

Impact of Performance Measures on Employee Fairness Perceptions, Job Satisfaction, and Organizational Commitment: Case of Private Limited Companies

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Abstract

The aim of study was to evaluate nonfinancial measured-based performance & financial measured-based performance 's relationship (either direct or indirect) with the employees' organizational commitment, employees' perception of procedural fairness, job satisfaction in performance evaluation procedure. There are almost 133 manufacturing private ltd companies in Multan. The sample was randomly selected from the list of manufacturing private limited companies which is located in Multan. A total of 300 names of functional heads are obtained. We get back only 265 questionnaires completely filled in which 45 questionnaires we have collected in the web based form the result shows that Performance measurements have positive and significant relationship with Fairness perception, job satisfaction, and organizational commitment. And also show the partial mediation of fairness perception between performance measurement and organizational commitment and partial mediation of job satisfaction between performance measurement and organizational commitment. Sample was selected only from the manufacturing sector; generalizing these results to non-manufacturing sector should be made with caution too.

Key Words: Employee Fairness Perceptions, Job Satisfaction, Organizational Commitment Performance Measures,

Introduction

Companies use performance assessment tools to assess the work performance of their staff when the level of competition between businesses rises; these methods can be both quantitative and qualitative (To & Huang, 2022; Bae, 2021). According to researchers, businesses evaluate employees' job performance using both financial and non-financial metrics. These metrics are said to have an impact on employees' perceptions of fairness, job satisfaction, and organizational commitments.

Performance measurements (PM) can be evaluate by financial measures emphasis on quality in manufacturing (Chow and Stede 2006; Kee, & Chung, 2021) it includes assets deployment (e.g., ROI), total gross or contribution margin, unit gross or contribution margin, total manufacturing cost, unit manufacturing cost, manufacturing cost budget line-item (labor cost variances, material cost variances, indirect cost (overhead) variances, maintenance expenditures) and dollar amount spent on manufacturing process improvements. All these measures can be easily calculated by using financial data of the firm.

Now it is the era of competition, companies focus on customer loyalty, employee satisfaction and other financial areas that are not financial but they are necessary to achieved desired profit of the firm (Chatzopoulou, et al., 2021). These measures can be classified into non-financial measures and subjective measures. Non-financial measures are further categorized into internal operating measures(including production volume, labor productivity, machine productivity, material usage, setup efficiency, manufacturing cycle times, inventory levels, product defects, new product introduction & new product design efficiency), customer oriented measures(include market shares, Time to fill

customer orders, delivery performance, time to respond to customer problems, product flexibility, customer satisfaction, customer acquisition and customer retention) and employee oriented measures (include employee satisfaction, employee skills, employee empowerment, safety measures, employee training, employee turnover, absenteeism). Ghaderi, et al (2021) also defined the subjective measures includes ability to effectively acquire, new skills and knowledge, willingness to share knowledge within the organization, corporation with other departments within the organization, employee spirits/ morale in my department, management style/leadership skills and loyalty toward firm and it consider a long term perspective on the business.

Kee, & Chung (2021) give their opinion that all process of measuring performance requires the use of statistical modeling to determine results. Without considering some parameters may be estimated or measured directly after that these parameters are compared with key figures then performance of organization can be obtained. It is doubtful that manufacturing activities can be effectively controlled by assigning tasks, encoding desired behavior and executing efficiency based pointers to detention task performance (Parthasarthy & Sethi, 1992; To & Huang, 2022). Financial measures of manufacturing are less relevant or important if there is the absents of standardization in performance measurements usually in production tasks (basically in inputs and outputs standards of materials and products) (Brownell & Merchant, 1990; Hayes, 1977). The most widely adopted PM systems are the Balanced Scorecard (Kaplan and Norton 1996) and the EFQM Business Excellence Model (EFQM, 1999). They both provide a structured approach for identifying improvement opportunities and threats, and converting companies' strategy in attainable goals, targets and specific tasks.

The impact of performance measurements of employees on various factors, including job satisfaction, job commitment, intention to leave, organizational commitments, attitude, fairness perception, work values, performance, and turnover intention, has been identified by Pinion study. In their study from 1989, Shore and Martin examine how work performance and turnover intention differ from job satisfaction and organizational commitment. The study's foundation is the banking industry. The findings indicated that, unlike for professionals, organizational commitment has a stronger link with work satisfaction when turnover is intended. In a Chinese context, work values are related to several aspects of job satisfaction, which must have an impact on employees' organizational commitment (Xiao and Froese, 2008; Susanty and Miradipita, 2013; Suma and Leshia, 2013), productivity and profitability (Jyoti, 2013).

Previous scholars have researched these variables, but there is a dearth of study on how performance measures affect employees' perceptions of employee fairness, job satisfaction, and organisational commitment in the setting of Pakistan. Therefore, this study aimed to answer the following research questions: (1) Does nonfinancial measured-based performance evaluates direct relationship with the employees' organizational commitment in performance evaluation procedure? (2) Does Nonfinancial measured-based performance evaluates direct relationship with the employees' perception of procedural fairness in performance evaluation procedure. (3)

Are there any relationship between nonfinancial measures-based performance evaluations and employee organizational commitment is indirect through employees' perceptions of procedural fairness in performance evaluation procedures? (4) Are there relationship between nonfinancial measures-based performance evaluations and employee organizational commitment is indirect through employee job satisfaction? (5) Is there any direct significant relationship between nonfinancial measures in performance measure and job satisfaction? (6) Is there any direct relationship between financial measures-based performance evaluations and organizational commitment? (7) Is there any direct relationship between financial measures-based performance evaluations and Fairness perception? (8) Is there any direct relationship between financial measure-based performance evaluations and job satisfaction? (9) Is there any relationship between financial measures-based performance evaluations and employee organizational commitment is indirect through employees' perceptions of fairness in performance evaluation procedures? (10) Is there any relationship between financial measures-based

performance evaluations and employee organizational commitment is indirect through employee job satisfaction?

The choice of performance measures used to evaluate employee performance is critical because it is likely to affect employees' attitudes such as their perceptions of fairness, job satisfaction, and organizational commitment.

Literature Review

Prior research has focused on the relation between comprehensive Performance measurements and organizational performance (perceived or actual) (Chenhall, 2005; Davis & Albright, 2004; Hoque & James, 2000; Ittner, Larcker, & Randall, 2003; Said, HassabElnaby, & Wier, 2003), and on the use of multiple performance measures in performance evaluation judgements (Banker, Chang, & Pizzini, 2004; Lipe & Salterio, 2000; Schiff & Hoffman, 1996).

The financial measures of performance are considered inadequate for guiding and monitoring organizations' value creating efforts by investing in computer-aided manufacturing. For Example, Lynch & Cross (1991) suggest that financial measures of performance alone fail to justify investment decisions in state-of-the-art CAM systems dedicated for manufacturing excellence.

All these performance measurement systems are concern with financial measurements. Now a days there is big research accounting literature emphasis on performance measurements concern with employees fairness perception, employee satisfaction and organizational commitment. There is nonfinancial performance measurements are so much concern because financial measurements are so inadequate (Ittner & Larker 2001), too late because of wait for end of financial period, too aggregated, narrow, in focus, historical, backward looking and incomplete (Hoque, Mia & Allem 2001, Chenhal 1997) and financial measurement are too much short term thinking basis, there is lack of long term managerial efforts (Hemmer, 1996).

Scholars of organizational behavior have attempted to create reliable linkages between employee attitudes and organizationally relevant behaviors, though with mixed results (Vroom, 1964). Considerable attention has been directed recently toward organizational commitment as the attitudinal component of this relationship (Hrebiniak and Alutto, 1972; Buchanan, 1974; Porter et al., 1974; Porter, Crampon and Smith, 1976; Steers, 1977a; Stevens, Beyer and Trice, 1978). Some have suggested that the concept of commitment may relate reliable linkages between attitudes and behavior, because commitment is supposed to be a relatively stable employee attribute (Porter et al., 1974; Koch and Steers, 1978).

A vast amount of research in recent years has been relevant to the topic of organizational justice which refers to employee perceptions of fairness in the workplace or organizational setting (Cropanzano & Greenberg, 1997; Greenberg, 1990). Cropanzano and Greenberg (1997) have suggest that organizational justice is one of the most interesting topic in industrial-organizational psychology, human resources management and human resource management during 1990s and its interest continues today and there is no chance of decreasing interest in future.

We expect that subordinates in functions with relatively contractible outputs (e.g., in sales functions) will be less prone to attribute performance evaluation formality to superiors' inherent trustworthiness. As superiors can use easily available metrics for target setting, performance measurement and reward distribution for these functions, formality does not provide a strong signal to subordinates about superiors' true and costly intentions toward providing fair evaluations. Thus, formality will add less to fairness attributions in such functions, than in functions in which formality requires more effort on the part of the superior (cf. Sitkin & George, 2005). This situational dependency of fairness judgment is consistent with recent findings by Colquitt and Jackson (2006), who showed that fairness judgment, may indeed depend on context.

Economic theory suggests that multiple financial and non-financial measures (i.e., a strategic performance measurement system “SPMS”) be used in compensation contracting to properly direct employees’ attention and motivate behavior aligned with organizational goals. Recent trends indicate that many organizations pursue these objectives by implementing a strategic performance measurement system (SPMS) in which multiple financial, operational, and strategic measures are selected to translate and communicate the firm’s strategy to its employees (Ittner, Larcker, & Randall, 2003).

Lau and Buckland(2001) and Lau and Shohilin (2005) both investigated the trust effects of superiors’ choice of financial or non-financial performance metrics for evaluating subordinate performance, but report almost opposite findings. Whereas the former study concludes that trust is higher when superiors use financial performance measures, which are more ‘objective’ and ‘truthful’, the latter study reports that trust is higher when superiors use non-financial measures, which are ‘broader’ and ‘more complete’.

Investigating employee’s perceptions of fairness in an organizational context is important since they are a primary antecedent of important work-related outcomes, including employee satisfaction, organizational commitment, organizational citizenship behavior, and job performance, that ultimately affect organizational success (Johnson, Selenta, & Lord,2006).

As well as there several studies are present about behavioral effect of non-financial measurement and performance measure will be consider (e.g., Lau and Moser, 2008, Hall, 2008; Burney, Henle and Widener, 2009; Hartmann and Slapnicar,2009).There are very few studies on non-financial measure and job satisfaction.

Lau and Sholihin 2005, examine that financial and non-financial measure have same effect. Show the relationship between job satisfaction and performance measurement. In our studies we re-examine Lau and Sholihin model and extended by adding the variable organization commitment.

Theoretical Framework and Hypothesis Development

Performance Measures and Organizational Commitment

It is well recognized in the performance measurement literature that, after market price, income is the most comprehensive performance measure, comprising all activities of the business (Ittner & Larcker, 1998). However, a growing concern with this income-based measure is that it is incomplete and focuses on data largely historical and internal to the firm (Chenhall, 1997; Dixon *et al.*, 1990; Keegan *et al.*, 1989; Lynch & Cross, 1991; McNair & Mosconi, 1987). The incomplete nature of this performance measure has led to a conclusion that it may well be best to use a combination of measures for assessing company performance (Kaplan & Norton, 1992, 1996)

Traditionally, non-financial measures (such as product innovation, product leadership, and customer satisfaction) may be better indicator to evaluating manager’s performance as compared to financial measures (Kaplan 1983).In 1996, Kaplan and Norton documented in their studies that financial and non-financial measures are both important for performance measurement. Non-financial performance has been derived from three perspectives of Balance Scorecard, (1) Customer Perspectives (customer satisfaction, market share, customer response time and cycle time) (2) Internal business process perspective(manufacturing lead time, efficiency variance and defect rates)(3) Learning and growth perspective (number of new patents, new product launches and time to market new products). According to Hopwood (1972) and Otley (1978) Performance measurement affected the employee perceptions of fairness in evaluation process and job satisfaction as well as attitude toward organizational commitment.

The argument that has been advanced in favour of this approach is that, in today’s competitive environment, businesses cannot rely solely on the narrowly focused internal financial measures for

performance evaluations. Use of multiple performance measures, financial as well as nonfinancial, is generally most fair to both management and the owner; for management, they have the added advantage of providing enhanced protection against the consequences of uncontrollable outside events (Bruns, 1992; Bruns & McKinnon, 1993).

According to the following the hypothesis is tested in the context of Pakistan:

H1: Nonfinancial measured-based performance evaluation has direct relationship with the employees' organizational commitment in performance evaluation procedure.

Nonfinancial Performance Measures and Perceptions of Fairness

Literature about non-financial measures tells that these are broad and multidimensional (Kaplan and Norton, 1996). Thus, employee who invest their time in building good relationship with customers, development of new products and innovations and are being evaluated on these performance drivers are likely to perceive these performance evaluation measures as fair.

H2: Nonfinancial measured-based performance evaluation has direct relationship with the employees' perception of procedural fairness in performance evaluation procedure.

Perceptions of Fairness and Organizational Commitment

Commitment has been studied from so many different theoretical perspectives, however, that Hall (1977) remarked that we might better abandon the term altogether and deal instead with a set of concepts, each focused on one or another aspect of commitment. The term "commitment" has been used, for example, to describe such diverse phenomena as the willingness of social actors to give their energy and loyalty to social systems (Kanter, 1968), an awareness of the impossibility of choosing a different social identity or of rejecting a particular expectation, under force of penalty (Stebbins, 1970a), the binding of an individual to behavioral acts (Kiesler, 1971; Salancik, 1977), or an affective attachment to an organization apart from the purely instrumental worth of the relationship (Buchanan, 1974). Some commitment like concepts, such as organizational identification or organizational involvement, has also appeared in the literature (Patchen, 1970; Hall & Schneider, 1972).

Organizational procedures define the organization's capacity to treat employees fairly (McFarlin and Sweeney, 1992). If rules are fair to all employees and if they are awarded based on their performance and merit, then employee will perceive evaluation process as fair and vice versa (Tang and Sarfield-Baldwin (1996)).

Considerable research has also shown that perceptions of fairness are associated with positive organizational commitment (Folger and Konovsky, 1989; Konovsky and Cropanzano, 1991; Kim and Mauborgne, 1993).

Thus we tested in the context of Pakistan is:

H3: The relationship between nonfinancial measures-based performance evaluations and employee organizational commitment is indirect through employees' perceptions of procedural fairness in performance evaluation procedures.

Job Satisfaction and Organizational Commitment

Research also has been conducted that investigates the relationship that job performance has with job satisfaction and organizational commitment. While some literature suggests job satisfaction and job performance are related (Petty, McGee & Cavender 1984), other analyses of the job satisfaction literature have concluded that satisfaction shows a negligible relationship with job performance

(Iaffaldano & Muchinsky, 1985; Locke, 1978). Both Steers and Wiener and Vardi (1980) concluded that organizational commitment was not clearly related to job satisfaction.

According to Price and Mueller (1986), Mathieu (1988), and Mathieu and Hamel (1989) there is a positive relationship between job satisfaction and organizational commitment. Positive association between these two variables suggests affective commitment (Mathieu and Zajac (1990)). and employees emotionally attached with high affective commitment with their organization (Kitchard & Strawser, 2001).

The above discussion and that in the previous section, therefore, suggest that there is an indirect relationship between multiple nonfinancial measures-based performance evaluation and employee organizational commitment via employee job satisfaction.

H4: The relationship between nonfinancial measures-based performance evaluations and employee organizational commitment is indirect through employee job satisfaction.

Nonfinancial Measures-Based Performance Evaluation and Job Satisfaction

These and many other criticisms of financial measures are intuitively appealing and likely have considerable validity. In deciding whether to increase the use of nonfinancial measures—and, if so, which ones—it is important to recognize that nonfinancial measures are not free of limitations. For example, if a firm tracks the percentage of shipments delivered on time, there may be an incentive to sacrifice one late but important shipment to ensure the on-time delivery of many smaller shipments.³ Moreover, at least some nonfinancial performance measures may be difficult to measure accurately, efficiently, or in a timely fashion. In a study of business executives by Wm. Schiemann & Associates, the executives widely acknowledged the limitations of traditional financial measures. Nevertheless, they still favored them over nonfinancial measures because they saw them as generally being less ambiguous. As a group, the executives were less willing to bet their jobs on the quality of a variety of nonfinancial information than on the quality of financial information. This is particularly true when nonfinancial performances are subjectively assessed, due to potential evaluation biases.

Performance measures may affect the employee job satisfaction because the evaluation results will affect their employee self-esteem, reward, and promotion. Hopwood (1972) argues that the use of financial measures to evaluate managerial performance would have negative effects on employee job-related tension and job satisfaction because of the incomplete nature of financial measures. Consequently, Performance evaluation based on multiple nonfinancial measures has significant effect on employee job satisfaction (Lau & Sholihin, 2005).

Accordingly hypothesis is

H5: The direct significant relationship between nonfinancial measures in performance measure and job satisfaction

Financial Measures as Performance Criteria

Financial measures might be more useful because they may be more objective as compared with nonfinancial measures. Financial measures might be more useful because they may be more objective as compared with nonfinancial (Ross, 1994). According to Hopwood (1972), financial measures can also lead to favorable employee behaviors including satisfaction because of their objectivity and reduced uncertainty which add clarity to jobs, goals and provide clear direction for employees.

According to above discussion and previous sections some hypotheses were proposed.

- H6: The direct relationship between financial measures-based performance evaluations and organizational commitment.
- H7: The direct relationship between financial measures-based performance evaluations and Fairness perception.
- H8: The direct relationship between financial measure-based performance evaluations and job satisfaction.
- H9: The relationship between financial measures-based performance evaluations and employee organizational commitment is indirect through employees' perceptions of fairness in performance evaluation procedures.
- H10: The relationship between financial measures-based performance evaluations and employee organizational commitment is indirect through employee job satisfaction.

The conceptual Frame work of the study is:

Specifically, it proposes that the effects of the use of *nonfinancial* performance measures (1) on employees' perceptions of procedural fairness are direct, (2) on employee job satisfaction are direct and (3) on employee organizational commitment are direct (4) on organizational commitment indirect through procedural fairness (5) on organizational commitment indirect through job satisfaction. A similar model is also used to ascertain if similar or different effects are found for *financial* measures.

Material and Methods

Data Collection

The study was quantitative in nature. The questionnaire has been adopted by the study of Tan, Lau (2012) show in appendix 1. The questionnaire was based on 5-point (strongly agree=5, strongly disagree=1) likert scale, consisted of elements of constructs and demographic information of respondents such as gender, age, qualification, designation and experience.

Data for this study is collected using a questionnaire survey in Multan. There are almost 133 manufacturing private ltd companies in Multan see appendix table2. The sample will randomly select from the list of manufacturing private limited companies which is located in Multan. A total of 300 names of functional heads are obtained. We get back only 265 questionnaires completely filled in which 45 questionnaires we have collected in the web based form.

Results and Discussion

Descriptive Statistics

Table 1 illustrates the demographics of respondents. Among 265 respondents, male respondents were dominant 240 (90.56%) on female 25 (9.4%). There were five age groups of respondents i.e. five respondents (1.8%) were of less than 20 years group. Eighty seven (32.9%) respondents were of 21-30 year group. A great proportion of 132 (49.8%) respondents lies from 31-40 year segment and 32 (11.9%) respondents were of between 41-50 years and 10 (3.7%) respondents were of above 50 years. There were 164 (61.7%) respondents who held a master. The college was 87 (32.9%), and under junior high school / Junior high school 15 (5.5 %) represent the total sample. One hundred seventy six (66.4%) respondents are managers; Eighty nine (33.58%) respondents are employees. Eighty nine (33.58%) respondents have experienced are less than once year; Sixty two (23.7%) respondents have experienced 2-3 years ; Sixty eight (25.6%) respondents have experience 4-5 years, Sixty five (28.3%) respondents have experienced more than 5 years. The sample comprised of young people. Most of respondents have

Master degree. Most of respondents are managers. Most of respondents have working experienced more than 5 times.

Table 1
Demographic of Respondent

Measure	Item	Frequency	Percentage %	Cumulative
Gender	Male	240	90.56 %	90.56
	Female	25	9.4%	100
Age	Under 20	5	1.8	1.8
	21-30	87	32.9	34.7
	31-40	132	49.8	84.5
	41-50	32	11.9	96.3
	Above 50	10	3.7	100
Education	Under junior high school/junior high school	15	5.5	5.5
	University/College	87	32.9	38.4
	Master	164	61.7	100
Designation	Employees	89	33.58	33.58
	Managers	176	66.4	100
Experience	Less than one year	59	22.4	22.4
	2-3 years	62	23.7	46.1
	4-5 years	68	25.6	71.7
	More than 5 years	75	28.3	100

Measurement Instruments

Financial and Nonfinancial Measures

The instrument developed by Lau and Moser (2008) was used to measure nonfinancial measures and financial measures. This instrument asks each respondent to indicate on a 5-point scale, how much importance his or her superior attached to each of (i) the 4 financial items and (ii) the 15 nonfinancial items when evaluating the respondent's individual performance.

A factor analysis was undertaken for all the 19 items. The factor analysis results indicate that the four financial items load satisfactorily on a single factor. The results also indicate that the minimum factor loading is 0.722, the eigen value is 1.581 and the variance explained is 21.634%. The Cronbach alpha coefficient for the four items is 0.832. The 9 nonfinancial items load satisfactorily into their expected perspectives other 6 nonfinancial items are exempted due to high cross loading. The factor loadings are presented in Table 1. The Cronbach alpha coefficient for the 9 nonfinancial items is .827. The results also indicate that the minimum factor loading is 0.522, the eigen value is 4.952 and the variance explained is 28.615%. Descriptive statistics for the variables investigated in this study are presented in Table 2.

Table 2
Factor loading of financial measures and non-financial measures variables

Item	Non-financial	Financial
My ability to meet my budget		.855
My ability to avoid unfavorable budget variance		.829
My ability to meet or better budgeted cost or sales		.722
My ability to achieve budgeted cost reductions or budgeted sales growth.		.743

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Number of employees trained in my Department	.656	
Employee turnover rate in my department	.577	
Number of innovations developed by my department	.755	
Adoption of new technology by my department	.703	
Quality of manufacturing output	.547	
Defect rates	.694	
Setup times for manufacturing processes	.520	
Number of new customers acquired	.522	
Customer satisfaction rate	.618	
Eigen value	4.952	1.581
% variance explained	28.615	21.634

KMO=.875

For financial measure: No. of items=4, Cronbach alpha= .832

For non-financial measure: No of item =9, Cronbach alpha= .827

Fairness in Performance Evaluation Procedures

The four-item instrument developed by McFarlin and Sweeney (1992) was employed to measure subordinates' perceptions of fairness in performance evaluation procedures. The instrument asks respondents to rate the fairness of the procedures used by their superiors to evaluate their performance, communicate their performance feedback, determine their promotion, and pay increases. An overall measure of procedural fairness is obtained by summing the scores of the four items. The factor analysis results indicate the one item has very high cross loading other 3 items shows the uni-dimensional results, items load satisfactorily on a single factor (Eigen value = 1.589; total variance explained =52.969%). A Cronbach alpha of .555 obtained for this instrument in our study indicates the high internal consistency of the three items. Descriptive statistics for the variables investigated in this study are presented in Table 3.

Table 3
Factor loading of Fairness in evaluation procedure

Item	Factor loading
How fair are the procedures used to evaluate employee performance?	.765
How fair are the procedures used to determine promotion?	.730
How fair are the procedures used to determine pay increases?	.686
Eigen value	1.589
% of variance	52.969

KMO=.603 No. of item=3, Cronbach alpha= .555

Job Satisfaction

Job satisfaction was measured by a two-item instrument developed by Dewar and Werbel (1979). This instrument has been used by prior accounting studies (Mia, 1993, Abernethy and Stoelwinder, 1995). The results of a factor analysis show satisfactorily construct validity. The two items load satisfactorily on a single factor, eigen value is 1.455 and the variance explained is 72.739%. The Cronbach alpha is 0.625 which indicates satisfactory internal reliability of the items. Descriptive statistics for the variables investigated in this study are presented in Table 4.

Table 4
Factor loading of Job satisfaction

Item	Factor loading
All in all, I am satisfied with my job	.853
In general, I like working here.	.853
Eigen value	1.455
% of variance	72.739

KMO=.500 No. of item=2, Cronbach alpha= .625

Organizational Commitment

Employees 'commitment to their organizations was measured using the nine-item short-form version of Organizational Commitment Questionnaire (OCQ) developed by Mowday, Steers and Porter (1979). This instrument is regarded as the most widely used measure of affective commitment. Both Mowday, et al. (1979) and Angle and Perry (1981) suggest that OCQ has good psychometric properties. Consistent with prior studies (e.g., Nouri, 1994; Nouri and Parker, 1998), a Cronbach alpha of .772 obtained in our study indicates the high internal consistency of the nine items in the instrument. A factor analysis was undertaken for the nine items. All items load satisfactorily on a single factor but only one item have very low factor loading (Eigenvalue = 3.245; variance explained = 36.054%). Descriptive statistics for the variables investigated in this study are presented in Table 5.

Table 5
Factor Loading of Organizational Commitment

Item	Factor Loading
I am willing to put in a great deal of effort beyond that is normally expected in order to help this organization to be successful	.690
I talk up this organization to my friends as a great organization to work for.	.597
I would accept almost any type of job assignment in order to keep working for this organization	.600
I find that my values and this organization's values are very similar	.593
I am proud to tell others that I am part of this organization	.665
This organization really inspires the very best in me in the way of job performance	.614
I really care about the fate of this organization	.523
For me, this is the best of all organizations for which to work	.693
Eigen Value	3.245
% of variance	36.054

KMO= .750, Cronbach Alpha=.772, No of items= 8

Correlation Analysis

Our conceptual framework shows the relationships between Performance measurements financial based), performance measurements (non-financial based), fairness perception and organizational commitment. To test this relationship correlation analysis is performed. Table 6 shows the mean values, standard deviations, and correlation matrix for the key variables of this study. The matrix shows that there is significant positive correlation between Performance measurements financial based and non-financial based ($r = .506$, $p < 0.01$), between financial based performance measure and fairness perception ($r = .192$, $p < 0.01$), and between job satisfaction and financial based performance evaluation ($r = .398$, $p < 0.01$). The correlation matrix also shows the significant positive correlation between performance measurements, job satisfaction, fairness perception and organizational

commitments .Therefore, this strong correlation among the variables confirms our all hypotheses initially then we have performed regression analysis.

**Table 6
Correlation**

	Mean	S.D	PM1	PM2	FP	JS	OC
PM1	3.9311	.74348	1				
PM2	3.8750	.57621	.506*	1			
FP	3.4302	.67813	.192**	.339**	1		
JS	3.7962	.74746	.398**	.760**	.318**	1	
OC	3.8175	.49963	.510**	.571**	.461**	.462**	1

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

PM1=Performance measurement for financial measurement

PM2=Performance measurement for non-financial measurement

FP=Fairness perception

JS=Job satisfaction

OC=Organizational Commitment

Regression

Regression Analysis was carried out in order to test the extent of impact of independent variables on dependent variable and the full or partial mediating effect of psychological climate. According to Baron & Kenny (1986), following conditions should be met if we want to test the mediating effect of a certain variable: First, Independent and mediating variable must be significantly related. Second, there must be a significant relationship between independent variable and dependent variable. Third, when the mediating variable is introduced the impact on dependent variable by independent variable will significantly decrease. We have used the same method of regression analysis that was suggested by Baron& Kenny (1986) to perform mediation effect. Results of Regression Analysis are shown in Table 7. As indicated in the first step, Adjusted R² is .257 which shows that variation in Organization commitment is explained up to 26% through variation in independent variable (performance measurement). Standard regression coefficient between Organization commitment and Performance measurement is significant ($\beta = .510$, $p < .001$) with significant T value (9.607, $p < .001$) and F value (92.285, $p < .001$). Standard regression coefficient between Fairness perception and performance measurement is also significant ($\beta = .192$, $p < .001$) with significant T and F values i.e. 3.168 ($p < .001$) and 10.035($p < .001$) respectively. To test the mediating effect, in first step, Adjusted R² is .510 which shows that variation in Organization commitment is explained up to 51% through variation in independent variable (performance measurement, fairness perception). Standard regression coefficient between organization commitment and independent variables (performance measurement, fairness perception) is significant ($\beta = .510$, $p < .001$) with significant T value (9.607, $p < .001$) and F value (92.285, $p < .001$). In the third step,FP is added into the overall model of PM1 and OC. The results indicate that standard regression coefficient in case of OC has decreased in magnitude but still is significant ($\beta = .378$, $p < .001$); however, in case of PM1, it has not only decreased in magnitude but also become significant ($\beta = .437$, $p = .078$). Hence, Fairness perception partially mediates the relationship between PM1and OC but partially mediates the relationship between PM1 and FP. So, H 1, H2 and H3 are well supported.

**Table 7
Regression**

Step	Dependent variable	Independent variable	Standardized regression coefficient	F	T	Sig	Adjusted R square	Result
Financial based Performance evaluation.								
	OC	PM1	.510	92.285	9.607	.000	.257	H1 supported
	FP	PM1	.192	10.035	3.168	.002	.033	H2 supported
	JS	PM1	.312	28.197	5.310	.000	.0194	H5 supported

1	OC	PM1, FP	.510	92.285	9.607	.000	.257	
2			.437	86.264	8.946	.000	.392	
			.378		7.724	.000		Partial mediation
1	OC	PM1, JS	.509	91.825	9.583	.000	.257	
2			.403	74.925	7.762	.000	.360	
			.341		6.575	.000		Partial mediation
Non-financial based performance measurements								
	OC	PM2	.571	127.009	11.270	.000	.324	H6 supported
	FP	PM2	.339	34.122	5.841	.000	.112	H7 supported
	JS	PM2	.410	52.741	7.262	.000	.165	H8 supported
1	OC	PM2,FP	.571	127.009	11.270	.000	.324	Partial mediation
2			.469	89.735	9.253	.000	.403	
			.302		5.972			
1	OC	PM2,JS	.571	126.350	11.241	.000	.324	
2			.454	84.724	8.573	.000	.390	
			.287		5.419			Partial mediation

Note: OC=Organizational commitment, FP= Fairness perception, JS= Job Satisfaction, PM1=Performance measurement (financial based), PM2= Performance measurement (non-financial based)

Conclusion

The objective of this study is to ascertain if the adoption of nonfinancial measures for performance evaluation is associated with procedural fairness, job satisfaction, and organizational commitment and if these relationships are direct or indirect. The second purpose is to ascertain if there is any significant difference in the results arising from the use of nonfinancial measures as well as financial measures for performance evaluations. Our result shows that Performance measurements have positive and significant relationship with Fairness perception, job satisfaction, and organizational commitment. And also show the partial mediation of fairness perception between performance measurement and organizational commitment and partial mediation of job satisfaction between performance measurement and organizational commitment. Our results are supported by empirical studies (see Shore and Martin (2013), Susanty and Miradipta (2013), Xiao and Froese (2008), Suma and Lesha (2013), Jyoti (2013), Aryani (2009)).H1 of this study is non-financial based performance measure has positive and significant relationship with organizational commitment in the performance evaluation procedure. According to this study H1 is approved and H2 has approved that there is a positive and significant relationship between non-financial based performance measure and fairness of perception in performance evaluation procedure and these are supported by the study of Hopwood (1972) and Otley (1978) in which proposed that Performance measurement affected the employee perceptions of fairness in evaluation process and job satisfaction as well as attitude toward organizational commitment.H5 of this study is nonfinancial measure based performance measure has a positive and significant relationship with Job satisfaction. But the result of Hopwood (1972) study argues that the use of financial measures to evaluate managerial performance would have negative effects on employee job-related tension and job satisfaction because of the incomplete nature of financial measure so, this result is against of H5.H5 also supported by Performance evaluation based on multiple nonfinancial measures has significant effect on employee job satisfaction (e.g., Lau and Sholihin, 2005).H3 of this study is mediating effect of Fairness perception between non-financial based performance measurements and organizational commitment and H4 of this study is mediating effect of job satisfaction between performance measurement and organizational commitment. Results of these hypothesis showed partial mediation. Considerable research has also shown that perceptions of fairness are associated with positive organizational commitment (Folger and Konovsky, 1989; Konovsky and Cropanzano, 1991; Kim and Mauborgne, 1993). And researches about job satisfaction Steers and Wiener and Vardi (1980) concluded that organizational commitment was not clearly related to job

satisfaction. And according to Price and Mueller (1986), Mathieu (1988), and Mathieu and Hamel (1989) there is a positive relationship between job satisfaction and organizational commitment. Same all hypotheses are related with financial based performance measurements H6, H7, H8 are also supported in this research. These are financial based performance measurement has a positive and significant relationship with organizational commitment. Financial based performance measurements has a positive and significant relationship with Fairness of perception and financial based performance measurement has a positive and significant relationship between job satisfaction and the result of H9 and H10 show the partial mediation of fairness perception between performance measurement and organizational commitment and also show the partial mediation of Job satisfaction between performance measurement and organizational commitment. Financial measures might be more useful because they may be more objective as compared with nonfinancial (Ross, 1994).

Practical/Managerial Implications

The implications that this study provides for managers are the following: if company want to expand their employees' job satisfaction, and organizational commitments and fairness perception then they must use performance evaluation procedure on the basis of financial as well as non-financial based performance measurements. Managers must keep in mind that employees' job satisfaction, fairness perception and organizational commitments is very important for running the company at profitable level and for creating customer loyalty.

Theoretical Implications/Contributions toward Literature

This study is focus on determinants of non-financial measures based performance measurements linked with the organizational commitments. There are very limited researches about relation between the organizational commitment and performance measurements.

Further Research Implications/Limitations of Study

The non-financial measure based performance measurement in performance evaluation procedure is a developing area and it needs a comprehensive research. Sample of the research is concerned with only Multan based manufacturing private limited companies. So the result is only for specific for Pakistan area future researcher can target on neglected areas for the more generalization of the results. In addition, as our sample was selected only from the manufacturing sector, generalizing these results to non-manufacturing sector should be made with caution too.

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