The Influence of Justice Perceptions on Performance Appraisal Reactions in Telecom Sector of Pakistan

Ijaz Ahmed[1] and Abdul Sattar[2]

Abstract

Performance appraisal remains very important human resource management practice and its success depend upon employees' fairness perceptions and reactions to performance appraisal process. This paper integrate previous research pertaining to the effect of justice perceptions of employees on their affective reactions. It determines employees' perceptions of organizational justice and satisfaction regarding their performance appraisal process in the context of Pakistan's Telecom sector. It also examines linkage between organizational justice and employee satisfaction. Organizational justice dimensions (distributive, procedural, interpersonal and informational) are identified and measured by using ten multi-item constructs. Satisfaction of employees with their performance appraisal, performance appraisal system and the supervisor is also explained and measured in this study. It subsequently investigates relationship between these variables. The data is obtained from 350 employees of Telecom sector organizations using survey method. The study show that appraisal processes are perceived as fair and employees are also found satisfied with the process. The hypothesized positive relationship between above stated four justice constructs and three dimensions of satisfaction is also confirmed. The study shows importance of fairness perceptions of performance appraisal process. It would help Telecom sector organizations of Pakistan in evaluation of their performance appraisal practices in order to identify shortcomings for subsequent improvement in the system; thereby affecting individual employee and overall organizational performance.

Keywords: Performance; Performance Appraisal; Employee Perceptions, Organizational Justice; Satisfaction.

1.   Introduction

In last three decades, Performance Appraisal (PA), a formal process involving periodic employee and manager interactions to assess employee performance, develop performance and distribute rewards, has gained increased attention of practitioners and researchers both. Accordingly, effectiveness of PA remains one of the most important subjects for researchers and practitioners. The emphasis of PA research has been its traditional features along with the new ones. Research findings in this regard show that initial focus of research on PA concentrated mainly on its individual aspects, such as psychometric stability, involving reliability and accuracy of rating formats and utility perspective (Adler et al., 2016). Recent literature on PA report that although its qualitative aspects have been agenda of research, however, PA as a whole system has been limitedly examined. Thus, the practice of evaluating effectiveness of PA, based on its individual aspects has been regarded as uneven and inadequate (Iqbal, Akbar & Budhwar, 2015), and despite considerable amount of research on various aspect of PA, practitioners also consider it to be a "far from perfect" system (Ikramullah, Prooijen, Iqbal & Ul-Hassan, 2016).

In a quest of competitive advantage, HR professionals are endeavoring for an appraisal system that can evaluate performance of employees fairly. Researchers have suggested that organizational justice framework might provide the answers, therefore, justice is being increasingly considered globally in PA research. Literature on the organizational justice show that it significantly predict employees' work attitudes like satisfaction (Thurston & McNall, 2010). However, still there is no consensus on effect of various organizational justice dimensions (i.e distributive, procedural, interpersonal and informational justice) on employee satisfaction. There are very few studies that have endeavored looking at justice perceptions of employees and its effect on satisfaction with PA using four factor justice models.

In the technological advanced countries, although researchers have studied appraisals using four factor justice model but due to distinct socio-economic conditions of our country, results of these studies cannot be generalized in Pakistan. Existing studies on PA in Pakistani context concentrate mostly on studying and comparing appraisal practices, outcomes of appraisal practices in different areas without paying due attention to effectiveness of PA as a whole system (Qureshi, 2005; Aslam & Sarwar, 2010,

[1]PhD Scholar, Bahria University, Islamabad, Pakistan. ijaz108@gmail.com
[2]Assistant Professor, Department of Management Science, Bahria University, Islamabad.abdulsattar77@yahoo.com

Ikramullah et al., 2016). As major focus of the extant research has been analysis of individual aspects of performance appraisals, the question of how various dimensions of organizational justice influence employee satisfaction thereby impacting effectiveness of PA remains unanswered, specifically in the Pakistani context. This paper is an endeavor to fill this gap.

Iqbal et al., (2015) consider PA literature to be devoid of Eastern perspective and suggest Eastern researchers to replicate models proposed in the West. This paper is also meant to answer calls for additional research by Eastern authors, thus it identify linkage between employees' fairness perceptions and satisfaction in appraisal process. Furthermore, widespread and extensive usage of appraisal process, the importance of PA for performance management, its importance for individual employee as rewards are based on its outcome, its worth for Human Resource Management & Development and requirement of a tool to ascertain effectiveness of PAs also dictated need for conduct of this study.

The purpose of this study, therefore, is to examine relationship between employee's perception of organizational justice and satisfaction with various facets of PA in private sector organizations of Pakistan. The resulting findings will provide guidance to our Telecom sector organizations for measuring effectiveness of their PAs thus providing a tool for improving existing PA practices. The study also validates four factor model in socio-economic environment of Pakistan which is distinct from West and paves way for its cross cultural comparison.

The paper initially reviews literature on PA, organizational justice, employee satisfaction and linkages between justice and satisfaction dimensions. It differentiates effect of distributive, procedural, interpersonal and informational justice by relating these to satisfaction with PA, satisfaction with PA system and satisfaction with supervisor respectively. Based on the same, a model depicting influence of justice dimensions on satisfaction is tested by the use of AMOS 6.0. Thereafter, the results are presented and discussion is made prior to conclusion and recommendations.

2.   Literature Review

PA is one of the most important human resource management functions (Kampkotter, 2015) by which expectations and goals for subordinates are defined, communicated, reviewed and evaluated by comparing it with preset standards (Warokka, Gallato & Moorthy, 2012; Dessler & Varkkey, 2016). Apart from its other uses, it is intended to compile, document the results of comparisons for reward allocation and provide feedback to designate areas needing improvement. PA is also viewed as a key component of strategic approach to management in that it is instrumental in linking competencies and behaviour of an employee with strategic objectives of an organization (Dusterhoff, Cunningham, & MacGregor, 2014). Furthermore, to keep organizational competitiveness intact, PA has become essential and very important human resource practice. Because of these aspects, organizations are increasingly considering use of PAs (Aguinis, 2009; Long, Kowang, Ismail & Rasid, 2013).

Despite of utility and widespread implementation of PAs, both manager and employee are apprehensive about its utility and dissatisfaction with the process is at its peak (Adler et al., 2016). Number of managers' and employees' survey reflect dissatisfaction with PA process in various settings. Employees perceive formally instituted PA to be of little value which can also demotivate high performers in organization (Culbertson, Henning & Payne, 2013). Number of Fortune 500 companies have parted ways from performance appraisal process on a pretext of its ineffectiveness (Wilkie, 2015; Meinert, 2015). Within Pakistani private sector organizations, findings of studies on PA are not much different as PA process is perceived as "inadequate" and employees have very limited faith in it (Qureshi, 2005; Aslam & Sarwar, 2010). Review of literature reveal that in view of prevalent criticism on PAs, its effectiveness that determine usefulness of system for employees' performance assessment has been of great concern to researcher and practitioners both (Darehzereshki, 2013; Iqbal et al., 2015).

Although psychometric soundness of rating formats, accuracy of ratings and qualitative facets of appraisals have been three facets of PA research that have been considered instrumental in ascertaining effectiveness of appraisals, however, majority of research measuring PA effectiveness focused on errors caused by raters and accuracy of ratings (Adler et al., 2016). Reactions of subordinates, the important aspect of qualitative criteria have been relatively ignored. Researchers have confirmed this observation and

have realized that comparatively less attention has been given to PA reactions (Pichler, 2012). The limited focus of researchers on qualitative aspects has been an obstacle in ascertaing effectiveness of PAs. The next section shed light on this aspect.

2.1 Reactions to Performance Appraisals

Human resource, being a major asset playing vital role towards achievement of competitive advantage by organizations is an essential stakeholder in PA process. Accordingly, employee appraisal reactions i.e fairness and satisfaction have been considered imperative for organizations (Cardy & Dobbins, 1994; Keeping & Levy, 2000; Arogoundale, 2013). The holistic approach to PAs regard employee reactions like fairness and satisfaction to be the vital components for appraisal effectiveness as employees can be willing to enhance their performance as a result of these reactions (Swanepoel, Botha & Mangonyane, 2014; Iqbal et al., 2015; Phin, 2015). Therefore, traditional approach for ascertaining effeeviveness of PA got suplemented by the qualitative criteria like employee reactions.

Cawley, Keeping and Levy (1998) in their meta-analytic study pertaining to PA participation and employee reactions identified satisfaction and fairness to be among the employees' reactions to appraisals. (Giles & Mossholder, 1990; Keeping & Levy, 2000; Levy & Williams, 2004; Jawahar, 2007) also consider satisfaction to be a key reaction within PA process as perceived accuracy and utility; the cognitively oriented aspects relate positively to satisfaction. (Lai Wan, 2007) highlighted that organizations regard satisfaction as a major aim to be reached because of reason that objectives of organizations are tied to satisfaction of employees. Therefore, satisfaction has been taken as an important variable in this study. Based on the study by (Thurston & McNall, 2010), satisfaction with performance appraisal, performance appraisal system and supervisor have been taken as three dimensions of satisfaction.

Researchers have suggested that satisfaction is positively influenced by perceptions of fairness. (Usman, Fan, Haq, & Hussain, 2014) found fairness perceptions to be one of the important predictor of employees' satisfaction with performance appraisal process. Consequently the fairness aspect has been considered an important variable for this study and is discussed in next section.

2.2 Organizational Justice

The concept of fairness has been dealt with by organizational justice theory. Organizational justice deals with fairness perceptions of employees and it refers to a degree to which processes, relations, exchanges and consequences in organization are perceived as fair by employees. It basically refers to perceptions of fair treatment from an organization and its agents (Shalhoop, 2003). In the last decade, focus of organizational researchers have been on fairness as individual and organizational outcomes have been found to be linked to employees' perceptions of fairness (Colquitt, Greenberg & Zapata-Phelan, 2005).

Cawley et al., (1998) in their meta-analytic review also argue organizational justice to be a key aspect of PAs. (Dijke & Cremer, 2016) highlighting role of justice in work setting report that researchers have predicted positive impact of justice on attitudes of employees like satisfaction. These justice perceptions of employees are instrumental in establishing longterm effectiveness of PA processes.

Distributive justice (DJ), the first dimension of organizational justice dealing with fairness related to perceived outcomes; embedded in the social exchange theory, is also termed as equity theory. It refers to employees' perceptions of rewards received viz-a-viz the efforts putin by employees in relation to the efforts putin by other employees. When employees feel their rewards to be corresponding to their efforts, social exchanges are perceived as (Adams, 1965; Homans, 1961; Greenberg, 1990; Dusterhoff et al., 2014). The second dimension of organizational justice is procedural justice (PJ), which depict employees' perceptions regarding fairness of procedures used in determining their outcomes/appraisal. It basically refers to employees' perception that decisions about appraisal, pay and rewards are made following fair procedures (Thibaut & Walker, 1975; Leventhal, 1980).

Apart from the aforementioned two factor (procedural - distributive) model, three factor i.e. distributive, procedural and interactional justice model is yet another model of organizational justice. The interactional justice refers to justice perceptions developed during interactions between rater and ratee while enacting PAs (Bies & Moag, 1986; Bies & Shapiro, 1987). Studies have incorporated interactional

justice as an element of procedural justice and/or as a seperate concept. Some researchers regard it as a part of procedural justice whereas, other consider it to be a seperate type of justice; the issue however still remains under further debate.

Four factor model of organizational justice put forth by Greenberg (1993) considers interpersonal (INTJ) and informational (INFJ) justice to be two separate dimensions of organizational justice. The treatment received by employees i.e. extant to which employees are dealt with courtsey, politeness, dignity and respect; refered to as interpersonal justice. On the other hand, informational justice refered to as procedural explanations for why something occurred. This four factor model comprising distributive, procedural, interpersonal and informational justice is also supported by (Colquitt, 2001). (Colquitt *et al.*, 2001) further suggest that primary argument for differentiating between types of justice is because of relationship of each justice type with certain organizational attitudes.

Globally, researchers have incorporated all four components of justice (procedural, distributive, interpersonal and informational) along with interactional justice into one framework (Roch & Shanock, 2006; Jawahar, 2007). However, situation in Pakistan is different as although the dimensions of organizational justice in isolation have been used to ascertain the employees' perception of fairness however, studies have not examined impact of employees' perception of fairness on their satisfaction using all four types of justice in a single framework. Therefore, this is a first study investigating the phenomenon in Pakistani settings.

2.3 Consequence of Justice Perceptions of Employees

PA process is likely to increase satisfaction when employees perceive it to be correct, related and not biased. On the other hand it can lead to great dissatisfaction when the process is perceived to be biased, unfair, political and subjective (Skarlicki & Folger, 1997). (Cook & Crossman, 2004) suggest that although various aspects of PA are heavily researched however, examination of fairness perceptions that lead to satisfaction with the PA process is limited. (Jawahar, 2007) argue that impact of justice perceptions on various organizational and individual consequences should be researched. In order to test the consequences of employees' fairness perceptions of PAs. (Thurston & McNall, 2010) used perceptual, affective and behavioral construct model which is consistent with the organizational adoption model proposed by (Hulin *et al.*, 1985) and (Organ, 1995). They applied this interactive framework specifically to PA context by developing a specific scale. The authors found procedural, distributive, interpersonal and informational to be four distinct but highly correlating dimensions of organizational justice. Their research results support earlier assertion of (Colquitt *et al.*, 2001) to consider the four justice dimensions separately. The authors have suggested that research on the subject needs to be broadened to see if these results generalize to other organizations or industries. These views led to development of theoretical framework that is discussed hereafter.

3. Theoretical Framework

Within the process of performance appraisal, the concept of organizational justice deeply embedded in social exchange theory, underpins linkage between employees' fairness perceptions and satisfaction. The basic assumptions of social exchange theories about human behavior include: social relationships seen as exchange processes whereby employees contribute for certain outcome; and, employees evaluate exchange fairness via information gained through social interactions. Thus organizational justice predict how employees will react to perceptions of fairness in their organizational environment. In that, if employees perceive their performance appraisal process to be fair, they are more likely to be satisfied in their workplace. Vice-e-Versa, if they consider their performance appraisal process to be unfair, they are likely to be dissatisfied with the process (Homans, 1961; Blau, 1964; Adams, 1965; Greenberg, 1990; Mowday, 1991;Thibaut & Walker, 1975; Leventhal, 1980; Bies & Moag, 1986; Bies & Shapiro, 1987; Greenberg, 1993; Colquitt, Greenberg & Zapata-Phelan, 2005; Thurston & McNall, 2010 and Dijke & Cremer, 2016).

The theoretical framework include organizational justice and satisfaction as independent and dependent variables respectively. Distributive, procedural, interpersonal and informational justice being four dimensions of organizational justice. Satisfaction with performance appraisal, performance appraisal

system and supervisor being three dimensions of satisfaction. The relationship between dimensions of independent and dependent variable is depicted in Figure 1.

3.1 Distributive Justice and Satisfaction with Performance Appraisal

According to Sweeny and McFarlin (1993) distributive justice theories make predictions regarding people's reaction to actual or relative level of rewards they receive; dictating that distributive justice theories are generally concerned with reactions to outcomes of reward. They conducted study of two factor model and found distributive justice to be better predictor of "personal-level evaluation". (Colquitt et al., 2001) suggest that distributive justice strongly influence "specific, person-referenced outcomes such as satisfaction with a pay raise or performance evaluation". (Jawahar, 2007) study found distributive justice to be positively related to performance appraisal satisfaction in Indian Telecom sector. (Thurston & McNall, 2010) in a study on justice perceptions used four factor model establishing relationship between distributive justice perceptions and performance appraisal satisfaction. Their results show employees' satisfaction with performance appraisal is primarily predicted by distributive justice than the other justice dimensions. Based on the foregoing, first hypothesis is developed as under.

H$_1$: Distributive justice perceptions positively influence employees' satisfaction with performance appraisal.

3.2 Procedural Justice and Performance Appraisal System Satisfaction

The method and manner followed while allocating rewards is focus of procedural justice theories. (Sweeney & McFarlin, 1993) established procedural justice to be "important predictor of organization level outcomes". (Colquitt et al., 2001) are of the view that procedural justice strongly influences general evaluation of the appraisal system. (Jawahar, 2007) hypothesized relationship between procedural justice and PA system satisfaction, and found PA system satisfaction to be highly impacted by procedural justice. (Thurston & McNall, 2010) found employees' perceptions of procedural justice be related to satisfaction with PA system. Their evidence suggests procedural justice to be a better predictor of employees' satisfaction with PA system. (Selvarajan & Cloninger, 2012) hypothesized relationship between procedural justice and employee satisfaction with appraisal system in the Mexican context. Their study results reveal appraisal satisfaction to be positively impacted by procedural justice. (Taneja, Srivastava, & Ravichandran, 2015) hypothesized procedural justice to be positively impacting satisfaction with PA system. These become the basis for development of second hypothesis for this study.

H$_2$: Procedural justice perceptions positively influence satisfaction with performance appraisal system.

3.3 Interpersonal and Informational Justice and Satisfaction with Supervisor

Within the process of performance appraisal, rater play a pivotal role in that he primarily evaluate employee performance and provide feedback. It is likely that employees will be highly satisfied if they are treated fairly. Agent-system model suggest that interpersonal and informational justice are strong predictors of "agent-referenced outcomes" instead of "system referenced outcomes" (Bies & Moag, 1986; Colquitt *et al.*, 2001).

Relationship between employee reactions and interpersonal justice was hypothesized by (Leung, Su & Morris, 2001). Their study results reveals that interpersonal justice positively relates to employee reactions. (Jawahar, 2007) hypothesized interpersonal and informational justice to be positively influencing satisfaction with rater. The author did not find support for positive relationship between interpersonal justice and satisfaction with rater whereas he found informational justice to be influencing satisfaction with the rater.

Thurston and McNall (2010) hypothesized relationship of interpersonal and informational justice with supervisor satisfaction. They found these justice types to be strongly predicting satisfaction of employees with their supervisor and positively influencing employee satisfaction with supervisor. (Silva & Caetano, 2014) study also suggest that interactional justice, generally regarded as composed of interpersonal and informational justice influence satisfaction with supervisors who are in-charge of their performance appraisals. (Taneja, Srivastava & Ravichandran, 2015) study found positive influence of interpersonal justice on employee's satisfaction with rater. Based on the aforesaid following hypotheses are developed.

H₃: Interpersonal justice perceptions positively inflence satisfaction with supervisor.

H₄: Informational justice perceptions positively influence satisfaction with supervisor.

Figure No. 1:   Theoretical Framework Depicting Link between Employee Perceptions of Organizational Justice and Satisfaction
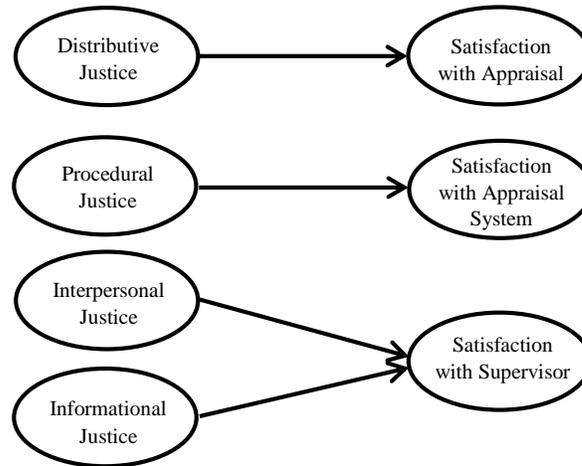

Table No.1: Dimensions of Justice and Underlying Constructs

Justice Dimensions	Underlying Constructs
• **Distributive Justice (DJ)**	– **Accuracy of Assessment (AOA)** – **Concern over Rating (COA)**
• **Procedural Justice (PJ)**	– **Performance planning (PP)** – **Rater Confidence (RC)** – **Seeking Appeals (SA)**
• **Interpersonal Justice (INTJ)**	– **Treatment by Manager (TBM)** – **Sensitivity in Supervision (SIS)**
• **Informational Justice (INFJ)**	– **Clarifying Expectations (CES)** – **Providing Feedback (FB)** – **Explaining Decisions (ERD)**

4.1   Participants and Procedure

The data is collected through the use of survey questionnaire from employees of telecom sector organizations. The employees have been asked to respond as a ratee in the study. The questionnaires were handed over to the employees through their managers as well as directly. In order to ensure confidentiality and anonymity, drop boxes were placed in organizations for returning filled questionnaires.

As per recommendations of Dillman (1978) letter covering questionnaire indicated information on performance appraisal process and reasons for conduct of study. It also informed respondents about their voluntary participation and clearly depicting that their responses would be kept confidential.

According to Saunders, Lewis and Thornhill (2009) collection of entire data available is not possible due limitation of time, money and access; hence data was collected by using probability sampling technique. The sample was randomly selected and recommendations of the authors guided calculation of sample size. A total of 365 questionnaires were distributed out of which 355 were received back, amongst which 5 were incomplete. Thus data from remaining 350 questionnaires has been analyzed.

4.2 Measures

The variables used in hypothesized model have been quantified by survey questionnaire consisting of 72 items. 56 items measured organizational justice and 16 items measured employee satisfaction. Response of respondents has been gathered using five-point Likert scale.

Organizational justice has been measured using scale developed by Thurston & McNall (2010) with slight modification to make it clear to Pakistani people. The scale measured distributive, procedural, interpersonal and Informational justice. Twelve items measured distributive justice assessing the fairness of outcome/ ratings received by using constructs of Accuracy of Assessment (AOA) and Concern over Assessment (COA). Seventeen items determined level of procedural justice assessing fairness of procedures used to determine ratings by using constructs Performance Planning (PP), Rater confidence (RC) and Seeking Appeals (SA). Interpersonal justice was measured by use of ten items assessing degree to which employees felt they were considered and respected by managers through using constructs of Treatment by Manager (TBM) and Sensitivity in Supervision (SIS). Informational justice was measured by use of seventeen items assessing clear explanations concerning appraisal decisions through constructs Clarifying expectations (CES), Providing Feedback (FB) and Explaining Decisions (ERD).

Employee satisfaction was measured using measures suggested by (Taylor, Tracy, Renard, Harrison & Carroll, 1995; Tang & Sarsfield-Baldwin, 1996; Thurston & McNall, 2010). The scale measured satisfaction with performance appraisal, satisfaction with appraisal system and satisfaction with supervisor. Four items measured satisfaction with performance appraisal, seven items measured satisfaction with performance appraisal system and five items were used to measure satisfaction with supervisor.

5. Results and Discussion
5.1 Results

Table 2 below shows characteristics of study sample.

Table No. 2: Sample Characteristics

Description	Labels	Frequency	Percentage
Gender	Male	284	81
	Female	66	19
Age	18 – 25	50	14.3
	26 - 40	260	74.3
	41 - 50	39	11.1
	51 – 60	1	.3
Job Category	Lower level of Management	108	30.9
	Middle level of Management	180	51.4
	Upper level of Management	36	10.3
	Others	26	7.4
Ethnicity	Punjabi	211	60.3
	Sindh	25	7.1
	Pushto	70	20.0
	Baloch	8	2.3
	Others	36	10.3
Education	Matric	8	2.3
	Intermediate	29	8.3
	Bachelor	140	40.0
	Master	169	48.3
	Others	4	1.1
Tenure in department	Less than 1 year	31	8.9
	1 – 3	102	29.1
	4 – 5	118	33.7
	6 – 10	90	25.7
	More than 10	9	2.6

Table 3 show mean and standard deviation of all the variables. The mean of satisfaction with most recent performance appraisal rating (SPA) (Mean=2.36; SD = .9039), satisfaction with performance appraisal system (SPAS) (Mean=2.47; SD .8718) and satisfaction with supervisor (SWS) (Mean=2.24; SD .8752) depict satisfaction of employees with their performance appraisal process.

The means of distributive justice (Mean=2.13; SD .5130), procedural justice (Mean= 2.31; SD .7375), Interpersonal justice (Mean=2.23; SD .7816) and informational justice (Mean=2.33; SD .7878) depict that employees consider their process of performance appraisal as fair.

Table No. 3: Means and Standard deviations

	DJ	PJ	INTJ	INFJ	SPA	SPAS	SWS
Mean	2.1327	2.3182	2.2397	2.3389	2.362	2.4724	2.2417
SD	.5130	.7375	.7816	.7878	.9039	.8718	.8752

The internal consistency of constructs is established by use of reliability test. The value of Cronbach alpha of entire scale is 0.979 whereas the values of individual dimensions of scale fall between 0.833 and 0.992; these are well above minimum acceptable limit of 0.7 (Hair, Babin & Krey, 2017).

Table 4 present correlations between dimensions of independent variable i.e organizational justice (distributive, procedural, interpersonal and informational justice). Table 4 also shows correlations between dimensions of satisfaction. The variables of study were significantly related to each other (p < 0.01). The results of correlation analysis reveal positive link between distributive justice and satisfaction with performance appraisal; between procedural justice and satisfaction with performance appraisal system; and between interpersonal and informational justice and satisfaction with supervisor. Furthermore, the correlations and internal consistency reliabilities depict that the data on which the research depends on is sound and reliable.

Table No. 4. Correlation Matrix and Reliability Coefficient (Cronbach's alpha)

	DJ	PJ	INTJ	INFJ	SPA	SPAS	SWS
DJ	.833						
PJ	.713**	.930					
INTJ	.648**	.749**	.924				
INFJ	.696**	.829**	.806**	.952			
SPA	.604**	.691**	.647**	.660**	.899		
SPAS	.606**	.720**	.640**	.681**	.740**	.892	
SWS	.566**	.672**	.731**	.733**	.643**	.647**	.910

Note: Correlations are shown below the diagonal and scale reliability at the diagonal

** Correlation significant at the 0.01 level (2-tailed).

Two step approach consisting confirmatory factor analysis (CFA) and SEM (Anderson & Gerbing, 1988) based on AMOS 6.0 was used for assessment of the relationships amongst variables. Maximum Likelihood method was employed for estimating the parameters.

The normality of data was assessed by analyzing skewness and kurtosis values (Hair, Hult, Ringle & Sarstedt, 2014). The values of skewness and kurtosis ranged between the normal acceptable limit of +2 which dictated the data of all the variables to be normally distributed (Gravetter & Wallnau, 2014).

5.1.1   Assessment of underlying factor structure of Organizational Justice

One of the purposes of this study has been to analyze underlying factor structure of ten scales used to ascertain employees' justice perceptions of appraisal practices. The comparison of nested models served purpose of testing relationship between ten justice perceptions scales to underlying latent justice constructs. Comparison of factor structure of five models was undertaken. The four factor model hypothesized in study was compared to various alternative models to ascertain best factor structure. The first model represented one-factor model consisting of all items used to measure justice perceptions. Then two 2-factor models were tested; first depicting traditional separation between distributive and procedural justice, whereas the second representing distinction between social and structural elements of justice. The third model matched constructs of (Skarlicki & Folger, 1997) representing two structural forms of justice (distributive and procedural) with two socially determined forms (informational and Interpersonal justice) combined into single construct namely Interactional Justice. The final four factor model also hypothesized

in study based on (Greenberg, 1993) stipulation, earlier supported by (Colquitt, 2001) and (Thurston & McNall, 2010) in Western context, representing distributive, procedural, informational and Interpersonal justice.

Various fit indices were analyzed to test and compare fitness of models. The absolute fit of model is ascertained by Chi-square index. However according to (Colquitt, 2001), sample size may inflate value of Chi-square; hence value of Chi-square relative to its degrees of freedom may be used whereby good fit indicated by the ratio of 2. Authors suggest use of Incremental Fit index (IFI), Non Formed Fit Index (NNFI, also known as TLI) and Comparative Fit Index (CFI) as these present comparison of fit of given model and baseline model with no covariance among variables. The values of IFI, TLI and CFI generally falls between 0 and 1; values closer to 1 representing good fit. The values of 0.9 represent good fit. Authors further suggest analyzing Root-Mean-Square Error of Approximation (RMSEA) depicting discrepancy between observed and population covariance matrices expressed relative to degrees of freedom with its values between 0 and 0.05 indicating good fit; between 0.05 and 0.08 reasonable fit; between 0.08 and 0.1 representing mediocre fit and values beyond 0.1 to be indicating poor fit (Kline, 2016; Hair et al., 2017).

Table 5 show result of CFA analysis in that four factor model hypothesized in study provided best description of underlying constructs of ten scales. Analysis of fit indices shows that four factor model has good fit (χ^2 = 1487.52, df = 763, CMIN/DF=1.950, Goodness of Fit Index (GFI) = 0.828, Incremental Fit Index (IFI) = 0.919, TLI = .913, Comparative Fit Index (CFI) = 0.919, Root Mean Square Error of Approximation (RMSEA) = 0.052) compared to other models. All paths between latent constructs and individual indicators were significant ($p < 0.05$) and factor loadings (standardized) ranged from 0.610 to 0.896.

Table No. 5. Comparison of the models of Justice Perceptions

Model	CMIN/DF	GFI	IFI	TLI	CFI	RMSEA
One factor Justice model	2.042	0.812	0.909	0.901	0.906	0.055
Distributive-Procedural Two factor model	2.024	0.813	0.909	0.902	0.908	0.054
Structural-Social Two factor model	2.043	0.812	0.907	0.900	0.906	0.055
Distributive-Procedural-Interactional Three factor model	2.047	0.812	0.907	0.900	0.906	0.055
Distributive-Procedural-Interpersonal Informational Four factor model	1.950	0.828	0.919	0.913	0.919	0.052

The global fit index of the measurement Model (χ^2 = 2268.706, df = 1192, CMIN/DF=1.903, Goodness of Fit Index (GFI) = 0.797, Incremental Fit Index (IFI) = 0.913, TLI = .907, Comparative Fit Index (CFI) = 0.913, Root Mean Square Error of Approximation (RMSEA) = 0.051) suggested that the measurement model fitted well with the sample data.

5.1.2   Structural Model
After supportive assessment of measurement model, structural model was executed on the said model for testing hypothesized relationships. Relationship among latent variables was specified by structural model. The hypotheses included distributive justice to be positively related to satisfaction with performance appraisal, procedural justice to be related positively to satisfaction with performance appraisal system and interpersonal and informational justice to be related positively to satisfaction with supervisor. The global fit indices of the structural model proposing relationship between distributive, procedural, Interpersonal and Informational justice and satisfaction with performance appraisal, performance appraisal system and supervisor (χ^2 = 2183.536, df = 1107, CMIN/DF=1.972, Goodness of Fit Index (GFI) = 0.798, Incremental Fit Index (IFI) = 0.908, TLI = .902, Comparative Fit Index (CFI) = 0.907, Root Mean Square Error of Approximation (RMSEA) = 0.053) suggested that the model fitted well with the data.

Employees' distributive justice perceptions were positively related to satisfaction with performance appraisal. Improvement in the model fitness was not observed by the modification indices. Furthermore, addition of paths from procedural, interpersonal and Informational justice to satisfaction with performance

appraisal did not result improvement in fit indices rather these further deteriorated the fit indices. From the evidence it was clear that distributive justice better predicts employee satisfaction with their performance appraisal.

Employees' perceptions of procedural justice were positively related to satisfaction with performance appraisal system. Improvement in the model fitness was not observed by the modification indices. Furthermore, addition of paths from distributive, interpersonal and Informational justice to satisfaction with performance appraisal system did not result improvement in fit indices rather these further deteriorated the fit indices. From the evidence it was clear that procedural justice better predicts employee satisfaction with their performance appraisal system.

Employees' perceptions of Interpersonal justice were positively related to employee's satisfaction with supervisor. Improvement in the model fitness was not observed by the modification indices. Furthermore, addition of paths from distributive, procedural and Informational justice to satisfaction with supervisor did not result improvement in the fit indices rather these further deteriorated the fit indices. From the evidence it was clear that Interpersonal justice better predicts employee satisfaction with supervisor. Similarly, Employees' perceptions of Informational justice were positively related to employee's satisfaction with supervisor. Improvement in the model fitness was not observed by the modification indices. Furthermore, addition of paths from distributive, procedural and Interpersonal justice to satisfaction with supervisor did not result improvement in the fit indices rather these further deteriorated the fit indices. Results depict that the satisfaction with supervisor is better predicted by socially determined Interpersonal and Informational justice construct.

Results indicate support for all the hypothesized relationships ($p < 0.05$). Fig 2 depict path coefficients (standardized betas) of the relationships hypothesized in the study. Table 6 shows squared multiple correlations that depict proportion of variance accounted for in the endogenous variables. 79% of the variance in the satisfaction with performance appraisal was explained by the distributive justice. 81% of the variance in the satisfaction with the performance appraisal system was explained by the procedural justice. Perceptions of Interpersonal justice and informational justice explained 85% of variance in the satisfaction with the supervisor.

Table No. 6. Squared Multiple Correlations (SMC)

Variable	Estimate
Satisfaction with Performance Appraisal (SPA)	0.788
Satisfaction with Performance Appraisal System(SPAS)	0.808
Satisfaction with Supervisor (SWS)	0.847

The figure No.2 depict that procedural justice relationship with performance appraisal system satisfaction is stronger than the relationship of distributive justice and satisfaction with appraisal. Within socially determined aspects of interpersonal and informational justice, the informational justice's relationship with employee's satisfaction toward supervisor is stronger than the relationship between interpersonal justice and satisfaction with supervisor. All the hypotheses are statistically significant.

Figure No 2. Results of Structural Equation Modeling of Relationships between Justice and Satisfaction
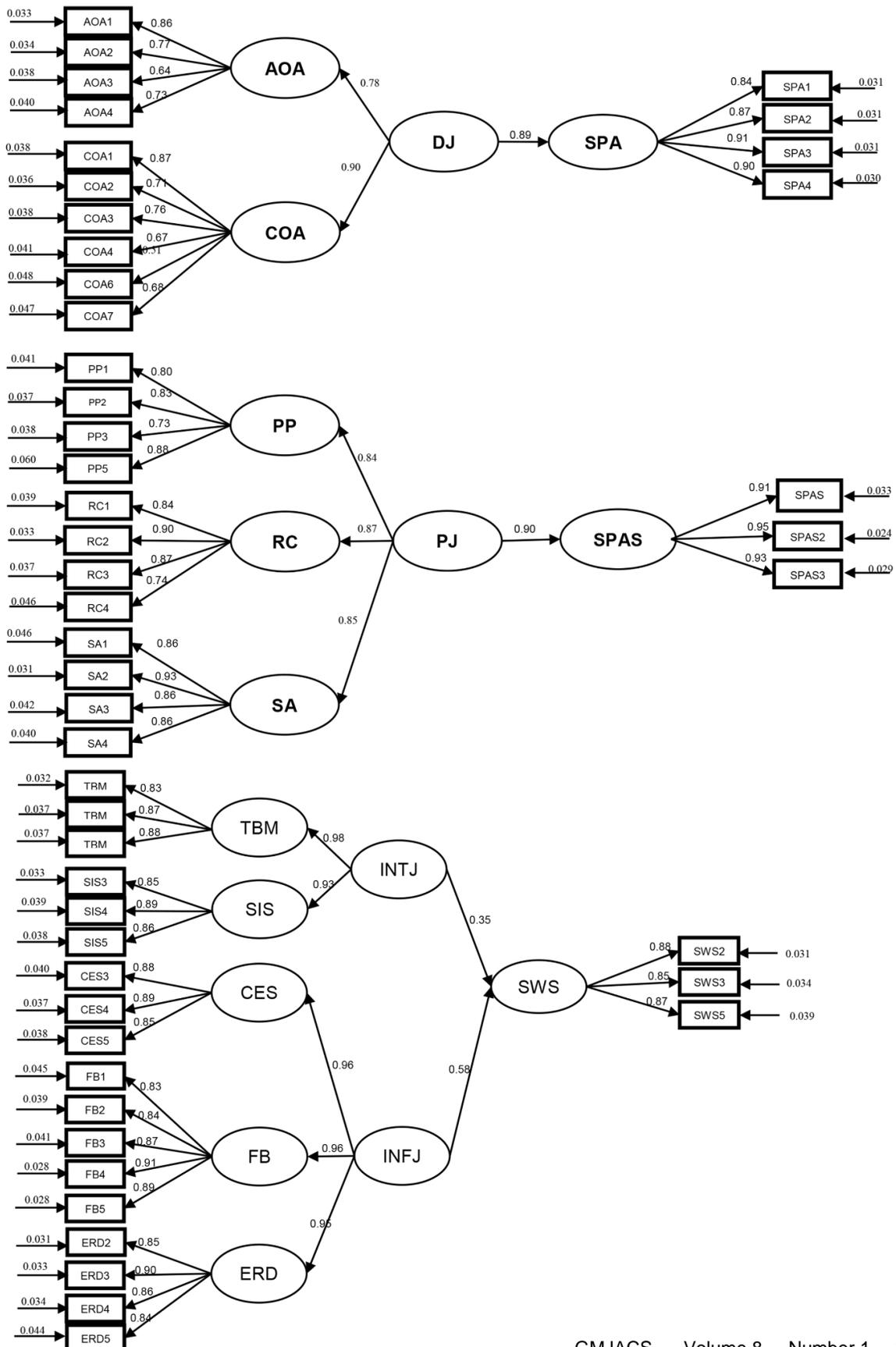
5.2   Discussion

Within PA, perceptions of injustice and dissatisfaction have been instrumental in impacting its effectiveness. The basic suggestion of (Folger *et al.*, 1992) pertaining to use of organizational justice based approach for ascertaining employees' affective reactions to PA system is tested in this study. For the purpose, set of organizational justice scales developed by (Thurston & McNall, 2010) have been used to study impact of justice perceptions on employees' satisfaction in Pakistani context. This study also integrates theory and existing research on perceptions of employees' pertaining to various dimensions of organizational justice and employees' reactions to PAs. Use of ten scales provide an empirical evidence for dimensions underlying organizational justice.

The hypotheses have been tested by the integration of theory and research on justice perceptions and employee reactions to PA. In line with perceptual, attitudinal and behavior model; employees' perceptions of fairness predicts employee attitudes toward PA, PA system and Supervisor. (Greenberg's, 1993) four factor model of organizational justice extending on the (Sweeney & McFarlin, 1993) two factor model and interactional justice construct of (Bies & Moag, 1986) along with (Thurston & McNall, 2010) operationalization of four factor model on PAs served as basis for hypotheses development. All the dimensions of organizational justice significantly influence respective hypothesized consequences. This is consistent with study results of (Thurston & McNall, 2010).

Amongst the influence of all justice dimensions on their respective hypothesized consequences, procedural justice accounts for major influence on PA system satisfaction (β =0.90) followed by influence of distributive justice on satisfaction with PA (β =0.89). These results of first two hypothesis; positing positive relationship of distributive justice with appraisal satisfaction; and positive relationship of procedural justice with appraisal system satisfaction corresponds to (Sweeney & McFarlin, 1993) two factor model predictions. This is also consistent with (Thurston & McNall, 2010) study findings, that distributive justice predict satisfaction of employees with current appraisal better than other justice dimensions.

Jawahar (2007) study found distributive justice to explain 68% of variance in appraisal satisfaction whereas, procedural justice explained 42 % of variance in appraisal system satisfaction; hence our study result are consistent with results of (Jawahar, 2007). However, (Taneja, Srivastava & Ravichandran, 2015) in a study of Indian Telecom sector did not find satisfaction with PA system to be influenced by procedural justice, hence although our result do not match with their study as far as relationship of Procedural justice and satisfaction with PA system is concerned but are consistent with other studies on the subject as discussed above.

Thurston and McNall (2010) evidence suggest that both interpersonal and informational justice constructs are important in predicting satisfaction of employees with their supervisor. (Jawahar, 2007) study hypothesis pertaining to relationship between informational and interactional justice with satisfaction reveals that informational justice explains 50% of variance in satisfaction with supervisor whereas significant relationship was not found between interpersonal justice and satisfaction with supervisor. (Taneja, Srivastava & Ravichandran, 2015) hypothesis positing positive causality between interpersonal justice and satisfaction with rater was accepted (Beta=0.28). In our study , amongst the influence of these justice dimensions on their respective hypothesized consequences, informational justice accounts for major influence on satisfaction with rater (β =0.58**)** followed by influence of interpersonal procedural justice on satisfaction with rater (β=0.35).

Thus this study reveal that employees working in Telecom sector of Pakistan perceive practices of PA employed by their organizations to be fair and are also satisfied with their PA processes. Apart from this, study is also instrumental in establishing effectiveness of PA process as a whole by highlighting role of fairness perceptions in causing satisfaction of employees with PA process. The results highlight important potential of PA system for its use as a management instrument in organizations.

This is first study that validate four factor structure of organizational justice and instrument proposed by (Thurston & McNall, 2010) in Pakistani context which is different from West in the socio-economic context thus paving way for cross cultural comparison of the phenomenon. This is also first study to investigate influence of four dimensions of organizational justice on employee satisfaction with performance appraisal,

appraisal system and supervisor based on perceptual – attitudinal model in Pakistani context. Results indicate strong support for (Thurston & McNall, 2010) model.

The study equip organizational management with a tool for assessing effectiveness of their PA processes in order to find out whether their appraisal practices are perceived as fair by employees or otherwise. Thus, the information can be used to make informed decisions for improvement in appraisals thereby utilizing the information to modify their appraisal process. Findings of this study also dictate that managers can affect employee satisfaction with different facets of PAs by providing distributive, procedural, interpersonal and informational justice. Furthermore, based on findings, organizational managers can be trained to focus on various aspects of justice while implementing appraisal process.

6.   Conclusion and Policy Recommendations

The study extends current literature on organizational justice by relating employees' justice perceptions to satisfaction of employees within the process of PA. Employees of Telecom sector are found satisfied with their PA process and have fair perceptions of their appraisal practices. Our finding also suggests that employees' perception of procedural justice most strongly predicts satisfaction with PA system. Distributive justice perceptions positively relates to employees' satisfaction with the PA. As expected, interpersonal and informational justice appears distinct constructs with interpersonal and informational justice relating positively to satisfaction with rater. These results are consistent with evolving literature on the subject.

The findings have some practical implications for managers of Telecom sector in that if they want to enhance effectiveness of their performance appraisals they have to ensure that their PA processes are perceived as fair by employees. They can modify their appraisal processes to have substantial enhancement in employees' performance thus impacting overall organizational performance positively.

References

Adams, J. S. (1965). Inequity in social exchange. (i. Berkowitz, Ed.) *Advances in Experimental and Social Psychology, 2.*

Adler, S., Campion, M., Colquitt, A., Grubb, A., Ollander-Krane, R., & Pulakos, E. D. (2016). Getting Rid of Performance Ratings: Genius or Folly? A Debate. *Industrial and Organizational Psychology, 9*(2), 219-252.

Aslam, H. D., & Sarwar, S. (2010). Improving Performance Management Practices in IT Firms of Pakistan. *Journal of Management Research, 2*(2).

Bies, R., & Moag, J. S. (1986). Interactional Justice: communication criteria of fairness. In R. J. Lewicki, B. H. Sheppard, & M. H. Bazerman, *Research on Negotiations in Organizations* (pp. 43-55). Greenwich, CT: JAI.

Bies, R., & Shapiro, D. L. (1987). Interactional fairness judgments: the influence of causal accounts. *Social Justice Research, 1*, 199-218.

Blau, P. M. (1964). *Exchange and Power in Social Life.* New York: John Wiley & Sons, INC.

Cardy, R. L., & Dobbins, G. H. (1994). *Performance Appraisal: Alternative Perspectives.* Cincinnati: South Western Publishing.

Cawley, B. D., Keeping, L. M., & Levy, P. E. (1998). Participation in the Performance appraisal process and employee reactions: A meta-analytic review of field investigations. *Journal of Applied Psychology, 83*(4), 615-633.

Colquitt, Conlon, Wesson, Porter, & Yee. (2001). Justice at the millennium: a meta-analytic review of 25 years of organisational research. *journal of Applied Psychology, 86*(3), 425-445.

Colquitt, J. A. (2001). On the dimensionality of organizational justice: a constructt validation of a measure. *Journal of Applied Psychology, 86*, 386-400.

Colquitt, J. A., Greenberg, J., & Zapata-Phelan, C. P. (2005). What is organizational justice? An Historical Overview. In J. Greenberg, & J. A. Colquitt, *The handbook of Organizational Justice* (pp. 3-56). Mahwah, NJ: Erlbaum.

Cook, J., & Crossman, A. (2004). Satisfaction with performance appraisal systems. *Journal of Managerial Psychology, 19*(5), 526-541.

Culbertson, S. S., Henning, J. B., & Payne, S. C. (2013). Performance appraisal satisfaction: The role of feedback and goal orientation. *Journal of Personnel Psychology, 12*, 189-195.

Darehzereshki, M. (2013). Effects of performance appraisal quality on job satisfaction in multinational companies in malaysia. *International Journal of Enterprise Computing and Business Systems.*

Dessler, G., & Varkkey, B. (2016). *Human Resource Management.* US: Prectice Hall.

Dijke, M. V., & Cremer, D. D. (2016). Justice in the Work Setting. In C. Sabbagh, & M. Schmitt, *Handbook of Social Justice Theory and Research* (pp. 315-332). New York: Springer Science + Business Media.

Dillman, D. A. (1978). *Mail and Telephones Surveys: The Total Design Method.* NY: Wiley.

Dusterhoff, C., Cunningham, J. B., & MacGregor, J. N. (2014). The effects of performancerating, leader-mamber exchange, perceived utility, and organizational justice on performance appraisal satisfaction: Applying moral judgement perspective. *Journal of business ethics, 119*, 265-273.

Giles, W. F., & Mossholder, K. W. (1990). Employee reactions to contextual and session components of performance appraisal . *Journal of Applied Psychology, 75*(4), 371-377.

Gravetter, F. J., & Wallnau, L. B. (2014). *Essentials of Statistics for the Behavioral Sciences.* Belmont, CA: Wadsworth.

Greenberg, J. (1990). Organisational justice: yesterday, today, and tomorrow. *Journal of Management, 16*(2), 399-432.

Greenberg, J. (1993). The social side of fairness: Interpersonal and informational classes of organisational justice. In R. corpanzano, *Justice in the Workplace: approaching Fairness In Human Resource Management* (pp. 79-103). Hillsdale, NJ: Lawrence Erlbaum Associates.

Hair, J. F., Babin, B. J., & Krey, N. (2017). Covariance-Based Structural Equation Modeling in the Journal of Advertising: Review and Recommendations. *Journal of Advertising, 46*(1), 163-177.

Hair, J., Hult, T., Ringle, C., & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM).* Thousand Oaks, CA: Sage Publications, Inc.

Homans, C. C. (1961). *Social Behavior: Its Elementary Forms .* New York, NY: Harcourt, Brace, and World.

Hulin, C., Roznowski, M., & Haciya, D. (1985). Alternative opportunities and withdrawl decisions. *Psychological Bulletin, 97*, 233-250.

Ikramullah, M., Prooijen, J.-W. V., Iqbal, M. Z., & Ul-Hassan, F. S. (2016). Effectiveness of Performance Appraisal: Developing a conceptual framework using competing values approach. *Personnel Review, 45*(2), 334-352.

Ikramullah, M., Shah, B., Hassan, F. S., Zaman, T., & Khan, H. (2011). Fairness Perceptions of Performance Appraisal System: An Empirical Study of Civil Servants in District Dera Ismail Khan, Pakistan. *International Journal of Business and Social Science, 2*(21).

Iqbal, M. Z., Akbar, S., & Budhwar, P. (2015). Effectiveness of Performance Appraisal: An Integrated Framework. *International Journal of Management Reviews, 17*, 510-533.

Jawahar, I. M. (2007). The influence of perceptions of fairness on performance appraisal reactions. *Journal of Lobor Research, 28*(4), 735-754.

Kampkotter, P. (2015). Performance Appraisals and Job Satisfaction. *The International Journal of Human Resource Management*, 1-25.

Keeping, L. M., & Levy, P. E. (2000). Performance appraisal reactions: measurement, modeling and method bias. *Journal of Applied Psychology, 85*(5), 708-723.

kline, R. B. (2016). *Principles and Practice of Structural Equation Modeling.* New York, NY: Guilford Publications, Inc.

Lai Wan, H. (2007). Human capital development policies: enhancing employee satisfaction. *Journal of European Industrial Training, 31*(4), 297-322.

Leung, K., Su, S., & Morris, M. W. (2001). When is criticism not constructive? The role of fairness perceptions and dispositional attributions in employee acceptance of critical supervisory feedback. *Human Relations, 54*(9), 1155-1187.

Leventhal, G. S. (1980). What should be done with equity theory? In K. J. Gergen, M. S. Greenberg, & R. H. Willis, *Social Exchange: Advances in Theory and Research* (pp. 27-55). New York, NY: Plenum.

Levy, P. E., & Williams, J. R. (2004). The social context of performance appraisal: A review and framework for the future. *Journal of management, 30*(6), 881-905.

Long, C. S., Kowang, T. O., Ismail, W. K., & Rasid, S. Z. (2013). A Review on Performance Appraisal System: An Ineffective and Destructive Practice? *Middle-East Journal of Scientific Research, 14*(7), 887-891.

Meinert, D. (2015). Is it time to put the performance review on a PIP? *HR Magazine, 60*(3), 1-12.

Mowday, R. (1991). Equity theory predictions of behavior in organizations. In R. Steers, & L. Porter, *Motivation and Work Behavior* (pp. 111-131). New York: Mc-Graw-Hill.

Organ, D. W. (1995). The subtle significance of job satisfaction. In B. M. Staw, *Psychological Dimensions of Organizational Behavior* (pp. 108-113). Englewood Cliffs, NJ: Prentice-Hall.

Pichler, S. (2012). The social context of performance appraisal and appraisal reactions, A meta analysis. *Human Resource Management, 51*(5), 709-732.

Qureshi, Z. I. (2005). Performance Challenges at Masood Textile Mills. *Asian Case Research Journal, 9*(1), 61-81.

Roch, S. G., & Shanock, L. R. (2006). Organizational Justice in an Exchange framework: Clarifying Organizational Justice Distinctions. *Journal of Management, 32*(2), 299-322.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students.* New Delhi: Pearson Education Limited.

Selvarajan, T. T., & Cloninger, P. A. (2012). Can performance appraisals motivate employees to improve performance? A Mexican study. *The International Journal of Human Resource Management, 23*(15), 3063-3084.

Silva, M. R., & Caetano, A. (2014). Organizational justice: what changes, what remains the same? *Journal of Organizational Change, 27*(1), 23-40.

Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: the roles of distributive, procedural, and interactional justice. *Journal of Applied Psychology*, 434-443.

Swanepoel, S., Botha, P. A., & Mangonyane, N. B. (2014). Politicisation of performance appraisals. *Journal of Human Resource Management, 12*(1).

Sweeney, P., & McFarlin, D. (1995). Process and Outcome. *Journal of Organizational Behavior, 18*, 83-98.

Taneja, S., Srivastava, R., & Ravichandran, N. (2015). Consequence of Performance Appraisal Justice Perception: A study of Indian Banks. *The IUP Journal of Organizational Behavior, XIV*(3), 33-46.

Tang, T., & Sarsfield-Baldwin, L. (1996). Distributive and procedural justice as related to satisfaction and committment. *SAM Advanced Management Journal, 61*(3), 25-30.

Taylor, S. M., Tracy, K. B., Renard, M. K., Harrison, J. K., & Carroll, S. J. (1995). Due process in performance appraisal: a quasi-experiment in procedural justice. *Administrative Sience Quarterly, 40*, 495-523.

Thibaut, J., & Walker, L. (1975). *Procedural Justice: A Psychological Analysis.* Hillsdale, NJ: Erlbaum.

Thurston, P. W., & Nall, L. M. (2010). Justice perceptions of performance appraisal practices. *Journal of Managerial Psychology, 25*(3), 201-228.

Usman, M., Fan, L., Haq, M. A., & Hussain, N. (2014). Outcomes of Employees' Reactions towards the Characteristics of Performance Appraisal System: A Case of a commercial Bank in Pakistan. *European Journal of Business and Management, 6*(15), 2222-28839.

Warokka, A., Gallato, C. G., & Moorthy, T. a. (2012). Organizational Justice in Performance Appraisal System and Work Performance: Evidence from an Emerging Market. *Journal of Human Resources Management Research*.

Wilkie, D. (2015, August 19). *Is the annual performance review dead?* Retrieved 2018, from https://www.shrm.org/resourcesandtools/hr-topics/employee-relations/pages/performance-reviews-are-dead.aspx