.801	//
Overall job satisfaction	03	0.844	Jenkins and Klesh (1983)
Power distance	06	0.556	Dorfman & Howell (1988)

The above table 2 represents the estimated values of the Cronbach's alphas (α) of all the scales used; these scales are: the nine facets of Spector's Job satisfaction, namely Pay satisfaction (PS), Promotion satisfaction (PRS), Supervision satisfaction (SUS), Benefits satisfaction (BES), Rewards satisfaction (RES), Operation procedure satisfaction (OPS), Co-workers relations (CRS), Nature of work satisfaction (NWS)/Work itself satisfaction and Communication satisfaction (COS), as well as, Spector's 36-items total satisfaction (JS_{Spector}), Overall job satisfaction (JS_{Overall}) and Power distance (PD).

According to above table 4.1, the value of alpha varies from 0.556 to 0.886. Pay Satisfaction has 4 items for measurement and the reliability value estimates at $\alpha = 0.770$, which shows that the items are highly reliable. Promotion Satisfaction has 4 items for measurement and the reliability value estimates to be $\alpha = 0.795$, which represents that items are highly reliable. Supervision Satisfaction has 4 items for measurement and the reliability value estimates to be $\alpha = 0.663$ which shows that items are satisfactory. Benefits Satisfaction has 4 items for measurement and the reliability value estimates to be $\alpha = 0.886$ which represents that items are highly reliable. Rewards Satisfaction has 4 items for measurement and the reliability value estimates to be $\alpha = 0.633$ which shows that items are satisfactory. Operating Procedure Satisfaction has 4 items for measurement and the reliability value estimates to be $\alpha = 0.752$ which shows that items are highly reliable. Co-workers Satisfaction has 4 items for measurement and the reliability value estimates to be $\alpha = 0.667$ which represents that items are satisfactory. Work itself Satisfaction has 4 items for measurement and the reliability value estimates to be $\alpha = 0.803$ which shows that items are highly reliable. Communication Satisfaction has 4 items for measurement and the reliability value estimates to be $\alpha = 0.856$ which shows that items are highly reliable. The Spector's Total Satisfaction scale consists of 36 items, and its reliability alpha estimates at $\alpha = 0.801$, showing that its constituent items are highly reliable. The Overall Job Satisfaction has 3 items for measurement and the reliability value estimates at $\alpha = 0.844$ which represents that the reliability is good and items are internally consistent. The moderating variable Power Distance measures through 6 items with Cronbach's alpha $\alpha = 0.556$. Although the reliability value is not high but it could be defended through the evidence that the "measure of power distance" developed by Dorfman & Howell (1988) with Cronbach's alpha 0.57 has used in the current study. And result of current study Cronbach's alpha is $\alpha = 0.556$ which is near to the results of Dorfman & Howell (1988).

Analyzing Spector's Job Satisfaction facets using Spector's own analytic Methodology

As described in Chapter 3 on methodology, Spector (January, 2013. Job Satisfaction Survey, JSS: retrieved from <http://shell.cas.usf.edu/~pspector/scales/jsspag.html>) advocates his own way of analyzing the JSS scores. According to him, for each of the nine 4-item sub-scales, as well as,

for 36-items total job satisfaction (JS), the respondents' scores would be summed up and evaluated on the following basis.

Scales	Dis-satisfactory	Ambivalence	Satisfactory
For every 4-item subscale	4 – 12 score	12 – 16 score	16 – 24 score
For 36-item JS scale	36 – 108 score	108 – 144 score	144 – 216 score

Source: Developed on the basis of materials available on: Spector's Job Satisfaction Survey, JSS:retrieved from <http://shell.cas.usf.edu/~pspector/scales/jsspag.html>, on January 17, 2013)

Accordingly, this researcher has followed Spector's suggested analytic methodology and estimated the JSS scores, as provided in table 4.2.

Table 3

Descriptive Statistics

	N	Min	Max	Mean	Std. Deviation
Sum of Pay Satisfaction	232	8.00	24.00	16.0819	3.34421
Sum of Promotion Satisfaction	232	7.00	24.00	16.6078	3.76663
Sum of Supervision Satisfaction	232	6.00	24.00	17.4138	3.48669
Sum of Benefit Satisfaction	232	6.00	24.00	16.1250	4.35809
Sum of Reward Satisfaction	232	5.00	21.00	13.2888	3.50859
Sum of Operation Satisfaction	232	6.00	22.00	12.9957	3.89082
Sum of Coworker Satisfaction	232	8.00	24.00	18.2069	2.79306
Sum of Work Satisfaction	232	7.00	24.00	16.6422	3.71804
Sum of Communication Satisfaction	232	7.00	23.00	17.3879	4.01894
Sum of 36-item Total Satisfaction	232	102.00	181.00	144.7500	15.21697

As far as the nine facets of JSS are concerned, the score of Pay satisfaction (PS) is estimated to be 16.081 which meet the Spector's addition for satisfactory results. The score of Promotion satisfaction (PRS) is estimated at 16.607 which also meet the Spector's condition for satisfactory results. Supervision satisfaction (SUS) score is 17.413 which meet the Spector's condition for satisfactory results. Also the score of Benefits satisfaction (BES) is estimated at 16.125 which meet the Spector's condition for satisfactory results. The Reward satisfaction (RES) score is estimated to be 13.288 which fall within the scores meant for ambivalence/neutral position. Operation procedure (OP) score is estimated to be 12.995 which also fall within the scores meant

for ambivalence/neutral position. The score of Co-workers satisfaction (CRS) is estimated at 18.206 and meet the Spector's condition for satisfactory results. The Nature of work satisfaction (NRS) score is 16.642 which meet the Spector's condition for satisfactory results. The score of Communication satisfaction (COS) is estimated to be 17.387 which also meet the Spector's condition for satisfactory results.

As far as JSS's 36-items total satisfaction is concerned, it scores at 144.75, and fulfills the Spector's condition for satisfactory results.

Analyzing Spector's Job Satisfaction facets using statistical mean values

In addition to the analytic technique suggested by Spector (1985, 2013) and carried out in preceding section 4.2 for evaluation of the responses on various subscales of job satisfaction, a relatively more sophisticated and statistically advance way of evaluating the respondents' responses is to generate data on the variables of interest by taking means of the responses on each of the items of the respective subscale (this section), and then evaluating/comparing the resultant mean values with mid-points for determining the statistical significance of the mean-differences (this and next section).

Accordingly the data on nine job satisfaction facets along with 36-item 'Total satisfaction' are generated, and its descriptive statistics are provided in table 3 (a).

Table 3 (a)

Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Pay satisfaction	232	2.00	6.00	4.0205	.83605
Promotion satisfaction	232	1.75	6.00	4.1519	.94166
Supervision satisfaction	232	1.50	6.00	4.3534	.87167
Benefit satisfaction	232	1.50	6.00	4.0313	1.08952
Reward satisfaction	232	1.25	5.25	3.3222	.87715
Operation satisfaction	232	1.50	5.50	3.2123	.96302
Co-worker satisfaction	232	2.00	6.00	4.5517	.69826
Work itself satisfaction	232	1.75	6.00	4.1606	.92951
Communication satisfaction	232	1.75	5.75	4.3470	1.00474
36-items Total satisfaction	232	2.83	5.03	4.0208	.42269

Since the Spector’s scales vary between 1 and 6, the mid-point therefore estimates at 3.5; hence mean values less than 3.5 would reflect unsatisfactory position, and mean values higher than 3.5 satisfactory.

Table 3 (a), giving descriptive statistics of various job satisfaction facets, reveal that the mean values of the Pay satisfaction (4.021), Promotion satisfaction (4.152), Supervision satisfaction (4.353), Benefit satisfaction (4.031), Co-worker satisfaction (4.552), Work itself satisfaction (4.161), Communication satisfaction (4.347) and Total satisfaction (4.020) are higher than the mid-point (3.5), and Reward satisfaction (3.322) and Operation procedure satisfaction (3.212) lower, showing that the mean values of the former variables fall in the satisfactory zone while that of the later in unsatisfactory zone.

Similarly, data on two other variables (Overall job satisfaction and Power distance) are generated, and their descriptive statistics along with that of the three demographic variables (age, experience and education) are developed and provided in table 4.3 (b).

Table 3 (b)

Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Dependent, moderating and demographic variables					
Overall job satisfaction	232	2.33	7.00	5.1365	1.14804
Power distance	232	1.17	5.00	3.0833	.65777
Age of respondent	232	20.00	58.00	32.0517	8.01726
Experience	232	1.00	28.00	7.1746	5.89342
Education	232	10.00	18.00	14.4569	1.67948

Table 3 (b) reveals that the mean value of variable ‘Overall job satisfaction’ is higher than its mid-point (midpoint = 4, as its scale ranges between 1 and 7), and falls in satisfactory zone. The mean value of variable ‘Power distance’ is also higher, though slightly, than its mid-point (midpoint = 3, as its scale ranges between 1 and 5), and it falls in the satisfactory zone, too.

The frequency analysis of the fourth demographic variable – gender – has been provided in table 3 (c).

Table No. 3 (c)
Sex of respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
Female	15	6.5	6.5	6.5
Male	217	93.5	93.5	100.0
Total	232	100.0	100.0	

Table 3 depicts that, of the total respondents, 15 are females (6.50%) and 217 are males (93.50%).

Evaluating statistical significance of respondents' responses, using One-sample T Test

Table 3 (a & b) of the preceding section presented descriptive statistics of the respondents' responses on various variables and provided their respective mean values. This present section is devoted to analyze whether those mean values of variables have turned out to be statistically significant, and different from the neutral/ambivalence position. Since Spector's 'Job satisfaction facets' and 'Total satisfaction' variables are measured through a 6-item Likert scale, and in such a measuring scale, the mid-point happens to be 3.5, bifurcating the 'Agreed/Satisfied' responses (valuing 4 and above) and 'Not Agreed/Unsatisfied' responses (value 3 and below). Hence, using the test value = 3.5, we carry out One-sample t-test of Spector's job satisfaction facets and total satisfaction, and provide the results in table 4 (a & b).

Table 4 (a)
One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Pay satisfaction	232	4.0205	.83605	.05489
Promotion satisfaction	232	4.1519	.94166	.06182
Supervision satisfaction	232	4.3534	.87167	.05723
Benefit satisfaction	232	4.0313	1.08952	.07153
Reward satisfaction	232	3.3222	.87715	.05759
Operation satisfaction	232	3.2123	.96302	.06323
Coworker satisfaction	232	4.5517	.69826	.04584
Work itself satisfaction	232	4.1606	.92951	.06103
Communication satisfaction	232	4.3470	1.00474	.06596
36-item total satisfaction	232	4.0208	.42269	.02775

Table 4 (b)

One-Sample Test

	Test Value = 3.5					
					95% Confidence Interval of the Difference	
	T	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Pay satisfaction	9.482	231	.000	.52047	.4123	.6286
Promotion satisfaction	10.545	231	.000	.65194	.5301	.7737
Supervision satisfaction	14.913	231	.000	.85345	.7407	.9662
Benefit satisfaction	7.427	231	.000	.53125	.3903	.6722
Reward satisfaction	-3.088	231	.002	-.17780	-.2913	-.0643
Operation satisfaction	-4.551	231	.000	-.28772	-.4123	-.1631
Coworker satisfaction	22.942	231	.000	1.05172	.9614	1.142
Work itself satisfaction	10.824	231	.000	.66056	.5403	.7808
Communication satisfaction	12.840	231	.000	.84698	.7170	.977
36- items total satisfaction	18.768	231	.000	.52083	.4662	.5755

Panel (a) of table 4 provides data on mean values of the variables under evaluation, and panel (b) gives data on mean differences (how much mean value differs from the mid-point = 3.5) and their respective t-statistics and significance levels.

The results indicate that the mean differences of the all nine Job satisfaction facets, as well as, Total satisfaction are statistically significant at $p < 0.01$, indicating that the respective responses of the respondents statistically differ from the mid-point neutral position. This further means that the respondents are statistically significantly satisfied with regard to almost all Job satisfaction variables, with the exception of Reward satisfaction and Operation satisfaction for which they showed dissatisfaction.

In addition, we have two more variables – power distance (PD) and an alternative measure of job satisfaction - overall job satisfaction - which also need to be tested for significance, using One sample t test. Accordingly, the test is carried out, and the results thereof are provided in table 5 (a & b) and 4.6 (a & b).

Table 5 (A)

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Power distance	232	3.0833	.65777	.04318

Table 5 (B)

One-Sample Test

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
POWER DISTANCE	1.930	231	.055	.08333	-.0018	.1684

As far as the variable Power distance is concerned, the mean difference of the respondents' responses is statistically moderately significant at $p < 0.10$, indicating that the respective responses moderately differ from the mid-point neutral position (which is 3 because of the usage of the 1 – 5 item Likert scale).

Table 6 (A)

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Overall job satisfaction	232	5.1365	1.14804	.07537

Table 6 (B)

One-Sample Test

	Test Value = 4					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Overall job satisfaction	15.078	231	.000	1.13649	.988	1.285

As far as the variable Overall job satisfaction is concerned, the mean difference of the respondents' responses is highly statistically significant at $p < 0.01$, indicating that the respective

responses statistically differ from the mid-point neutral position (which is 4, because of the usage of the 1 – 7 items Likert scale).

Analyzing Job Satisfaction facets across public and private sector organizations

To check whether the mean value of various Job satisfaction facets differ across public and private sectors, the Dummy-variable econometric approach (Gujarati, 2007; pp. 304-331) is used. This technique requires regressing variable Y over D, where Y stands for dependent variable, and dummy D = 1 for public sector employees and D = 0 for private sector employees (as reflects in Model 3.1 of Chapter 3 on methodology). In the estimated model, the intercept term β_0 would measure the mean value of the variable where we kept D = 0, private sector organization employees in this case, and β_1 – the coefficient carting with D would measure the magnitude by which mean value of public sector employees’ responses would differ from that of the private sector responses. However, while evaluating the coefficient β_1 , β_1 should be checked for statistical significance, and the sign carrying with it. A statistical significant coefficient carrying plus sign would mean that the mean response of the public sector employees is statistically higher by the magnitude of the coefficient. While coefficient carrying negative sign would indicate that mean response would be lower.

Applying this approach to analyze position of variable Pay satisfaction (PS) across public and private sector organizations’ employees, the results obtained are:

$$\begin{aligned} \text{PS} &= 4.139 - 0.225D \\ &\quad (- 2.058) \\ &\quad (0.0410) \end{aligned} \tag{4.1a}$$

(Figures in the 1st and 2nd parentheses are t-statistic and significance levels)

The results given in equation 4.1 (a) indicate that the mean value of responses on Pay satisfaction (PS) of private sector employees, on an average, is equal to 4.139, while the that of the public sector organization employees’ differs from it by a value 0.225, on a lower side (because of minus sign); and this difference between the mean values of the two groups (private and public) is statistically significant at $p < 0.05$.

In the same way, the Dummy-variable analysis has been carried out, and results are provided, as follows.

$$\begin{aligned} \text{PRS} &= 4.491 - 0.645D \\ &\quad (-5.530) \\ &\quad (0.000) \end{aligned} \tag{4.1b}$$

$$\begin{aligned} \text{SUS} &= 4.37 - 0.032D \\ &\quad (-0.282) \\ &\quad (0.778) \end{aligned} \tag{4.1c}$$

$$\begin{aligned} \text{BES} &= 3.843 + 0.358D \\ &\quad (2.525) \\ &\quad (0.012) \end{aligned} \tag{4.1d}$$

$$\begin{aligned} \text{RES} &= 3.609 - 0.546D \\ &\quad (-4.967) \\ &\quad (0.000) \end{aligned} \tag{4.1e}$$

$$\begin{aligned} \text{OPS} &= 3.305 - 0.175D \\ &\quad (-1.388) \\ &\quad (0.166) \end{aligned} \tag{4.1f}$$

$$\begin{aligned} \text{CRS} &= 4.641 - 0.170D \\ &\quad (-1.857) \\ &\quad (0.065) \end{aligned} \tag{4.1g}$$

$$\begin{aligned} \text{NWS} &= 4.148 + 0.024D \\ &\quad (0.199) \\ &\quad (0.842) \end{aligned} \tag{4.1h}$$

$$\begin{aligned} \text{COS} &= 4.314 + .063 D \\ &\quad (.479) \\ &\quad (.632) \end{aligned} \tag{4.1i}$$

$$\begin{aligned} \text{JS}_{(\text{Spector})} &= 4.100 - 0.150D \\ &\quad (-2.738) \\ &\quad (0.007) \end{aligned} \tag{4.1j}$$

$$\begin{aligned} \text{JS}_{(\text{Overall})} &= 5.091 + 0.087D \\ &\quad (0.573) \\ &\quad (0.567) \end{aligned} \tag{4.1k}$$

$$\begin{aligned} \text{PD} &= 3.003 + 0.153 D \\ &\quad (1.774) \\ &\quad (0.077) \end{aligned} \tag{4.1l}$$

Equations 4.1 (a – l) indicate that the respondents’ responses on Pay satisfaction (PS), Promotion satisfaction (PRS), Benefit satisfaction (BES), Reward satisfaction (RES), Co-workers satisfaction (CRS), Power distance (PD) and Total satisfaction (JS_(Spector)) statistically significantly differ across public and private sector’s employees; while in cases of Supervision satisfaction (SUS), Operating procedures (OPS), Nature of work (NWS), Communication satisfaction (COS) and Overall job satisfaction (JS_(Overall)), they do not differ.

Regressing Spector’s ‘Total satisfaction’ over nine ‘Job satisfaction facets’

As already discussed in Chapter-3 on methodology, as well as, in the preceding paragraphs that, whereas Spector measures nine different facets of job satisfaction (using a sub-scale of 4 items for each), he also advocates to take all his 36 (9 x 4) items for ‘total satisfaction’ (JS_(Spector)). In order to evaluate whether this Total satisfaction is significantly determined by the nine Job satisfaction facets, the former variable is regressed over the later ones.

$$JS_{(Spector)} = f(\beta_0 + \beta_1PS + \beta_2PRS + \beta_3SUS + \beta_4BES + \beta_5RES + \beta_6OPS + \beta_7CRS + \beta_8NWS + \beta_9COS + e) \quad (4.2a)$$

Estimating the model 4.2a),

$$\begin{aligned}
 JS_{(Spector)} = & -0.013 + 0.115PS + 0.112PRS + 0.110SUS + 0.110BES + 0.109RES \\
 & (-.750) \quad (57.384) \quad (61.096) \quad (53.314) \quad (71.475) \quad (54.600) \\
 & (0.454) \quad (0.000) \quad (0.000) \quad (0.000) \quad (0.000) \quad (0.000) \\
 & +.108OPS + .113CRS + .114NWS + .112COS \quad (4.2b) \\
 & (62.077) \quad (44.840) \quad (59.551) \quad (65.012) \quad (4.2c) \\
 & (0.000) \quad (0.000) \quad (0.000) \quad (0.000) \quad (4.2d)
 \end{aligned}$$

$$\begin{aligned}
 R = 0.998 \quad R^2 = 0.997 \quad R^2_{adjusted} = 0.997 \\
 F = 7448.15 \text{ (p-value/sig. level} = 0.000) \quad (4.2e)
 \end{aligned}$$

(Figures in the 1st and 2nd parentheses are t-statistic and significance levels, respectively)

The estimated model 4.2 is, as a whole, statistically significant as reflects from the F-statistic, valuing at 7448.15 and significance level at $p < 0.00$. The coefficient of determination $R^2 = 0.997$ indicates that 99.70 percent variation in dependent variable JS_(Spector) has been explained by variations in independent variables (PS, PRS, SUS, BES, RES, OPS, CRS, NWS & COS). As far as the individual independent variables are concerned, the coefficients of all nine explanatory variables carry positive signs and statistically significant p-values ($p < 0.00$), indicating the fact

that each of the nine job satisfaction facets positively and significantly contributes towards total satisfaction of the employees.

Regressing ‘Overall job satisfaction’ over nine ‘Job satisfaction facets’

To reinforce the results obtained in previous section with regards to regressing Spector’s 36-item ‘Total satisfaction’ on nine ‘Job satisfaction facets’ through model 4.2, this section additionally use an independently developed ‘Overall job satisfaction’ scale and regress over the nine ‘job satisfaction facets’, using the following model.

$$JS_{(Overall)} = f(\beta_0 + \beta_1PS + \beta_2PRS + \beta_3SUS + \beta_4BES + \beta_5RES + \beta_6OPS + \beta_7CRS + \beta_8NWS + \beta_9COS + e) \tag{4.3a}$$

Estimating the model 4.3a),

$$\begin{aligned}
 JS_{(Overall)} = & -3.572 + 0.260PS + 0.122PRS + 0.299SUS + 0.238BES + 0.204RES \\
 & (-7.757) (4.727) \quad (2.435) (5.289) (5.629) \quad (3.730) \\
 & (0.000) (0.000) \quad (0.016) \quad (0.000) \quad (0.000) \quad (0.000) \\
 & + 0.238OPS + 0.167CRS + 0.312NWS + 0.321COS \tag{4.3b} \\
 & (4.972) \quad (2.412) \quad (5.948) (6.767) \tag{4.3c} \\
 & (0.000) (0.017) \quad (0.000) \quad (0.000) \tag{4.3d} \\
 R = & 0.814 \quad R^2 = 0.663 \quad R^2 = 0.649 \\
 F = & 48.491 \text{ (p-value/sig. level = 0.000)} \tag{4.3e}
 \end{aligned}$$

The estimated model 4.3 is, as a whole, statistically significant (F = 48.491; p < 0.00). The coefficient of determination R² estimates at 0.663, and indicates that 66.30 percent variation in dependent variable JS_(Overall) has been explained by variations in independent variables. As far as the individual independent variables are concerned, the coefficients of all nine explanatory variables carry positive signs, and with the exception of two explanatory variables (PRS and CRS, which happen to be statistically significant at < 0.05), seven explanatory variables (PS, SUS, BES, RES, OPS, NWS & COS) are statistically significant at p < 0.00); the results reinforce the earlier results, and indicate that each of the nine job satisfaction facets positively and significantly contributes towards employees’ overall job satisfaction.

Whether 'Power distance' moderates between 'job satisfaction facets' and 'overall job satisfaction'

The regression carried out in the previous two sections have proved that Spector's (1985) job satisfaction facets contribute towards the determination of 36 item 'Total satisfaction' and 'Overall job satisfaction' of organizational employees. An attempt is made in this section to analyze whether variable 'Power distance' (PD) moderates between each of nine Job satisfaction facets and the 'Overall job satisfaction'. For this purpose, the following econometric model would be estimated.

$$Y = \beta_0 + \beta_1 X + \beta_2 PD + \beta_3 (X \times PD) \quad (4.4)$$

Where Y stands for dependent variable, X for independent variable, and PD for moderator, and interaction term (XxPD) would be checked to evaluate the status of the moderator; if β_3 carrying with the interaction term is found statistically significant, moderator would be evaluated to be statistically moderating between Y and X variables.

Applying model 4.4 in case of Pay satisfaction (PS) - Job satisfaction (JS) relationship,

$$\begin{aligned} JS_{(Overall)} = & 3.130 + 0.440PS + 0.292PD - 0.054(PS_PD) \\ & (1.922) \quad (1.124) \quad (0.562) \quad (-0.426) \\ & (0.056) \quad (0.262) \quad (0.575) \quad (0.670) \end{aligned} \quad (4.5a)$$

The interaction term happens to be statistically insignificant ($p > 0.10$), suggesting that 'Power distance' does not moderates between overall job satisfaction and pay satisfaction.

In the same way, model 4.4 is run for other eight job satisfaction facets, and results are reproduced, as follows.

In case of Promotion satisfaction (PRS) - Job satisfaction (JS) relationship,

$$\begin{aligned} JS_{(Overall)} = & 3.236 + 0.460PRS + 0.102PD - 0.025PRS_PD \\ & (2.431) \quad (1.414) \quad (0.239) \quad (-.244) \\ & (0.016) \quad (0.159) \quad (0.812) \quad (0.808) \end{aligned} \quad (4.5b)$$

In case of Supervision satisfaction (SUS) - Job satisfaction (JS) relationship,

$$\begin{aligned} JS_{(Overall)} = & 0.464 + 1.043SUS + 0.647PD - 0.139SUS_PD \\ & (0.303) \quad (2.992) \quad (1.293) \quad (-1.216) \\ & (0.762) \quad (0.003) \quad (0.197) \quad (0.225) \end{aligned} \quad (4.5c)$$

In case of Benefits satisfaction (BES) - Job satisfaction (JS) relationship,

$$\begin{aligned}
 JS_{(Overall)} &= 3.750 + 0.319BES + -0.033PD + 0.016BES_PD \\
 &\quad (3.270) (1.154) \quad (-0.089) \quad (.183) \\
 &\quad (0.001)(0.250) \quad (0.930) \quad (.855)
 \end{aligned}
 \tag{4.5d}$$

In case of Contingent Rewards satisfaction (RES) - Job satisfaction (JS) relationship,

$$\begin{aligned}
 JS_{(Overall)} &= 2.422 + 0.736RES + 0.346PD - 0.078RES_PD \\
 &\quad (1.901) (2.021) \quad (0.851) \quad (-0.668) \\
 &\quad (0.059) (0.044) \quad (0.395) \quad (0.505)
 \end{aligned}
 \tag{4.5e}$$

In case of Operating Procedure satisfaction (OPS) - Job satisfaction (JS) relationship,

$$\begin{aligned}
 JS_{(Overall)} &= 1.767 + 0.909OPS + 0.658PD - 0.161OPS_PD \\
 &\quad (1.413) (2.589) \quad (1.691) \quad (-1.458) \\
 &\quad (0.159) (0.010) \quad (0.092) \quad (0.146)
 \end{aligned}
 \tag{4.5f}$$

In case of Co-Workers satisfaction (CRS) - Job satisfaction (JS) relationship,

$$\begin{aligned}
 JS_{(Overall)} &= -0.893 + 1.308CRS + 1.137PD - 0.244CRS_PD \\
 &\quad (-0.403) (2.702) \quad (1.585) \quad (-1.562) \\
 &\quad (0.688) (0.007) \quad (0.114) \quad (0.120)
 \end{aligned}
 \tag{4.5g}$$

In case of Nature of Work satisfaction (NWS) - Job satisfaction (JS) relationship,

$$\begin{aligned}
 JS_{(Overall)} &= 2.755 + 0.556NWS + 0.069PD - 0.011NWS_PD \\
 &\quad (2.058) (1.777) \quad (0.158) \quad (-0.111) \\
 &\quad (0.041) (0.077) \quad (0.875) \quad (0.912)
 \end{aligned}
 \tag{4.5h}$$

In case of Communication (COS) - Job satisfaction (JS) relationship,

$$\begin{aligned}
 JS_{(Overall)} &= 1.639 + 0.763COS + 0.332PD - 0.063COS_PD \\
 &\quad (1.343) (2.731) \quad (0.883) \quad (-.729) \\
 &\quad (0.180) (0.007) \quad (0.378) \quad (0.467)
 \end{aligned}
 \tag{4.5i}$$

The equations 4.5 (a – i) indicate that the interaction terms in all nine job satisfaction facets cases have turned out statistically insignificant ($p > 0.10$), suggesting that ‘Power distance’ does not moderates between job satisfaction facets and overall job satisfaction.

A possible explanation as to why ‘Power distance’ does not work as an effective moderator may be the fact that power distance is not a strong cultural dimension in Pakistani society; Hofstede’s own research has put Pakistan on a moderate level (55), on an index which extends from the lowest 1 to the highest 120. Pakistan’s score.

Discussion

The purpose of the study was to investigate whether different facets of job satisfaction determine employees' total job satisfaction in Pakistani public and private sector organizations, and the cultural dimension Power distance moderates between 'job satisfaction facets' and 'total job satisfaction'. From one perspective findings of the current study support all nine hypotheses that claim nine facets of job satisfaction determine overall job satisfaction. But on other hand findings of current study do not support that power distance moderates relationship between job satisfaction facets and employees overall job satisfaction.

Management of organizations, whether public or private sector, should take note of the fact that almost all nine facets of job satisfaction have been found statistically significant factors of determining of job satisfaction among employees; hence these factors should be considered and used as primary movers for motivating employees for hard work, greater productivity and improved efficiency.

Managerial Implications

- If management of public and private organizations finds some gaps in employees' efficiency, productivity and commitment, it should be analyzed whether such gaps and deficiencies are due to the lacking of employees' job satisfaction, and if yes, then where, in which of the job satisfaction facets deficiency lies.
- Such an analysis would help management to decide where, in which of the job satisfaction area, it should concentrate for improving and enhancing the employees' overall job satisfaction, commitment and engagement.

Limitations of the study

Some of the limitations of the current study are highlighted, as follows:

- Convenience sampling technique was used, which has inherent disadvantage of representativeness.
- The numbers of female respondents in this study are limited in number; hence this study lacks perfectness on gender basis.

- Sample size was not sufficient enough to reflect the factual image of the organizations functioning in Pakistan in context with measuring overall job satisfaction.

Directions for future studies

- On the basis of research findings and conclusions drawn, it is recommended that the Spector's nine job satisfaction facets be also used as factors determining the overall job satisfaction, in addition to Spector's own 36 items total satisfaction, in future studies.
- It is also recommended that the cultural dimension 'Power distance' be retried as a moderator in future research to check the validity of the present findings.
- The study should be replicated in different cultural contexts so that it could be generalized widely.
- To improve peripheral strength, the future research efforts should get hold of a representative sample from more organizations.

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