CAPITAL UNIVERSITY OF SCIENCE AND TECHNOLOGY, ISLAMABAD



Organizational Justice A new Theoretical Perspective: A Study from Private Higher Educational Institutions of Pakistan

by

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Organizational Justice A New Theoretical Perspective: A Study from Private Higher Educational Institutions of Pakistan

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It is certified that following publication(s) has been made out of the research work that has been carried out for this thesis:-

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(Ahmed Ullah Shah)

Abstract

This study was based on human resource management (HRM) and performance linkages, and reviewed existing available HRM-Performance perspectives to identify an alternate perspective for HRM. The most suitable option in literature was organizational justice (OJ) and its major dimensions. The objective of this study was to identify the missing theories of OJ, which if included would further substantiate OJ and its major dimensions.

Census method was used to collect data from faculty members and their respective head of department of private higher educational institutions operated in Pakistan. A 5-point Likert scale was used which provided data from both types of respondents. A total of 966 questionnaires were distributed amongst the faculty members and their respective head of department. Out of 966 questionnaires, 588 successful questionnaires were returned with a response rate of 60 percent. The reliability of measures were evaluated through Cronbach's alphas; while, the validity were evaluated through expert opinion along with confirmatory factor analysis. One sample t-test and simultaneous equation models (three path mediated model) were used for testing of our eight hypotheses.

The results reflect that the well identified missing theories in existing OJ scales include: external equity, equality, need, due process model, interaction with colleagues, interaction with top management, and upward communication. Further, majority of experts opinion on missing theories (our proposed additions) have appeared on positive side, that is, they were more inclined toward agreed side than disagreed. Moreover, the first five econometric models (4.1-4.5) used for testing of hypotheses, one each for each of the OJ dimension have been significant on the basis of F-value. Additionally, majority of our proposed additions and existing sub-dimensions turn out to be significant, in the first five econometric models. Similarly, the last four econometric models (4.6-4.9) used to test the mediating mechanism of overall justice and employees' job satisfaction have also been found significant on the basis of F-value. The mediated effect of overall justice, and employees' job satisfaction were also found statistically significant. Finally, the last model (4.13) used to test the moderating affect of organizational size was statistically significant; however, only two variables, that is, overall justice and rater procedural justice provide significant results.

On the basis of results, it is concluded that there exist considerable theoretical gaps and misconceptions in existing OJ scales and literature. Further, presently missing theories (external equity, equality, downward communication, etc.), should be added to the existing dimensions of OJ to complete the concept. Moreover, OJ dimensions as measured through their sub-dimensions contributes towards overall OJ, which in turn lead to employees' job satisfaction, which further lead to employees behavior.

Keywords: Organizational justice, Distributive justice, Process procedural justice, Rater procedural justice, Interpersonal justice, Informational justice, Sequential mediation model.

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Abbreviations

HITCH Holling Holling Holling Holling	AMOT	Ability	Motivation	and	Opportunity	Theory
--	------	---------	------------	-----	-------------	--------

- **ATT** Employee's Attitudes
- **DJ** Distributive Justice
- **INPJ** Interpersonal Justice
- **INFJ** Informational Justice
- **JS** Job Satisfaction
- JI Job Involvement
- **OCB** Organizational Citizenship Behavior
- **OCBI** Organizational Citizenship Behavior towards Individual
- **OCBO** Organizational Citizenship Behavior towards Organisation
- **OC** Organizational Commitment
- OJ Organizational Justice
- PJ Procedural Justice
- **PPJ** Process Procedural Justice
- **RPJ** Rater Procedural Justice
- **RBV** Resource-Based View
- **SET** Social Exchange Theory

Symbols

$b_1 b_2 b_3$	Indirect Effect
β_0	a constant
$\beta_1\beta_2\beta_3$	Independent Variables
С	Total Effect
ć	Direct Effect
e	Error Term

Chapter 1

Introduction

1.1 Research Theme

Human resource management (HRM) and performance have remained the special areas of research interest to the management sciences researchers during the last two decades (Boxall & Purcell, 2008; Paauwe, 2009; Jiang, Lepak, Jiahu & Baer, 2012; Martin & Llusar, 2018; Guest, 2017). In spite of the fact that these researchers have succeeded in developing huge body of knowledge and information in this research area, they have not yet reach consensus on their research outcomes. Researchers believe that HRM positively affect performance but they have faced hardship in finding clear mechanism as to how HRM and performance are linked in empirical studies. The research on HRM-Performance linkages is dominated by a number of challenges and issues. Researchers have identified theoretical and methodological challenges while reviewing relationship between HRM and performance (Boselie, Brewster & Paauwe, 2009; Guest, 2011; Boselie, Dietz & Boon, 2005; Wall & Wood, 2005). These challenges suggest that, there are gaps, and black boxes in existing HRM-Performance relationship (Purcell & Kinnie, 2007; Wright & Gardner, 2003; Paauwe, Wright & Guest, 2013; Mansour, Gara & Gaha, 2013; Ostroff & Bowen, 2016).

An in depth review of literature in the area of HRM-Performance, made in chapter 2, reveals that there is a long list of HRM practices, and there has been little agreement amongst experts on common HRM practices. The experts and practitioners are concerned as to which of the HRM practices are relatively more important and warrant priority in implementation relative to the other practices. In spite of heavy research work carried out on informal categorizing of HRM practices and proper bundling and development of high performance work systems (HPWS), consensus could not be arrived at some common structure of HPWS. It may be said that HPWS vary in impact from situation to situation, industry to industry and organizations. And there is strong theoretical support for develop-ing HPWSs, and there exists great need to do so, even if it can be possible on situational basis, for situation-to- situation and industry-to-industry.

On theoretical basis, one can think about several HRM-Performance perspectives, and some such perspectives provide good theoretical foundations to take insights from, for building a strong and practical base for the HRM-Performance linkages. Such promising perspectives especially include resource-based view (RBV), ability motivation and opportunity (AMO) theory, contingency theory, fully-integrated model, social exchange theory, and balanced HR perspective (discussed in detail in chapter 2). Similarly, a review of 104 papers reflect that although strategic contingency theory, RBV and AMO are the prominent theories, but in majority cases there is no clear relationship of HRM with performance (Boselie, Dietz, Boon. 2005). In this regard, a large numbers of research scholars are of the view that HRM practices have significant and positive impact on performance (Boselie, Dietz, & Boon, 2005; Paauwae & Richardson, 1997; MacDuffie, 1995; Pundziene et al., 2007; Buoziute-Rafanaviciene et al., 2009); however, some researchers doubt this relationship (Wright & Gardner, 2003; Wall & Wood, 2005). Hence, there still exist deficiency in literature pertaining to alternative theory (Boselie, Dietz, & Boon, 2005; Paauwe, Wright & Guest, 2012; & Savaneviciene & Stankeviciute, 2010).

There seems a need to consider which of the aspects of some of the stated practicallymore-important perspectives would need to be combined, and how, so that the academically researched and identified gaps in the existing research be taken care. There exist theoretical gaps and misconceptions in the existing research, and there is strong need of framing research basing it on relevant theories (Paauwe, Wright & Guest, 2013; Mansour, Gara & Gaha, 2013). Researchers specially suggest incorporation of mediators and moderators to fill the gaps. Additionally, there exist methodological errors, and there is strong need to avoid repeating such errors (Wright and Gardner, 2003).

Our review also reflects that in the literature the most suitable option for the HRM-Performance perspectives is organizational justice (OJ), and its existing dimensions. Organizational justice has great scope and it could be one of the most realistic perspectives in future HRM-Performance research (Paauwae & Boselie, 2005; Paauwae & Boselie, 2007, & Paauwae, 2009; Boselie, Paauwae & Farndale, 2013). Moreover, organizational justice needs further exploration, which could forward the field of HRM in general and HRM-Performance relationship in particular (Paauwe, 2009).

Our review further indicates that some of the relevant theories are not included in organizational justice, and its four existing dimensions. Wherever, OJ focuses on well established theories, the inclusion of less prevalent theories are equally important. Whereas, Greenberg (1993) have already recognized the importance of missing theories and called it a state of "intellectual adolescence", some researchers (Greenberg, 2007; Ambrose et al, 2015; Rodell Colquitt & Baer, 2017) still believe there are many theoretical gaps available for conceptual development.

In spite of the fact that the concept of OJ has evolved over time in theory and practice, and its contemporary questionnaires of different dimensions have validated to a large level, there is still a need to identify the missing theories of OJ and to include them in existing well established questionnaire, for giving them a relatively more 'fair' and 'just' touch while keeping preserved their technical nature. The review of literature and existing OJ questionnaires help us to identify and to add some relevant theories in different dimensions of OJ, to substantiate it to yield the desired results, such as, employees' attitudes (JS) and behavior (OCB).

1.2 Problem Statement

The concept of organizational justice, which has already been developed well over time, in both theory and practice, to the extent that it provides a relatively better and greater sense of 'fairness' and 'justice' to the employees, has the potential to be further substantiated, with the incorporation of the missing theories; this proposition provides the base for our proposed research, for this study.

This proposed research thus required analyzing and evaluating those presently missing theories (external equity, equality, (Rodell, Colquitt & Baer, 2017)), which should be added to the existing dimensions of organizational justice, to make it a comprehensive system of service, capable of yielding desired outcomes in terms of employees' attitudes (job satisfaction) and employees' performance (in terms of organizational citizenship behavior), as envisages under various relevant theories including, resource based view, AMO theory, balance HR perspective, fully integrated model and social exchange theory.

Section 2.6 (of chapter 2) has elaborated well what contents have already been covered in various dimensions of OJ, as well as what additions need to be incorporated, to make OJ capable enough to yield the stated outcomes. This research required consulting the basic stakeholders, including, faculty members, and head of department. Organizational employees/faculty members were involved to get their responses regarding existing and our proposed additions in OJ and its outcomes, such as, job satisfaction and OCB. Head of department were involved to evaluate the faculty member's performance in terms of organizational citizenship behavior. In this context eight different hypotheses were tested to evaluate OJ-employees' JS relationship.

1.3 Research Questions

The study specifically pursued the following questions:

Research Question 1

What are the present missing theories of organizational justice, which if included would further improve organizational justice and its four major dimensions?

Research Question 2

Would the inclusion of such missing theories in organizational justice justify theoretically, from the expert's/researchers point of view?

Research Question 3

Would the inclusion of such missing theories contribute to yield desired outcomes in terms of employees' job satisfaction, and organizational citizenship behavior?

1.4 Objectives of the Study

This study aimed to achieve the following objectives:

Research Objective 1

To identify the present missing theories of organizational justice, which if included would further improve organizational justice and its four major dimensions?

Research Objective 2

To evaluate whether the inclusion of such missing theories in organizational justice would justify theoretically.

Research Objective 3

To evaluate whether the inclusion of such missing theories in organizational justice would contribute to yield desired outcomes in terms of employees' job satisfaction, and organizational citizenship behavior.

1.5 Scope of the Study

The scope of this research was to critically review and analyze the literature on HRM-Performance relationship and to identify an alternate perspective for the stated relationship. In this regard, organizational justice was identified as the most suitable perspective to be used in place of existing available perspectives. The scope of the present study also includes identification of present missing theories (theoretical gaps) of OJ which if included would improve the concept of OJ.

The scope of this thesis also includes private higher educational institutions operated in Pakistan. Moreover, missing theories were evaluated through eminent researchers/experts, faculty members/employees and head of department/dean. Hence, the evaluations of both existing and missing theories of OJ and their further contribution towards positive/desired outcomes were within the scope of the present study.

1.6 Research Justification

A review of literature on the HRM-Performance perspective helps us to justify that there was a need of a study which may use organizational justice as an alternative option for HRM-Performance perspectives. Organizational justice has developed over time in both theory and practice, and the measuring scales of its various dimensions have intensively substantiated to a great extent; however, it needs further exploration. Hence, there was a dire need to identify the missing theories of organizational justice, which if added would further improve the concept of organizational justice and its major dimensions. Moreover, it was also required to greatly adapt the existing scales to include the missing theories of organizational justice and its major dimensions, for giving them a relatively more 'fair' and 'just' touch while keeping preserved their technical nature. The well identified missing theories in existing organizational justice scale help us to add and further substantiate the concept to yield the desired outcomes in terms of employees' attitudes (job satisfaction) and employees performance (in terms of organizational citizenship behavior).

1.7 Significance of the Study

This study is important from many dimensions. The most important one is that, it helped in identification of the concept of organizational justice as an alternative theory for existing HRM-Performance perspectives. Similarly, this study also helped in identification of the present missing theories of organizational justice, which if added to their respective OJ dimensions would complete the concept of OJ. The results of this study provide a picture of prevailing conditions within organizations and further suggested the areas where organizations need to maintain good relationship with employees. Since, organizational justice lead to employees attitude and as result employees in turn work with their full potential to improve their performance.

1.8 Supporting Theories

Colquitt et al., (2012) have referred three theoretical perspectives which help us to better understand justice-performance relationship. First and foremost, social exchange theory states that employees trust is important to improve and develop the social exchange relationships (e.g., employees and supervisor relationships where they cooperate and exchange favors over an indefinite period of time) as it minimizes the doubt about employees/supervisor reciprocation while creating a sense of obligation (Blau, 1964; Cropanzano, Anthony, Daniells, and Hall, 2017; Valizade et al, 2016). The norm of reciprocity in social exchange theory addresses the key principle that people should help those who help them and in turn, those whom you have helped have an obligation to help you. Hence, in employeer and employees relationship, their exist expectation of exchanges. The fairness of exchanges, an employee perception of fair treatment received from the organization, and his behavior towards such perceptions are a foundation of OJ (Chou, Chou, Jiang and Klein, 2013; Colquitt et al., 2013).

In a similar pattern, trust is also important in fairness heuristic theory. Trust refers to employee's positive expectations regarding actions, words, motives, intentions, and decisions of another in risk facing situation (McAllister, 1995; Lewicki & Bunker, 1995). Trust guides employees in decision about whether to positively cooperate with management or supervisor when their exist doubt about possible exploitations (Lind, 2001; van den Bos, Lind, & Wilke, 2001). The theme of fairness heuristic theory is that employees are concerned with the fairness because it helps them to deal with unforeseen situation whether or not they can trust their supervisor or management. This theory helps us to better understand why employees behave in a certain way within the organization. Moreover, this theory suggests that overall OJ mediates between OJ dimensions and employee's attitude and behavior (Marzucco et al., 2014).

Uncertainty management theory developed on the basis of fairness heuristic theory (Lind & van den Bos, 2002; van den Bos & Lind, 2002). This theory states that the large prevalence of justice can minimize the effects of any form of uncertainty, which may include employees concerns about trust and reciprocation. This theory expands the use of fairness from social uncertainties domain to more generalized conditions of any source of uncertainty. Therefore, the sense that management is fair may produce a reciprocation of obligations, and it may further introduce a sense of comfort that solve uncertainty in a much more general sense.

1.9 Abbreviation & Definitions of Key Terms

1.9.1 Organizational Justice (OJ)

The concept of OJ refers to perceived adherence to procedures, and rules that indicate appropriateness in decision making context (Colquitt & Rodell, 2015). The theory regarding justice developed from two to three and then to four dimensions (Colquitt & Shaw, 2005). The researchers in the field of OJ agree that it has four major types, such as, distributive justice, procedural justice, informational justice and interpersonal justice.

1.9.2 Distributive Justices (DJ)

DJ refers to the employee's perceptions regarding the appropriateness of decision outcomes, which include: equality, equity, and need (Adam, 1965; Colquitt & Zipay, 2015; Colquitt, 2012). People compare their contributions and inducements to that of other employees. Employee's assessment that inducements are unfair and unjust leads them to perceive treatment as unfair (Adam, 1965).

1.9.3 Procedural Justice (PJ)

PJ is the employee's perceptions concerning the fairness of the decision-making processes. Employee's assessment that managers and corporation adopt unfair practices and procedures to reach the decisions leads them to perceive treatment as unfair (Leventhal, 1980; Thibault & Walker, 1975; Greenberg & Folger, 1983).

1.9.4 Interpersonal Justice (INPJ)

Interpersonal justice (INPJ) is the level to which employees within organization are treated with politeness, respect and dignity by supervisors (Colquitt, 2001). Employee's assessment that they are not treated with politeness and respect will lead to perceptions of unfair treatment (Bies & Moag, 1986; Colquitt, 2001; Greenberg, 1993).

1.9.5 Informational Justice (INFJ)

Informational justice (INFJ) refers to information convey to people are adequate, true and on time. Employees assessment that information is untrue or not on the time and do not provide sufficient explanations leads to perceptions of unfair treatment (Bies & Moag, 1986; Colquitt, 2001; Greenberg, 1993).

1.9.6 Employees Attitude (ATT)

Employees attitudes are the feeling or emotional segment, which provide strong bases to employee's behavior (Robbins & Judge, 2013). Moreover, the research in organizational behavior has focused on three major attitudes, which include, job involvement, job satisfaction, and organizational commitment (Robbins & Judge, 2013).

1.9.7 Organizational Citizenship Behavior (OCB) Performance

Organization citizenship behaviors are the extra role behaviors, which represent employees' willingness to go above and beyond the duty which they have been assigned (Bateman and Organ 1983). These behaviors are additional contributions by employees, which may be related to organizational benefit or it may be related to specific individual benefits.

1.10 Layout of the Study

The two major challenges-theoretical and methodological - were addressed in five chapters. To start with, chapter two provide comprehensive review of literature and theoretical framework regarding OJ and its outcome like job satisfaction and organization citizenship behavior. This chapter also covered different perspectives of HRM-Performance relationship. The last section of this chapter covered theoretical frame work and relevant hypotheses were formulated. Chapter three provide a detailed research methodology, which include; population, data collection tools, and research approaches etc. Two types of respondents were selected to collect data regarding OJ and its outcomes. Respondents include: head of department/dean and employees/faculty members. Two different scales were distributed to collect data from the above mentioned respondents. The data collection instruments for the above mentioned respondents and its application methodology

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was also discussed in this chapter. Chapter four covers descriptive and inferential statistics followed by appropriate interpretations. This chapter also covered testing and substantiation of hypotheses. Chapter five presents a summary & conclusions of this study. This chapter also covered limitations of the study and implications & suggestions for future areas of research.

Chapter 2

Review of Literature

With an overall objective to finding out what a good working environment for organizational employees is, and what the outcomes of such an environment would be, an effort is being made to represent a review and evaluation of the relevant available literature on the topic, especially in the earlier sections of this chapter; the later sections would then use the evaluations of the earlier sections for developing theoretical framework for the intended study.

2.1 Management and Human Resource Management (HRM)

Most of the textbooks define the discipline of 'Management' as the decision-making process that involves four major functions of planning, organizing, leading, and controlling (Robbins & Coulter, 2012; Robbins & Judge, 2013). Planning is the process of setting objectives and determining what should be done to accomplish them; organizing is establishing working relationships among employees to achieve goals; leading is exerting influence on people to inspire, motivate and direct their activities to achieve goals; and controlling is developing standards & objectives, comparing existing performance with benchmarks (Schermerhorn, 2004; Quinn, 2010). The process of management can thus be summarized, as depicted in the following figure.

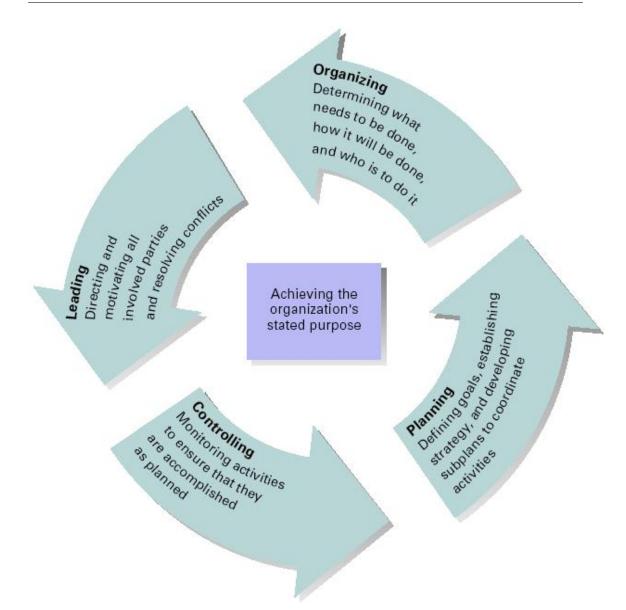


FIGURE 2.1: Adopted From: Robbins & Coulter (2012).

Dessler (2011) agrees with the above definition of 'the management process' but adds another function-staffing-to the definition, saying that "the management functions include: planning, staffing, organizing, leading, and controlling"; his lecture's slide is reproduced, as follows.

Dessler (2011) further adds "The human resource" aspects of management include: HR planning and recruitment; job analyses; selecting job candidates; wages and salaries; performance appraisal; communicating; training & developing employees; equal opportunity, incentives and benefits; affirmative action, training and developing managers; employee health and safety; handling grievances and

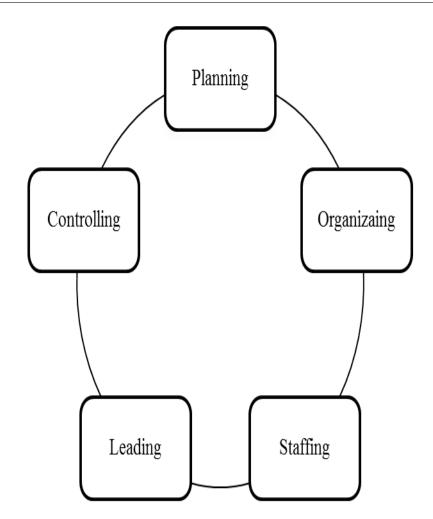


FIGURE 2.2: Adopted From: Dessler (2011).

labor relations; building employee commitment, and affirmative action. In his another work, Dessler (2012) adds "The staffing and managing of personnel-that is, human resource management (HRM)-deals with to acquire, train, appraise, and compensate employees, as well as attend labor relations affairs, health and safety, and fairness concerns of the labour"; he graphically represents the human relation management process as:

The process of human resource management (HRM) has evolved over time; however, the today's modern HRM seems to have its roots in the great works of Maslow, Argyris and Herzberg of 1960s when these management thinkers advocated placing greater emphasis on issues such as motivation, commitment, learning and development of human resources. Consequently, the traditional personnel management remained under serious criticism both from academic and commercial circles during the next three decades, for not being sophisticated enough to

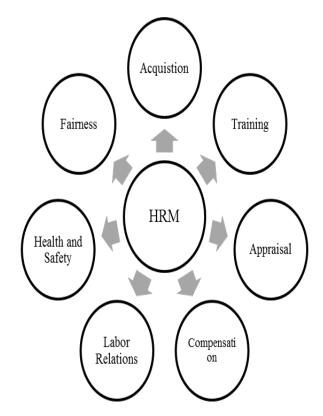


FIGURE 2.3: Adopted From: Dessler (2011).

cope with the requirements of new ages (Senyucel, 2009). Especially, since the mid-eighties, HRM has gained acceptance in both academic and commercial circles as a multidisciplinary function, drawing theories and ideas from the fields such as management, psychology, sociology and economics (Senyucel, 2009).

2.2 Human Resource Management (HRM) Practices

2.2.1 Dessler's List of (HRM) Practices

Thanks to the continuous efforts of authors and researchers that human resource management (HRM) process developed over time, and expanded and extended in the form of HRM practices, procedures and policies; the present count of such HRM practices, procedures and policies has crossed a dozen in number. Jiang, Lepak, Jiahu & Baer (2012) list consists of 14 HRM practices. Similarly, Pfeffer (1994) has earlier provided a list of 16 HRM practices and later on reduced it to thirteen HRM practices (Pfeffer, Hatano and Santalainen, 1995); while, (Boselie, Dietz & Boon), after reviewing a number of sources, have presented his own list of twenty-six HRM practices. However, Patterson et al., (2010) list consist of only 10 HRM practices. Dessler's (2011, 2012) list includes 13 HRM practices, namely: (i) conducting job analyses, planning labor needs and recruiting job candidates; (ii) selecting job candidates; (iii) orienting, training, and developing employees; (iv) managing wages and salaries; (v) providing incentives and benefits; (vi) appraising performance; (vii) communicating; (viii) training and developing managers; (ix) building employee commitment; (x) equal opportunity; (xi) affirmative action; (xii) employee health and safety; and (xiii) labor relations.

2.2.2 Pfeffer's List of (HRM) Practices

Pfeffer (1994) has earlier provided a list of 16 HRM practices, including (i) employment security (ii) selectivity in recruiting (iii) high wages (iv) emphasis on training and skill development (v) sharing information (vi) symbolic egalitarianism (vii) wage compression across levels and departments (viii) incentive compensation such as gain sharing, pay for performance, and pay for skill (ix) employee ownership (x) teams and job redesign (xi) cross training and cross utilization (xii) participation and empowerment (xiii) promotion from within (xiv) long term perspective (xv) measurement to assess progress (xvi) overarching vision or rationale, and later on reduced it to thirteen (Pfeffer, Hatano and Santalainen, 1995); these thirteen are: (i) employment security, (ii) selectivity in recruiting (iii) high wages (iv) incentive pay (v) employee ownership (vi) information sharing (vii)) participation and empowerment (viii) self-managed team (ix) training and skill development (x) cross utilization and cross training (xi) symbolic egalitarianism (xii) wage compression and (xiii) promotion from within.

2.2.3 Naqvi List of (HRM) Practices

Naqvi (2012), after reviewing a number of sources, has presented his own list of fourteen HRM practices, namely: (i) employment security, (ii) selectivity in recruiting (iii) high wages (iv) incentive pay based on performance appraisal (v) employee ownership (vi) information sharing (vii) participation and empowerment (viii) self-managed team (ix) training and skill development (x) reduce status distinctions and barriers (xi) job design (xii) promotion from within (xiii) measurement of HR practices (xiv) quality of work/ life.

2.2.4 Boselie, Dietz and Boon List of (HRM) Practices

The sources of literature on HRM practices reviewed and compared reflect a total number of sixteen HRM practices, with fewer things in common than the differences (Annexure table 2.1). Boselie, Dietz & Boon (2005) reviewed 104 journals' articles published between 1994 and 2003 and found twenty-six HRM practices, in total (Annexure table 2.2). According to these researchers, the top four HRM practices were training and development, contingent pay and reward schemes, performance management (including appraisal), and careful recruitment and selection. However, the commonalities among the aforementioned list of HRM practices include: recruitment & selection, compensation and rewards, training & development, performance management, sharing information, and employee involvement.

2.3 Efforts on Combining HRM Practices in to Bundles

Sufficient literature is available wherein experts have tried to arrive at selecting a few relatively more important and relevant HRM practices, through categorizing the HRM practices, building the 'Bundles' of HRM practices and conceiving 'High Performance Work Systems' (HPWS). This section is devoted to review and evaluate the literature regarding such efforts.

2.3.1 Broader HRM Practices Categories

Some researchers have categorized HRM practices in to some broad groups. Huselid (1995) has divided HRM practices in to two groups, namely: (1) the practices aiming at improving employee skills; and (2) the practices aiming at enhancing motivation of employees. According to him, the first category include selection/training activities which relate to turnover and financial performance; while, motivational activities include appraisal of performance and compensating activities which relate to of productivity measures. The researcher suggests using of management practices which involve employee skills, information, motivation and latitude and result in to a work force that enjoys competitive advantage.

Guest, Conway, & Dewe (2004) have used the sequential tree analysis to search for 'bundles' of HR practices and found out that the HR practices could initially be divided in to more than two broad categories, namely: competence of the workforce, motivation to perform, opportunity to participate/perform, and commitment. Moreover, they suggested that team working, job designing, training/development, appraisal of performance, involvement of employees, and equal opportunity and information provision should be given more importance. As already referred, Boselie, Dietz & Boon (2005) reviewed 104 journals' articles published between 1994 and 2003 and found training/development, contingent pay/reward schemes, managing performance, and recruitment and selection as four most commonly referred human resource management practices.

2.3.2 More Formal Bundling of HRM Practices

A number of researchers have tried to combine inter-related and internally consistent HRM practices in to bundles, using one of the two approaches, additive and multiplicative approaches. According to Osterman (1994), the two approaches differ on the basis of the effects that the bundle as a whole is as equal as the parts or is greater than the sum of its parts. According to the researcher, the additive approach provide combination of HRM practices has silent features of normally distributed variable scores, which does not exist in multiplicative approach. A multiplicative approach means that if any single HRM practice is missing will lead HRM bundle score equal to zero. In case of additive approach, HRM practices are interrelated in a bundle and the mere absence of any single HRM practice will not eliminate the effect of all other practices, but will weaken the net effect of the bundle (Osterman, 1994).

Similarly, Delery (1998) has proposed four possible solutions for combination HRM practices, which are, additive, substitutable, positive synergistic, and negative synergistic. According to Delery, HRM practices may be combined through additive properties, that is, the combination of HRM practices produces an added and non-overlapping benefit. Second, HRM practices may be substitutable, that is, one HRM practice may replace other HRM practices. So, in such cases, adopting both HRM practices will adds nothing but a large additional expense. Third, there are positive synergistic effects, wherein the combination produces greater outcomes than the sum of the parts. Finally, there are negative synergistic effects, wherein unsuitable combination of HRM practices produces negative consequences than the mere absence of a practice.

2.3.3 High Performance Work System (HPWS)

Ichniovski et al. (1993) were amongst the earlier researchers who found that 'bundles' of HRM interventions have greater effect on performance than individual practices (Ichniovski et al., 1993; Huselid, 1995; Alfes et al., 2013; Kehoe and Wright, 2013; Knies and Leisink, 2014). Such bundles of HRM practices have been referred to as high involvement, high commitment, high performance work system, high performance work practices, and high performance management practices. However, the above concepts refers to same philosophy, but are used interchangeably (Beltrán-Martín et al., 2008; Chow, 2005; DeKok & Hartog, 2006; Drummond & Stone, 2007; Bae et al., 2011; Connolly & McGing, 2007; Bryson, Forth, & Kirby, 2005; Wiesner, McDonald, & Banham, 2007; Evans & Davis, 2005; Cafferkey et al, 2018). Datta, Guthrie, & Wright (2005) define HPWS practices as a bundle of HRM practices which have been developed enhancing the skills, commitment, and productivity of the employee to make employee have sustainable competitive advantage for their organization. Subramony (2006) defines that the term includes activities to develop skill full and motivated force by using sound HR principles, namely, selection of employees, rewarding of performance, training/development, and involvement of employees. Golan (2005), states that HPWS intends developing employee relations, performance and profitability by enhancing quality communication and consultation. Tsai (2006) considers job flexibility, team working and employee participation as the major HPWS practices.

2.3.4 Generalization Problem in HPWS

However, after critically reviewing 104 journals' research articles published between 1994 and 2003, Boselie, Dietz, & Boon (2005) have found 58 research articles wherein an organization's HRM could be defined as discrete and multiple practices which have no explicit or discernible linkage between them and 46 research articles wherein a more strategically minded system approach was used which viewed HRM as a bundle of integrated and coherent mutually reinforcing practices. On basis of their findings, the researchers categorize high performance work system in to two major categories, the 'practices' approach category and 'system' approach category.

Some researchers are of the view that performance of the HPWS is situational, and such a system can better work in the manufacturing sector compared to the services. Macduffie (1995) used data for the year 1989-90 relating to 62 assembly plants of automobiles. He investigated in to two hypotheses, namely: (i) the HR practices which are innovative affect performance as inter-related HR bundle/system; and (ii) such bundles contribute towards effectiveness when used in compliance with manufacturing policies of a flexible production system.

Appelbaum, Bailey, Berg, & Kalleberg, (2000), on the basis of their visits of 44 plants and surveys of more than 4,000 employees, wrote the book which explains

why high-performance work systems pay off in manufacturing case. They concludes that organizations are very successful when supervisors share knowledge with their workers, delegate powers to them, and when subordinates assume responsibility and discretion. They mentioned that workers of self-directed teams were found to quickly coordinate the work process. In case of committees, who were responsible to improve quality were found to effectively communicate with people outside their own work groups and were able to solve problems. The survey further indicated that jobs in participatory work systems provide more opportunity of creativity and more challenging tasks and assignments. This study further reported that people working in apparel had higher hourly earnings; people working in steel had both higher hourly earnings and higher job satisfaction.

Lepak & Snell (2002) have studied the features of both human capital and explained that the uniqueness of human capital differentiates on the basis of four modes of employment which includes knowledge-based, job-based employment, contract work, and partnership. They further add that each of these four modes of employment associate with specific type of HR configuration referred to as commitment-based, productivity-based, compliance-based, and collaborative, respectively). Likewise, more recently Elorza, Harris, Aritzeta, Balluerka (2015) found that the effect of HPWS on employee citizenship behavior differ on the basis of groups and organizations.

Raziq (2011) compared manufacturing with service-based SMEs and found significant differences in the adoption of the kinds of HPWS; he indicated that servicebased SMEs adopt formal HPWS, relative to manufacturing SMEs. Appelbaum, Gittell, & Leana (2011) stated that HRM practices that lead to employee's motivation can benefit all stakeholders; however, the same set of HRM practices could not be applied in all type of organizations, rather they must be customized to particular industries. This indicate that attaining optimal performance requires an integrated approach to capital investment, investment in new technologies, and execution of HRM practices that are customized to particular sector and technology.

2.4 HRM-Performance Linkages: Theoretical Perspectives

2.4.1 Theoretical Perspectives

Looking in to the question 'Are human resource practices really associated with performance?', Carroll, Rondeau, & Gilson (2007) have referred about the four theoretical perspectives which, according to these authors, have attracted most of researchers attention on how HRM is link with performance; these perspectives include: universalistic perspective, contingency perspective, configurational perspective, and resource-based view perspective. Some other authors have also talked about three more theoretical perspectives, namely: AMO theory, fully integrated model and social exchange theory (Boselie, Dietz, & Boon, 2005; Katou, 2012).

2.4.2 Universalistic Perspectives

According to Carroll, Rondeau, & Gilson (2007), the best practices or universalistic perspective suggests that 'there exist a list of HRM practices that could be applied in all situations and organizations and have impact on performance in any situation'. However, according to Carroll, Rondeau, & Gilson (2007), 'there is no clear list of high performance best practices'. Moreover, very weak empirical supports exist for this perspective (Carroll, Rondeau, & Gilson 2007).

2.4.3 Contingency Model

The contingency model is the opposite of universal model, in which there is no specific set of HRM practices, rather HRM practices changes according to organization policies. HR practices will only be effective if they are consistent with organizational culture, strategies and other context specific factors, such as, firm size, industry, and operational policies. According to this perspective, there are three types of "fit" regarding organization's HRM policies and specific context. The first fit is horizontal fit that requires HRM policies and practices should be consistent within an organization. The second fit is vertical fit that requires HRM policies and practices should be consistent with the internal factors, such as, organizational culture, its structure and strategy etc. The third fit is external fit that requires HRM policies and practices should be in compliance with specific aspects of the external factors, such as political, economical and technological etc. However, Wright and Snell (1998) do not agree; they describe fit as a temporary approach, and mentioned that organizations should be flexible pertaining to their HRM policies and practice; as environmental changes organization should also change its HRM policies and practices and adjust itself according to the environment. So, there exists a fit-flexibility paradox, in this regard (Carroll, Rondeau, & Gilson, 2007).

2.4.4 Configurational Perspectives

The configurational perspective is a more holistic approach that concerns as to how the cluster of various factors relates with an outcome, rather than how individual factor relate to their outcomes. This perspective suggests that bundles of HRM practices can enhance organizational performance rather than individual HRM practices. Hence, adopting and implementing a right mix of HRM practices have the potential in boosting performance; while, on other hand a "deadly combinations" of HRM practices could also negatively affect performance. In addition, as reviewed earlier and as Guest, Conway and Dewe (2004) mentioned, there is little consensus about which practices should be combined to constitute effective bundles.

2.4.5 Resource Based View (RBV)

The fourth perspective, resource-based view (RBV), suggests that organizations gain competitive advantage when they have unique resources that are rare, valuable, and difficult for competitors to imitate, and then utilize those resources in such a way as to optimize the overall organization profit. Lado and Wilson (1994)

argue that, the HRM practices system can lead to competitive advantage by building competencies, such as, knowledge, skills and abilities (KSAs) which are specific to organization, its history and culture, and produce implicit organizational knowledge. However, there are many implications of this perspective. First, firms should concentrate on their workforce, including employee knowledge, skills and abilities (KSAs), that is expected, in turn, to contribute positively to firm performance at the aggregate level. It is suggested that organizations should consistently focus on their workforce as the nature of this pool, and its requirements are constantly changing. Second, organizations need to develop such systems which have ability to use the full potential of their workforce. This implies that employees are motivated and committed and their discretionary behaviors are directed towards those tasks which are beneficial to the organization. Finally, this perspective suggests that an organizational HRM practices would be a feasible of the organization's culture. So, organization culture which refers to accepted norms, beliefs and values, functions both as an antecedent to the HRM system and as a mediator to organizational performance (Bowen and Ostroff, 2004).

However, there are some very strong arguments against the stated RBV perspectives. It is said that, in situation when both the demand for labour and supply of labour are homogenous, there exist very little difference in employee's contribution towards the organization. Provided with such situation, the investment in human resources could not create value. It is further argued that human resources are commodity and not rare, and the organizational culture, norms and team production are imitable - can be replicated in a vast number of cases. Wright, McMahan and McWilliams (1994) mention that, as people are highly mobile, a competing organization does not need to copy the people of the focal organization, it can simply hire them away.

2.4.6 Fully Integrated Perspectives

Katou & Budhwar (2008) and Katou (2009) have talked about the fully integrated perspective of HRM-employees' performance linkages, and argued that business strategy is not formulated in isolation; rather HRM strategy and business strategy are developed 'simultaneously', and not separately. Fully integrated model thus suggests 'simultaneity', which means that business and HRM strategies should be formulated as a whole, in determining business performance.

2.4.7 AMO Theory

According to AMO theory, three components (employees' Ability, Motivation and Opportunity to participate) lead organization towards improved organizational performance (P) in manufacturing industries (Appelbaum, Bailey, Berg, & Kalleberg, 2000).

$$P = f (A, M, O)$$

In simple words, organizational performance will be enhanced when HR practices lead to ability, motivation, and provide an opportunity to employees to contribute to the effectiveness.

2.4.8 Social Exchange Theory (SET)

The Social exchange theory (SET), originally introduced in the 1960s, primarily focuses on the behavior of individuals when they interact with one another. In a recent review of the theory, Cropanzano & Mitchell (2005) state that social exchange theory is one of the most theoretical perspective in HRM, in spite of some of its unresolved theoretical ambiguities. Referring to the social exchange relationships, the authors add that certain workplace antecedents lead to interpersonal connections, which are evolved when employers "take care of employees", suggesting that the social exchange relationship acts as a mediator, which produce effective work behavior and positive employee attitudes. The authors add that workers form distinguishable social exchange relationships, with their immediate supervisor, coworkers, employing organizations, customers, and suppliers. These distinct relationships have implications for behavior, specifically because individuals return the benefits they receive. In this regard, the authors have quoted instances from previous researches carried out, under five different models of relational constructs, namely:

Model 1: Perceived organizational support (POS) and leader-member exchange

Model 2: Support to commitment

Model 3: Adding team support to organizational support

Model 4: Adding supervisory support

Model 5: Trust

Like other perspectives, social exchange theory also has certain limitations. For example, Zafirovski (2005) have criticized this theory at two levels of analysis. First level is related to the social life as exchange or human behavior treatment; second level is related to the 'exchange' to economic transaction or reduction of social interaction. Similarly, though the norm of reciprocity in social exchange theory (which addresses the key principle that people should help those who help them and in turn, those whom you have helped have an obligation to help you) could be hypothesized as being universal, there still exists a variance of felt obligation of repayment, which is contingent upon the recipient's valuation of the benefits received, such that the more highly valued these are then the stronger the perceived obligation to reciprocate (Gouldner, 1960). Though the theory has been widely adopted in organizational research to explain employment relationships in the workplace (Shapiro & Shore, 2007; Shapiro & Conway, 2004), however, some researchers contend that the organization cannot be a party in employee and employer relationship, but the party is the agent himself who represent the organization (Shapiro & Shore, 2007). The dyadic exchange relationship between employee and employer has also been criticized for failing to distinguish the role of different organizational agents in the process (Shapiro & Shore, 2007).

2.4.9 Blending Insight from Big Three Theories

Some researchers suggest that a mixture of two or more than two perspectives be used to complete HRM-Performance linkages. Boselie, Dietz, & Boon, (2005), found that researchers are largely combining two to three perspectives to take insights from them, such popular theories are, AMO theory, resource based view, and contingency theory to make overall theory of HRM. These theories seems to provide complementary frameworks: AMO's attention to employees ability, motivations and opportunities to participate acts as a theory for HRM; RBV provides a starting point, a belief in the value of employees' input into performance, while contingency theory provides a lens on the possible link between these two theories. However, as Boselie, Dietz, & Boon, (2005) have opined, "researchers generally have not reached to an agreement regarding the operationalizations of these theories, so these theories remain only a starting point". Similarly, some more recent studies and contemporary researchers (Katou, 2008; Katou & Budhwar, 2010) are of the same views of combining different perspectives to take insights for giving practical form to the HRM-performance relationship. However, Paauwe and Boselie's (2005) 'Balanced HR perspective' needs a separate detailed discussion, in the following sub-section.

2.4.10 Balanced Perspectives

Paauwe and Boselie's (2005) work entitles 'HRM and Performance: What's Next?', which they have built on the basis of earlier contributions of several researchers (Boxall & Purcell, 2003; Boxall, 2003; Paauwe, 2004; Deephouse, 1999; Dyer & Shafer, 1999; Sharp, Irani, & Desai, 1999; Baron & Kreps, 1999). Their model advocates for achievement of critical HRM goals, and critical non HRM goals. Critical HRM goals in their strategic balance theory include; (1) increased labour productivity, (2) organizational flexibility, and (3) social legitimacy; while, critical non-HRM goals include, (1) sales, and (2) market share. According to their model, there is the need of a balance between cost-effectiveness HR goals, the organizational flexibility urgency, and the social legitimacy dimensions, that is, a balanced HR perspective (Deephouse, 1999). They referred to Deephouse (1999) study, who conducted a longitudinal study in commercial banks and found support for strategic balance theory, which states that organization which keeps balance

between a legitimate focus and a market focus has higher performance than organization, which heavily focus on the legitimate dimension or which heavily focus on the market dimension.

Paauwe and Boselie's (2005) argue that, the changing role of the market place necessitate that strategic HRM systems should include both flexibility (Boxall and Purcell, 2003) and agility (Dyer and Shafer, 1999). However, the initial two HRM goals, that is, cost effectiveness and organizational flexibility mainly covers employer's perspective and do not fully considered the employee's and the societal dimension. So, (Boxall and Purcell, 2003) covered employees' perspectives by incorporating the third critical HRM goal, that is, social legitimacy and fairness.

Paauwe and Boselie's (2005) mentioned that, the first two HRM goals can only be achieved, when employees are fairly treated. They further suggested that, HRM system should consist of both economic and relational rationality (Deephouse, 1999). Fairness and legitimacy refers to building good relationship with all stakeholders (Paauwe, 2004). Organizations who fail to achieve the objective of fairness and legitimacy will lead their people to perceive injustice by those involved (inside and outside stakeholders) and affect both employee behavior and social relations within an organization (Paauwe and Boselie, 2005; Ababneh et al., 2014; Stoughton et al., 2015). Moreover, achieving the criteria of fairness and legitimacy in true spirit means that HR managers need to treat their people (stakeholders) with dignity and respect. This also means that the message communicated to people through HR practices by management needs to be clear, consistent, and uniformly applied.

It is, however, important to note that researchers by and large have used shareholders approach to measure the performance; while, the stakeholder approach (employee perspectives) has been generally ignored. Stakeholder approach focuses on other constituencies which could be affected through HRM practices. Beer and colleagues (1984) were among the earlier researchers who used this approach involving key stakeholders to study organizational effectiveness. The key stakeholders include; customer, employee, shareholder, trade union, supplier, and works councils. They argue that the execution of HR practices would be useful if they fulfill the particular interests of the all stakeholders.

In this connection, literature revealed that the research on the HRM-Performance relationship have generally used shareholders approach to measure the performance, which includes economic and financial indicators such as market value, return on assets, sales growth, sales achievement, firm profitability, and return on investment (Boselie, et al., 2005; Wright & Boswell, 2002). This type of research is called strategic oriented research, with its key focus on the changes in the financial indicators using a list of HRM practices (Wright & Boswell, 2002).

Boselie, Dietz, & Boon, (2005) after reviewing (104) papers proposed stakeholders approach (Freeman, 1985), for "balanced scorecard" (Kaplan and Norton, 1992), which is considered important for multi-level research design for HRM (Jiang, Takeuchi, and Lepak, 2013), which require different stakeholders rating their respective indicators of performance. So, beside management indicators, measures for employees attitudes and behavior, such as, satisfaction (Den Hartog et al., 2013), & commitment (Elorza et al., 2011); measures of customers satisfaction (Aryee et al., 2012), and - where present - measures of trade unions interest would provide more insight to the studies. Some researchers argue that, multiple measures from multiple stakeholders produced "seemingly paradoxical and incompatible conclusions" (Truss, 2001). However, Boselie, Dietz, & Boon (2005) mentioned that, we need to address rather than ignore these contradictions, as they are critical for the understanding of this complex relationship.

Similarly, Paauwae & Boselie (2005) have also suggested stakeholder approach for HRM-Performance relationship, which also means multi-dimensional meaning of performance and more holistic and balance approach, which will be a unique composition for each organization, that is difficult to imitate by competitors; hence lead to sustainable competitive advantage. Keeping in mind the advantages associated with stakeholder approach, the third critical goal of HRM (Boxall and Purcell, 2003) that is, fairness and organizational justice (employee's perspective) would be further discussed in section (2.6).

2.5 HRM-Performance Paradigm: Black-Box and Gaps

2.5.1 Definition of Black Box

The discussion - whether various HRM practices contribute (what, how and why), which ones contribute and which ones not, and which ones contribute better than others - started getting attention of the researchers during the mid-1990s. Becker & Gerhart (1996) were amongst the earlier researchers who pinpointed some of the 'black boxes' in the HRM practices-employer performance linkage. According to Boselie, Dietz & Boon (2005), in between HRM practices (input) and performance (output) - are possibly moderated by intervening variables - lies what HRM does to improve performance, how, and why; this mediating mechanism is usually known as "black box", as little is known, what happens in this mediating mechanism, and the contents of key variables some-what unclear. Boselie, Dietz & Boon's (2005) analysis of the 104 articles confirms that the mediating mechanisms between input (HRM practices) and output (performance), as well as, the contents of key variables are largely disregarded in research. According to Savaneviciene and Stankeviciute (2010), a good number of researchers have found the existence of black boxes; they referred to the situations as black boxes where the mechanisms between HRM and performance linkages remain unclear.

Review of literature help us to categorize the major problems of HRM-Performance link into two broad groups, (1) theoretical and (2) methodological problems. Theoretical problems have further been divided into (a) theoretical imperfections and (b) possible element/content of black box; while, methodological problems have further been divided into four sections (a) measurement error (b) nonrandom measurement error/single respondent bias (c) specification error (d) simultaneity/causality. In addition to these common methodological problems shared by many researchers, Gerhart (2007) have extended this list to the problems of statistical significance testing, mediation, and moderation.

2.5.2 Black Box

The problem of "black box" presented in section (2.5.1) obtain acceptance after researchers raised some basic questions like, what is HRM, what is performance, and how these two are linked? Guest (1997) was amongst the earlier researchers, who mentioned that there are considerable numbers of papers supporting HRM performance relationship but, in most cases it is less clear how and why this relationship exists. This study also mentioned that to provide a true picture of this relationship we need to improve our theoretical and conceptual frameworks in three major areas. These are the nature of HRM, the nature of organizational performance; and the linkage between these two. Regarding HRM practices, this study proposed that we should build on something like expectancy theory to provide a sensible rationale for these practices. Concerning performance, he proposed that, we need outcomes that reflect the concept of the balanced score card. Similarly, relating to the link between HRM and performance, he suggested longitudinal research and case study approach to have more in depth understanding of this relationship.

In this context, (Boselie, Dietz, Boon, 2005; Paauwe, Wright & Guest, 2012; & Paauwae & Boselie, 2005) further reinforces the above mentioned problems and reported that there exist a gap in literature regarding alternative theories on the concept of HRM, the concept of performance and how they are linked. Boselie, Dietz, Boon (2005) mentioned that although strategic contingency theory, resource based view and AMO are prominent perspectives used in (104) papers, but in majority cases there is no clear relationship of HRM with performance. These perspectives provide a starting point but cannot claim to fully answer to Guest's (1997) questions. Similarly, Paauwae & Boselie (2005) in addition to above mentioned challenges have further demonstrated that results are generally weak and not clear.

Patterson et al., (2010) reported that cross-sectional studies within the health and non-health sector shows association between HRM-Performance link, but they cannot claim causation. Further, this systematic review mentioned that, there is little evidence how, and in what situations, HRM practices lead to organizational performance. They also suggested that 'big science', change and intervention, and multilevel research will enable us to explore HRM-performance relationship.

Savaneviciene & Stankeviciute (2010) have confirmed these problems and recognized the gaps in literature in the field of HRM-performance link. They mentioned that there is still a need of theory regarding HRM, theory regarding performance and a theory pertaining how they are linked. Moreover, the linking mechanisms that mediate between HRM and performance relationship should be considered as a central issue in HRM literature. Likewise, Boselie, Brewester, & Paauwe (2009), in their study "managing the dualities of HRM" mentioned that almost 30 years have passed; there still exist dualities, paradoxes, and ambiguities in HRM performance relationship.

2.5.3 Methodological Errors

Research on HRM-Performance relationship has been dominated by a number of dualities, and balance issues (Boselie, Brewester, & Paauwe, 2009). Besides theoretical and conceptual problems, reflected in above two sections, a number of researchers have also reported methodological issues. For example, (Becker & Gerhart; 1996; & Gerhart, 2007) have summarized the following measurement errors (1) random measurement errors, (2) method bias and (3) specification error.

2.5.3.1 Measurements Errors

Becker & Gerhart (1996), have mentioned that measurement error can come from a number of sources, the most common of which are (1) items, (2) time, and (3) raters (Wright et al., 2000; Wright et al., 2001; & Gerhart, 2007). These studies mentioned that the measurement error due to item can be assesses through internal consistency; the measurement error due to time are generally assessed through test-retest correlations; while, the measurement error due to raters can be measure through computing inter rater reliability indices. These studies also mentioned that researchers in the field of HRM - performance relationship have largely focused on assessing measurement error due to items and there is lack of research to assess the amount of measurement error due to time and have largely ignored error due to raters.

Wright et al., (2000) have suggested that, these problems can be best addressed by collecting data from multiple respondents. They have also recommended other methodological changes that will help researchers to draw more confident conclusions regarding how HR practices impact firm performance. The prime method of minimizing this error is through increasing the number of raters rather than from adding items. Second method to increase reliability would be to prepare better scales of HRM interventions. Another method to improve reliability may be through adopting different rating scales.

Similarly, Becker & Gerhart (1996) recommended that researchers should concentrate on several raters, while collecting data from each organization and business unit, particularly where subjectivity or judgment is required. Concerning this issue, Gerhart (2007) suggested that it can be best addressed by estimating a generalizability coefficient (Cronbach et al. 1972).

2.5.3.2 Single Respondent Bias

Becker & Gerhart (1996) have also talked about single respondent/method bias, which usually occur if data is collected from single person on both HRM practices and organizational performance, and organizational performance is determined subjectively (Wright et al., 2000; Wright et al., 2001; Gerhart; 2007; & Patterson et al., 2010). Such type of error generally occurs irrespective of the organizational size and it makes interpretations more difficult. The rater might be biased upward or downward in reporting both HRM and performance. To solve this problem, Becker & Gerhart (1996) suggested that data regarding HR and performance might be collected from different respondents. Wright et al., (2001) have suggested, collecting data from multiple raters. Gerhart (2007) on the basis of literature mentioned that the multi-method matrix (Campbell and Fiske 1959), and a marker variable (Lindell and Whitney 2001), can and should be use to overcome the problems associated with common methods variance. The former approach applies structural equation modeling (e.g. Alwin 1974); while, the later approach, as per theory should have no association with other concepts in the study. Longitudinal data and multiple raters could also be applied to overcome individual-specific, time-invariant omitted variables of this sort. Boselie, Dietz, & Boon, (2005) mentioned that researchers have consistently suggested multiple respondents for data collection to overcome this problem. They refer to Gerhart and colleagues (2000a), who have suggested at least four raters per unit of analysis for HRM indicators and at least three for performance indicators. They also mentioned that, scholars generally suggest to select respondents according to research design, so the data regarding HRM effectiveness might be collected from senior Executives (Wright et al., 2001), while, the data regarding individual HRM practices might be collected from employees, the intended recipients of HRM practices (Paul and Anantharaman, 2003).

2.5.3.3 Specification Errors

Gerhart (2007) reported that, specification errors occur when a model misses variables that are relevant with the HRM and also influences organizational performance (Becker & Gerhart, 1996; Boselie, Dietz, & Boon, 2005). Pertaining to the performance, missing variables may include: capital structure, organizational size, type of industry, corporate or business level strategy, and the management in other areas, such as, operations and finance. This study also reported that when researchers omit relevant independent variable, it may produce biased results.

Becker & Gerhart (1996) mentioned that such types of problems might be solved through incorporation of control variables but if in principle these omitted variables are measurable, they are not always accessible. This study also suggested that, if missing variables changes across organizations, but are somewhat fixed over time, longitudinal data might be collected to produce accurate results. This study further suggests selecting homogenous sample to minimize the chances of specification error.

2.5.3.4 Gerhart's List of Methodological Error

As already referred above, Gerhart (2007) agree with above mentioned measurement, non-measurement error (single respondent bias), and specification error, and further extended this list to, simultaneity, statistical testing, mediation and moderation. Similarly, other researchers have also reported the issue of simultaneity; they mentioned that the relationship of HRM and performance does not run in one direction (Boselie, Dietz, & Boon, 2005; & Gerhart, 2007; Patterson et al., 2010). The causation can be recursive and non-recursive. Gerhart, (2007) suggested that simultaneous equation models (SEM) provide a more realistic picture of this relationship; however, its assumptions may be very difficult to satisfy. He also suggested that two stage least square (2SLS) and instrumental variables, and LISREL can be used to deal with simultaneity. This study also identified that longitudinal data and time precedence as necessary condition as already noted by Cook and Campbell (1979). Gerhart (2007), on the basis of literature (Wright, Gardner, Moynihan & Allen, 2005) mentioned that this requirement is not fulfilled; rather condition is very pathetic; where HRM is usually measured after performance.

While, Boselie, Dietz, & Boon, (2005) after reviewing (104) papers mentioned that HRM-Performance studies are mostly cross-sectional and limited to correlations, hence causality could not be properly inferred. They proposed longitudinal research designs for such problems. They also proposed stakeholders approach (Freeman, 1985), for "balanced scorecard" (Kaplan and Norton, 1992), which is considered important for multi-level research design for HRM (Jiang, Takeuchi, and Lepak, 2013), which require different stakeholders rating their respective indicators of organizational performance. So, beside management indicators, measures for employees attitudes and behavior, such as, satisfaction (Den Hartog et al., 2013), & commitment (Elorza et al., 2011); measures of customers satisfaction (Aryee et al., 2012), and - where present - measures of trade unions interest would provide more insight to the studies. Some researchers argue that, multiple measures from multiple stakeholders produced "seemingly paradoxical and incompatible conclusions" (Truss, 2001). However, Boselie, Dietz, & Boon (2005) mentioned that, we need to address rather than ignore these contradictions, as they are critical for the understanding of this complex relationship. Patterson et al., (2010) have also talked about causality and simultaneity and mentioned that many researchers have used cross sectional and co relational designs thus limiting causal inference. Therefore, causation could not be verified on the basis of co-relational designs. Moreover, longitudinal data, and quasi experimental research design would be required to test causation among HRM-practices and organizational performance.

Besides the aforementioned common challenges, Gerhart (2007) have also talked about statistical significance testing, mediation, and moderation. In statistical significance testing, usually un-standardized regression coefficient is used to measure the results, but in the field of HRM, having base in psychology has traditionally focused on statistical testing. He mentioned that, statistical significance tests merely suggest whether empirical results are precise, which is considered, but it is merely an index. He further suggested that to precisely illustrate the importance of the HRM-Performance relationship, researchers should present an effect size estimate; typically an un standardized regression coefficient.

Concerning mediation, Gerhart (2007), have referred to Baron and Kenny (1986) method of mediation. He mentioned, they have largely focused on statistical significance testing, but researchers are very cautious and have reported that mediation is nothing phenomenon and test of statistical significance is not sufficient for measuring mediation. He suggested that the focus should be on percentage change in the regression coefficient when the mediator is added to the equation.

The literature presented so far reflect that there is a long list of HRM practices, but researchers have no agreement on common HRM practices. The researchers are greatly concerned as to which of the HRM practices are relatively more important and warrant priority in implementation relative to the other practices (section 2.2). Similarly, a review of existing perspectives help us to conclude that theoretically, there exist many HRM-Performance perspectives, and some perspectives did provide good theoretical foundations for the HRM-Performance linkages (section 2.4). However, there exist significant theoretical gaps and misconceptions in the existing perspectives, and there is strong need of alternate perspective (section 2.5). While, in literature the most suitable alternate option was organizational justice (section 2.4.10), which need a detailed discussion in the following section.

2.6 Organizational Justice (OJ)

2.6.1 Introduction to Organizational Justice

The literature presented on the eight HRM-Performance perspectives (section 2.4) and gaps and black-boxes (section 2.5) would be considered incomplete unless it does not include a discussion on 'organizational justice' and its prospects as an alternative option to be used for measurement of HRM-Performance relationship. Recently, researchers like (Paauwae, 2004; Paauwae & Boselie, 2005; Paauwae & Boselie, 2007; & Boselie, Paauwae & Farndale, 2013) argue that, due to different organizational setting we need additional theory for HRM, and further proposed organizational justice as a better option. Paauwae & Boselie (2005), in their paper "HRM and performance: what's next" suggested 'legitimacy & organizational justice' for HRM-Performance research, which according to them need further exploration. They further mentioned that to date, little attention has been paid to legitimacy & organizational justice and flexibility, and these two might turn out to be more realistic perspectives in future HR research.

While in their other work, "HRM and Societal Embeddedness", (Paauwae & Boselie, 2007) further reinforced that, due to different institutional setting (for example, across countries), we need a theory for HRM. They proposed three alternatives, such as, "new institutionalism", "the theoretical notions of organizational justice", and "organizational legitimacy". Moreover, organizational justice (value-laden or ethical approach) needs further exploration, which could forward the field of HRM in general and HRM-Performance research in particular (Paauwe, 2009). This section therefore first introduces the concept of organizational justice and then critically reviews its prospects whether or not it would provide a better alternative, if used at place of HRM-Performance perspectives.

2.6.2 Organizational Justice: Definition and Dimensions

The concept of justice has its roots in the earlier work of eminent philosophers such as, Aristotle, Plato, Augustine, Aquinas, Hume, Kant, and Mill etc. According to Aristotle justice comprise of what is fair and lawful. Fairness according to him encompasses distributions of goods equitably and the rectification of what is not equitable. While, Plato define it as a creation of legal order of different sections with each section perform its suitable role and not interfering with the effective functioning of other sections. For Augustine, the core of justice is to give people what is their due right; while, for Aquinas it include reciprocal transactions and proportional distributions. According to Hume, it is a virtue which mainly serves public utility by protecting people property. Kant defines justice as respecting other freedom, dignity, and autonomy by not interfering with their actions until and unless they do not harm others' rights. For Mill justice is a social utility, which is helpful to nurture and protect human liberty.

The concept of OJ refers to employee perceptions regarding how employees are treated and the outcomes they receive are reasonable, impartial, and in compliance with ethical and moral values (Cropanzano, Bowen, & Gilliland, 2007; Greenberg, 1990). The theory of OJ has been developed from two to three and then to four dimensions (Colquitt & Shaw, 2005). The researchers in the field of OJ by and large agree that it has four major types, such as, distributive justice, procedural justice, informational justice and interpersonal justice. However, some researchers argue that procedural justice is best covered in two separate dimensions, namely, process procedural justice, and rater procedural justice (Erdogan, 2002; Erdogan, Kraimer, and Liden, 2001; Nabatchi, Bingham, and Good, 2007).

Distributive justices (DJ) refer to the employee's perceptions regarding the distribution of resources, which includes benefits, rewards, recognition, pay, and promotions etc. People compare their contributions and inducements to that of other employees. Employee's assessment that inducements are unfair and unjust leads them to perceive treatment as unfair (Adam, 1965; Leventhal, 1976). Thanks to continuous efforts of researchers, they have extended the scope of distributive justice from equity to equality, followed by need based allocation and seniority. Today, it consist of four allocations rules such as, equity theory (Adam, 1965), equality, need based (Deutsch, 1975), and seniority (Chen, 1995; Fischer, 2004). Some researchers (Bolino & Turnley, 2008) have used seniority as an input, and subsumed it under equity theory.

Equity theory refers to employee's perception of decision outcomes such as pay, benefits, incentives, punishments, promotions and rewards. According to Adam (1965) employees compare their inputs (education, age, intelligence, experience, training, skills and efforts) with positive (rewards, advancement opportunities and fringe benefits that employees receive from a job situation) and negative outcomes (punishments, poor working conditions, uncertainty, and insult and fatigue etc) to that of a referent employee (Bolino & Turnley, 2008; Fischer, 2012). The comparison that outcomes are inequitable leads employees to perceive treatment as unfair (Adam, 1965; Bolino & Turnley, 2008). Equity can be internal as well as external. Internal equity means that within organization people are paid according to the worth of the job so that similar positions get similar pay, while; external equity, means that an organization pay almost similar pay compared to other organizations or prevailing market rate.

However, researchers like (Deutsch, 1975) have mentioned that equity is not only the allocation rule for distribution of organizational resources. This led us to other allocation rules such as equality and need. Equality refers to a system where organizational resources are distributed equally regardless of individual differences in terms of contributions. If employees perceived that resources are not equally distributed, lead them to unfair treatment (Deutsch, 1975). While, Need refers to a system where outcomes are distributed on the basis of individual needs. If employees perceived that organization does not consider their needs, lead them to perceived unfair treatment (Deutsch, 1975). Prior research on need based has been conducted in laboratory studies by using students and have studied different need, such as, medical problem in family, and weak financial position (Murphy-Berman, et al., 1984). Similarly, very limited research has studied the relationship between employees need and reward allocation decisions at an individual level within organizational settings (Day, Holladay, Johnson and Barron, 2012). Recent research indicates that the rules of equity, equality and need are applied in different context in organizations. For example salary increase are given on the basis of past performance (equity), while medical aid payments might be distributed equally (equality), and the printing department may be allocated higher budget (business need) (Nawakowski & Conlon, 2005). Likewise, Greenberg (2001) mentioned that people from different culture favor different rules for distribution of resources. He specifically mentioned that, while allocating rewards, Americans generally like equity rule, Indian favor distribution on the basis of need rule, while Netherland people prefer equality rule for distribution. This indicates that there is no consensus, when and under which circumstances each rule should be applied. There are considerable amount of literature reflecting that all three allocation rules are useful for distribution of resources, but it is less clear when each rule will be applied and considered fair.

Review of relevant literature helps us to conclude that, there are four different allocation criteria for distribution of resources, which are applied in different context. The distributive justice criteria which have already been well recognized in literature include; equity theory (internal and external equity), equality, need, and seniority. It is important to mention that researchers in the field of organizational justice have generally focused on only internal equity, due to which, it is well established in literature as compared to other allocation criteria.

Procedural justice (PJ) is the employee's perceptions concerning the fairness of the decision-making processes. Employee's assessment that managers and corporation adopt unfair practices and procedures to reach the decisions leads them to perceive treatment as unfair (Leventhal, 1980; Thibault & Walker, 1975; Greenberg & Folger, 1983). PJ criteria include; process control (Thibaut and Walker, 1975), procedural fairness (Leventhal, 1980; Leventhal et al., 1980; Folger & Bies, 1989) and due process model (Folger, Konovsky, & Cropanzano, 1992).

Process control refers to the degree to which people have sufficient time to present their arguments, which provide basis for decision (Thibaut and Walker, 1975). Process control is also referred to as "voice" (Folger, 1977; Lind & Tyler, 1988). Leventhal (1980) agree with process control and have identified an extended list of six procedures and called it "procedural fairness", which include; consistency, bias suppression, accuracy, correctability, ethicality, and the degree to which they allow voice and input.

Almost similar procedural justice criteria were identified by Folger & Bies (1989), which include; (1) giving adequate consideration to employees viewpoints (2) Bias suppression (3) consistent application of decision criteria (4) timely feedback (5) providing justification for decisions (6) truthfulness in communication and (7) courteous/civil treatment of employees. However, Tyler & Bies (1990) reduced this list to only five criteria, consisting of; (1) giving adequate consideration to employees viewpoints (2) Bias suppression (3) consistent application of decision criteria (4) timely feedback (5) providing justification for decisions. Based on the above mentioned criteria, people decide whether or not management adopts fair and transparent procedures to arrive at decisions leads to perceptions of fair treatment (Greenberg & Folger, 1983; Leventhal, 1980; Thibault & Walker, 1975).

Contemporary researchers like Mark, Helen, & Maureen (2012), proposed that the above mentioned components identified by different scholars can be, and indeed have been systematically combined in the due process model (Folger, Konovsky, & Cropanzano, 1992). Many researchers have proposed "due process model" to measure procedural justice in organization decision making (Folger, Konovsky, & Cropanzano, 1992; Posthuma, 2003; & Weller, 2009). Posthuma (2003) have further emphasized that both procedural justice and due process model share similar dimensions and the same underlying rationale, and so well developed conceptions of the former can be used to better understand the latter. Due process model according to (Folger, Konovsky, & Cropanzano, 1977) includes three major dimensions, such as, (1) advance notice (2) fair hearing and (3) decision based on evidence. This model has recently used by (Mark, Helen, & Maureen, 2012) to measure overall procedural justice with regard to poor performance, misconduct, and redundancy (downsizing) situations. Likewise, Weller (2009) identified six rules and called it due process, which include; (1) advance notice, (2) hearing opportunity, (3) neutral panel/decision maker, (4) decision based on evidence, (5) right of appeal, and (6) time specific.

Thus so far, our review reflect that, procedural justice criteria which have already been well established in literature include; consistency, bias suppression (Leventhal, 1980; Leventhal et al., 1980; Folger & Bies, 1989; Tyler & Bies, 1990), representativeness (Thibaut & Walker, 1975; Leventhal, 1980; Leventhal et al., 1980; Folger & Bies, 1989; Tyler & Bies, 1990), accurate information (Leventhal, 1980; Leventhal et al., 1980; Folger, Konovsky, & Cropanzano, 1992 and Mark, Helen, & Maureen, 2012), a right of appeal (Weller, 2009), impartial person/panel (Weller, 2009), and advance notice/transparency (Folger, Konovsky, & Cropanzano, 1992; and Mark, Helen, & Maureen, 2012).

Interactional dimension of justice refers to interpersonal treatment employees receive when decisions are implemented (Bies & Moag, 1986); or it refers to the treatment which is established while enacting organizational processes (Bies and Moag, 1986). It also deals with the sense of fairness of different interaction aspect. Whereas, (Greenberg, 1993) suggested that interactional justice could better be conceptualized in two separate dimensions, such as, interpersonal justice, and informational justice; (Colquitt, 2001) have empirically tested and verified that interactional justice should be divided into two dimensions, such as, interpersonal and informational justice.

Interpersonal justice (INPJ) is the level to which employees within organization are treated with politeness, respect and dignity by supervisors (Colquitt, 2001). The assessment that they are not treated with dignity and respect will lead to perceptions of unfair treatment (Bies & Moag, 1986; Colquitt, 2001; Greenberg, 1993).

Informational justice (INFJ) refers to information convey to people are adequate, true and on time. Employees assessment that information is untrue or not on the time and do not provide sufficient explanations leads to perceptions of unfair treatment (Bies & Moag, 1986; Colquitt, 2001; Greenberg, 1993). Bies and Moag (1986) proposed two criteria to measure informational justice, which include: truthfulness, and justification. However (Shapiro, Buttner, & Barry, 1994) while studying perceived adequacy of explanation proposed additional variable such as; the information should be reasonable, timely and specific. In addition to the aforementioned dimensions of justice some authors have also talked about two other dimensions of justice such as retributive and compensatory justice (Velasquez, Andre, Shanks, and Meyer, 1990).

According to Velasquez, Andre, Shanks, and Meyer (1990), retributive justice is the level to which punishments are just and fair. Generally, punishments are fair and just to the level that they consider appropriate criteria that are, the intent of the criminal and the seriousness of the crime, and eliminate inappropriate criteria which may include race. Similarly, compensatory justice is the level to which employees are justly and fairly compensated for their injuries by those who have injured them (Velasquez, Andre, Shanks, and Meyer, 1990).

2.6.3 Existing Gaps and Needed Additions in Organizational Justice

The literature on organizational justice and its four dimensions reviewed earlier in sub-sections 2.6.1 through 2.6.3 reflects a total of four types of organizational justice, with many items similar to earlier work presented by (Adam, 1965; Thibaut and Walker, 1975; Leventhal, 1980; Bies and Moag, 1986; Colquitt, 2001) than differences (Annexure table 2.3). A meta-analysis of (183) justice studies was conducted by Colquitt et al., (2001) found that OJ dimensions are significantly related to each other, and there exist unique relationship between distributive, procedural, interactional and informational justice and its outcomes like job satisfaction and organizational commitment.

2.6.3.1 Distributive Justice Scale

Homans (1961), and Adams (1965) were amongst the earlier researchers who proposed distributive justice. Adams proposed that how people arrive at decisions regarding whether a decision was fair or unfair. To study relationship between distributive justice and different employee's attitude and behavior, a number of scholars have either tried to improve the existing scale or developed their own scale as reflected in (Annexure table 2.3). Building on empirical work of Adam (1965), Price and Mueller (1986) developed a scale to measure employee's intentions regarding manager's behavior about distribution of resources. Their scale consists of six items and major emphasis was on fair reward system (one of HR practice) and employee's contributions in term of responsibilities, education and training, experience, amount of effort, work, and stresses and strains of job. After five years Moorman (1991), measured distributive justice with DJ index developed by (Price and Mueller, 1986); but he reduced the number of items from six to five. Moorman's scale was short, simple and precise to measure manager's allocation behavior in terms of responsibilities, experience, amount of efforts, work, and stresses and strains of job.

While in his other work, Niehoff & Moorman (1993), have incorporated changes in his existing scale and expand it to work schedule and workload. This time scale was not specific to only reward; rather it was intended to measure general organizational environment regarding distribution of resources. This scale was general, easy to understand, and intended to measure manager's allocation decisions in terms of work schedule, pay, workload, reward, and responsibilities. Colquitt (2001), after reviewing many sources mentioned that other allocation rules such as equality and need are certainly important but for the purpose to maximize generalizability, he developed a scale on the basis of Leventhal (1976) conceptualization (equity), with only four most relevant items. His emphasis was on outcome received and input contributed by employees such as amount of efforts, work, contributions, and performance. This scale was the most simplest and shortest among distributive justice scales and have adopted by a large majority of researchers.

Colquitt (2001) scale was followed by Blader & Tayler (2003), they constructed their own distributive justice scale consisting of seven items. Their focus was on how resources (salary and bonuses), are distributed comparing employee's contribution with the outcomes they received. This scale has uniquely differentiated outcomes favorability from distributing resources. Ahmad and Raja (2010) adapted a scale from Colquitt (2001) and modified it according to their research. The number of items and sequence of the scale was same; however, they replaced the word outcome with pay reflecting that this scale was also pay specific. Thamendren A/c Moorthy (2011), adapted a scale from Price and Mueller (1986), and applied it to only one of the HR practice i.e. performance appraisal. This study tried to measure employee's intentions regarding manager's allocation decision in performance appraisal grades. Colquitt et al., (2012) adapted a scale from (Colquitt, 2001), they have slightly changed its wording but the content, number and sequence of all items remain the same.

Critical review of existing scales reflects that researchers have expanded the scope of distributive justice from single HR practice (Pay) to multiple HR practices (salary, salary raises, fringe benefits, promotion, incentives, and recognition). Thanks to their continuous efforts that distributive justice scale has developed over the time, but there is a lack of attention to apply the concept of distributive justice on all HRM practices or it is still limited to only few HR practices as reflected in (Annexure table 2.3).

Researchers in the field of organizational justice have modestly contributed to develop and explore the items and sub dimension of distributive justice. Recent development in distributive justice criteria reflect that there are three allocation rules that can lead to distributive justice, such as, equity theory (Adam, 1965), equality and need based (Deutsch, 1975). It is relevant to mention that the majority of distributive justice scales (Annexure table 2.3) reflect distribution of resources on the rule of equity, and they have largely ignored equality and need based criteria, thus limiting the scope of distributive justice to only internal equity (only one dimension of equity theory).

Furthermore, researchers have generally focused on internal equity, that is, how pay/pay raises, reward, and promotion opportunities are distributed inside the organization, and the concept of "external equity" has been largely ignored. Likewise, distributive justice scales developed from 1986 to 2011(Annexure table 2.3) also reflects that researchers have focused on how pay/pay raises, reward, promotion opportunities are distributed but largely ignored "how roles are distributed" and "how punishments are distributed". This indicate that there is a need of distributive justice scale which may cover missing theory of external equity, and other

allocation criteria like equality and need to complete the concept of distributive justice.

2.6.3.2 Procedural Justice Scale

Thibaut and Walker (1975) were amongst the pioneer who proposed procedural justice. It refers to when employees are given a chance to speak on their own behalf. They presented two criteria for procedural justice: process control and decision control- give people a voice in the procedures affecting them. Later on, Leventhal (1980) extended this criteria to six procedures, which are; consistency, bias compression, accuracy of information, correctability, representation, and ethicality. Leventhal's criteria were adopted by Lind and Tyler (1988); however, they did not included representation criteria and subsume to be there in Thibaut and Walker's criteria of process and decision control.

On the basis of earlier procedures presented by Thibaut and Walker (1975) and Leventhal (1980), researchers have developed different procedural justice scale. For example, Konovsky, Folger and Cropanzano (1987), proposed a scale consisting of only three items. This scale was intended to measure respondent's perception regarding supervisor behavior in performance appraisal. This scale was further improved by Folger and Konovsky (1989), and extended it from four to twenty six items, which broadly cover the major procedures within organizational environment.

Moorman (1991) measured procedural justice on the basis of two factors i.e. formal procedures and interactional justice. For formal procedures he constructed most comprehensive scale consisting of seven relevant items, his focus was to measure employee's intentions regarding manager's decisions making behavior in light of different procedures. This scale mostly focused on Leventhal (1980) procedures such as, accurate information, appeal or challenge, consistency, and concerns of all. This scale was short and precise as compared to the last scale. While in his other work, with Niehoff & Moorman (1993), further reduced the number of items from seven to six but this time the scale was modified to measure manager's job specific decisions, keeping in mind the number of procedures, such as, unbiased manner, hear employee concerns, correct and complete information etc.

Colquitt (2001), after reviewing a number of sources developed a scale consisting of seven items. The first two items in his scale represent Thibaut and Walker (1975) two criteria of procedural justice; while, the remaining five items were based on Leventhal (1980) six criteria. This scale was intended to measure employee's perceptions regarding the existence of different procedures and its outcomes. Colquitt scale was followed by Blader & Tyler (2003) scale; they divide procedural justice into quality of decision making procedures and quality of treatment. This scale was more comprehensive as compared to earlier scales developed from 1989 to 2001. It was intended to measure quality of decision making procedures and quality of treatment in both formal and informal way. However, the informal portion of quality of treatment in their scale as already mentioned above was replaced by Colquitt (2001) with separate type of organizational justice i.e. interpersonal justice.

Ahmad and Raja (2010) adapted a scale from Colquitt (2001), and modified it according to their research. They replaced the word outcome with pay/pay increases. Thamendren A/c Moorthy (2011) adapted a scale from (Moorman, 1991), and customized it to the performance appraisal procedures. They were intended to measure employee's perceptions regarding manager's decision specifically in performance appraisal in light of different procedures as already presented by (Moorman, 1991). Colquitt et al., (2012) adapted a scale from (Colquitt, 2001), they have slightly changed it to make it more simple but the content of the scale, number and sequence of all items are same.

The scales of procedural justice (Annexure 2.3) reflect that researchers had bring modest changes with time to time and there major emphasis was on Thibaut and Walker (1975) two criteria of procedural justice: process control and decision control, and Leventhal (1976, 1980) six principles, which are; consistency, bias compression, accuracy of information, correctability, representation, and ethicality. Review of existing procedural justice scale suggests that researchers by and large have focused on the above mentioned two criteria of procedural justice and have largely ignored the due process model.

(Annexure 2.3) also reflect that researchers have generally used a single scale to measure overall procedural justice, however, some researchers (Erdogan, Kraimer, and Liden, 2001; Nabatchi, Bingham, and Good, 2007) proposed that overall procedural justice can be divided into two different types; namely, process procedural justice and rater procedural justice. Similarly, procedural justice scales by and large do not cover objective measure of procedural justice and have largely measure procedural justice subjectively i.e. through employee perceptions. Contemporary researchers like (Weller, 2009) mentioned that, in addition to subjective measures, procedural justice dimension is also defined objectively.

Review of existing literature and procedural justice scales help us to conclude that there is a need of a scale which may cover overall procedural justice, under (1) rater procedural justice (fairness of procedures implement by decision maker) and (2) process procedural justice (fairness of procedures used by the organization), as already suggested by (Erdogan, Kraimer, and Liden, 2001) and (Nabatchi, Bingham, and Good, 2007). Erdogan, Kraimer, and Liden (2001) called it rater procedural justice and system procedural justice; while, Nabatchi, Bingham, and Good (2007) called it procedural justice process component and the procedural justice mediator component.

2.6.3.3 Interpersonal Justice Scale

Bies and Moag (1986) were among the earlier researchers who introduced interactional justice. They identified four criteria to measure it, which include: justification, truthfulness, respect and propriety. Just like distributive and procedural justice a numbers of scholars have also contributed their efforts to develop a new or improve the existing scale of interactional justice. For example, Folger and Konovsky (1989) developed a combine scale for procedural and interactional justice consisting of twenty six items, out of which some items were interactional in nature. Likewise, Moorman (1991), also developed a combine scale for formal procedures and interactional justice to measure overall procedural justice. His interactional justice scale consists of six items. This scale was precise and intended to measure employee's perception regarding supervisor behavior in terms of supervisor and employee interactions.

However, Niehoff & Moorman (1993) further improved Moorman's scale and increased number of items from six to nine and included some missing items in Moorman's (1991) scale. They focused on employees job and post decision situations. Colquitt (2001), after reviewing the past interactional justice scales categorized it into interpersonal and informational justice. He basically divided Bies and Moag (1986) four criteria, justification, truthfulness, respects and propriety into two different justice dimensions. On the basis of literature he included, justification and truthfulness items into informational justice and respects and propriety items were included in interpersonal justice. His interpersonal justice scale consists of only four items and all items were based on Bies and Moag (1986) conceptualization. This scale was short, precise and easy to understand as a result adapted by vast majority of researchers, however, like his other scales this scale was also general. Ahmad and Raja (2010), adapted Colquitt (2001) scale, however, he once again combine interpersonal and informational justice to single interactional justice, but the items were similar to those of Colquitt (2001) scale.

Similarly, Thamendren A/c Moorthy (2011) adapted Moorman (1991) scale and tailored it on single HR practice i.e. performance appraisal. This scale was easy to understand and intended to measure employee's intentions regarding manager decision specifically to performance appraisal. Colquitt et al., (2012) adopted interpersonal justice scale from Colquitt (2001), number of items, and content were same.

Review of relevant literature reflects that interactional justice was initially considered a part of procedural justice, but in 1986, it was introduced a separate type of organizational justice, since then it was further evolved and developed up to the level to be divided into interpersonal and informational aspect of OJ. Whereas, (Greenberg, 1993) suggested that interactional justice could better be conceptualized in two separate dimensions, such as, interpersonal justice, and informational justice, (Colquitt, 2001) have empirically tested and verified that interpersonal and informational justice are two separate dimensions; hence, interactional justice should be divided into above stated two dimensions.

Interpersonal justice research is limited to how employees are treated by their immediate supervisor and have generally ignored interpersonal interaction between employees and interaction between employees and top management, as already suggested by some researchers (Baron & Kreps, 1999). This suggests that there is a need of a scale which may cover how employees are treated by supervisor, colleagues and top management.

2.6.3.4 Informational Justice Scale

Informational justice was proposed by Greenberg (1993). As already referred, (Colquitt, 2001) have empirically tested and divided interactional justice into interpersonal and informational justice. After his comprehensive review of literature, he differentiated interpersonal justice from informational justice on the basis of different items. He developed separate scale for informational justice which consists of five items. The first two items in his scale represent Bies and Moag (1986) criteria, however, the remaining three items were based on Shapiro, Buttner, & Barry (1994) conceptualization. Like his other scales of organizational justice, this scale was also precise, to the point and intended to measure employees perception regarding supervisor role in communicating information. Colquitt & Rodell (2011) adapted Colquitt (2001) scale and bring minor changes in it; but number of items and content were same.

The review of information justice scales shows that researchers have mostly measured informational justice with downward communication and have generally ignored upward communication, which flows in a higher level within organization (Robbins & Judge, 2013). This indicates that there is a need of another scale which may cover both upward and downward communication.

2.6.4 Operationalization of Organizational Justice

The details of theoretical framework given in figure 2.4 provide the various elements for our proposed structure of organizational justice. This suggested structure for OJ is produced in detailed for further elaboration and development of relevant hypotheses to be tested. We take Colquitt's (2001) OJ scale measures as the base and add our suggested additions already discussed to have a substantiated structure of organizational justice. It is pertinent to mention that the questionnaire used in this study is, in Lind and Tyler's (1988) terms, an indirect measure. An indirect questionnaire analyze the fairness criteria, such as, adequate explanation, lack of bias, and consistency etc rather than directly ask questions about how fair is something. The indirect questionnaire/measure was preferred on direct measure due to two reasons (Colquitt, 2001). First, Colquitt et al., (2001) reviewed 114 papers and concluded that indirect questionnaires provide superior results than direct questionnaire. Second, indirect questionnaires provide detail information than direct questionnaires.

Our proposed OJ would thus cover the following aspect,

- 1. Distributive justice, which consists of two sub dimensions namely:
 - (a) Equity theory
 - i. Internal equity
 - ii. External equity
 - (b) Equality
- 2. Procedural justice, which consists of following two sub-dimensions:
 - (a) Process procedural justice consists of four sub dimensions, namely:
 - i. Advance notice/transparency
 - ii. Fair hearing
 - iii. Decision based on evidence/accurate information
 - iv. Right of appeal

- (b) Rater procedural justice consist of three sub dimensions, namely:
 - i. Selection of decision maker
 - ii. Bias suppression
 - iii. Consistency
- (c) Interpersonal justice, which consists of three sub-dimensions, namely:
 - i. Interaction with supervisors
 - ii. Interaction with colleagues
 - iii. Interaction with top management
- (d) Informational justice, which consists of two sub-dimensions, namely:
 - i. Downward communication
 - ii. Upward communication

Our proposed substantiation in OJ structure is further elaborated in graphical form given in figure, 2.4. According to Graph 2.4, the organizational justice, as usual, will consist of four dimensions, namely, distributive justice, procedural justice, interpersonal justice, and informational justice. Distributive justice will further consist of equity, and equality, while equity will further consist of internal and external aspect of equity, as described in section 2.6 on theoretical framework.

The items for the internal equity were adopted from Colquitt (2001), which consist of pay, incentives, recognition, and salary raise. Pay was measured with items (e.g. your pay compared to your effort), incentives (e.g. your incentives compared to your contributions), recognition (e.g. recognition for your work), and salary raise (e.g. salary raise justified). On the other hand, the items for external equity were self prepared and include salary (e.g. salary compared to other organizations), incentives (e.g. incentives compared to other organizations), salary (e.g. salary compared to the market rate), and increments (e.g. increments compared to other organizations). Similarly, equality was also measured through internal and external facets of equality. The items for external equality consist of equal health benefits (e.g. health benefits across employees within industry), and health benefits (e.g. health benefits across organizations within industry). Contrary to external equality, internal equality include work load (e.g. distribute work load equally), punishment (e.g. distribute punishment equally), and equal employment opportunities (e.g. provide equal employment opportunities). It is pertinent to mention that, the items for both internal and external equality were self-prepared.

Procedural justice was consists of two major sub dimensions, namely, process procedural justice and, rater procedural justice. The first sub dimensions - process procedural justice-was further consist of four sub dimensions, including, advance notice/transparency (e.g. provide easy access to procedures), fair hearing (e.g. explain your position before your supervisor), decision based on evidence (e.g. decision based on accurate information), and right of appeal (e.g. organization provides right of appeal to employees), and the second sub dimension - rater procedural justice - was further consist of selection of decision maker (e.g. organization hires managers whose educational back ground is relevant to the job), biased suppression (e.g. supervisor decision been free of bias), and consistency (e.g. supervisor decision been consistent).

Interpersonal justice was consist of three sub dimensions, namely, interaction with supervisors, interaction with colleagues, and interaction with top management. The items for the above mentioned three components include; dignity and respect (e.g., being polite rather than rude), and propriety/improper remarks (e.g., refraining from improper remarks or prejudicial statements). It is relevant to mention that items for the first component, that is, interaction of employees with supervisor was adopted from Colquitt (2001), while, the items for the next two components were self-prepared.

Informational justice was consist of two sub dimensions, downward communication and upward communication. The items for downward communication were adopted from Colquitt (2001), which include truthfulness, reasonable, timely and specific. Truthfulness was measured with items (e.g., an authority figure being candid and not engaging in deception), reasonable (e.g., explaining procedure thoroughly), timely (e.g. providing information on right time) and specific (e.g. providing information to one specific needs). While, the second dimension, that is, upward communication is our proposed additions in informational justice. The items for this dimension were self-prepared and consist of problems/grievances, suggestion box, and attitude survey. Problems/grievances was measured with items (e.g. an opportunity to share problems), suggestion box (e.g. an opportunity to share suggestions), attitude survey (survey regarding organizational working environment).

Development of Hypotheses

Our review reflects that researchers have generally focused on well established theories, and largely ignored the less prevalent theories. Hence, there was a need to adapt OJ scale which may cover missing theories in existing OJ scale to complete the concept of organizational justice. In the light of above research review, following hypothesis was developed.

 H_1 : Organizational justice experts/researchers would agree with the suggested additions in organizational justice scale.

Hypotheses H_1 would be accepted if mean score of the responses of OJ experts/researchers happens to be greater than the midpoint, using One - sample ttest. The questionnaire meant for employees/faculty members consists of three parts, part A, B and C. Part A requires employees/faculty member's opinions on actual prevalence of the OJ existing practices, part B requires employees/faculty member's opinions regarding the implementation of the would-be (suggested) OJ, while part C was devoted for OJ outcomes. We presume that the same type of hypotheses would be relevant for both types of responses. The relevant hypotheses for organizational justice, its major dimensions and their sub dimensions are based on theoretical framework provided in figure 2.4.

Distributive Justice (DJ)

 H_2 : Equity (EQT) and Equality (EQL) have significant impact on Distributive Justice (DJ); where, Internal equity (IE), and External Equity (EE) have significant impact on Equity.

In econometric terms, Distributive justice (DJ) would happen to be a function of Equity (EQT), and Equality (EQL), where Equity is predetermine as a function of

Internal equity (IE), and External Equity (EE); hence DJ would econometrically estimate as:

$$DJ = f(EQT(IE, EE), EQL)$$
(2.1)

Procedural Justice (PJ)

 H_3 : Process procedural justice (PPJ) and neutrality of decision maker (N) have significant impact on Procedural justice (PJ); where, Advance Notice (AN), Fair hearing (FH), Decision based on evidence (DE) and Right of appeal (ROA) have significant impact on process procedural justice (PPJ), and Selection of decision maker (SDM), Bias suppression (BS), and Consistency (CN) have significant impact on neutrality of decision maker (N).

In econometric terms, Procedural justice (PJ) would happen to be a function of process procedural justice (PPJ) and neutrality of decision maker (N), where process procedural justice (PPJ) will be predetermine by Advance Notice (AN), Fair hearing (FH), Decision based on evidence (DE), and Right of appeal (ROA); and Neutrality of decision maker (N) would be predetermine by Selection of decision maker (SDM), Bias suppression (BS), and Consistency (CN); where PJ would econometrically estimate as:

$$PJ = f(PPJ(AN, FH, DE, ROA), N(SDM, BS, CN))$$
(2.2)

Interpersonal Justice (INPJ)

 H_4 : Interaction with supervisors (IS), Interaction with colleagues (IC), and Interaction with top management (IM) have significant impact on Interpersonal justice (INPJ).

In econometric terms, Interpersonal justice (INPJ) would happen to be a function of Interaction with supervisors (IS), Interaction with colleagues (IC), and Interaction with top management (IM); where INPJ would econometrically estimate as:

$$INPJ = f(IS, IC, IM)$$
(2.3)

Informational Justice (INFJ)

 H_5 : Downward communication (DC) and Upward communication (UC) have significant impact on Informational justice (INFJ).

In econometric terms, Informational justice (INFJ) would happen to be a function of Downward communication (DC), and Upward communication (UC); where INFJ would econometrically estimate as:

$$INFJ = f(DC, UC)$$
(2.4)

2.7 Overall OJ and its Outcomes

For the purpose of this study, overall organizational justice and its outcomes will be used as mediating variables. Overall organizational justice outcomes consist of employee's attitude and behavior. Employee attitudes will include job satisfaction, while, behavior will include organization citizenship behavior.

2.7.1 Relationship Between OJ Dimensions and Employees Attitudes

Scholars in the field of organizational behavior believe that people usually have thousands different types of attitudes, but organizational behavior talked about only work-related attitudes (Robbins & Judge, 2013). Moreover, the research in organizational behavior has focused on three major attitudes, which include, job involvement, job satisfaction, and organizational commitment (Robbins & Judge, 2013). So, for the purpose of this study, attitudes will include job satisfaction.

Hoppock (1935) was among the earlier researchers, who introduced the concept of job satisfaction. It can be defined as how well the person likes his job (Judge, 1993;

Mobley & Locke, 1970) and it is an attitude towards a job that provides valued rewards (Locke, 1976; Lawler & Hall, 1970). Uludag & Menevis (2005) studied relationship between organizational justice and work attitudes like job satisfaction and organizational commitment. This study used three dimensions of justice; distributive justice, procedural justice and interactional justice. They reported positive relation between organizational justice and job satisfaction. Similarly, Fulford (2005) studied relationship between organizational justice, job satisfaction and organizational commitment. He reported that organizational justice effect organizational commitment through the intervening mechanism of job satisfaction.

Likewise, Loi, Yang, & Diefendorff (2009) have studied the relationship between organizational justice and job satisfaction. They have used four dimensions of OJ, such as, distributive justice, procedural justice, interactive justice and informational justice. Hierarchical linear regression model was applied to check the above mentioned relationship. They found that interpersonal and informational justice have significant relationship with job satisfaction; distributive justice have moderating effect on interpersonal justice and job satisfaction; and procedural justice have moderating effect on informational justice and job satisfaction.

Sohail & Nuhu (2010) have used three dimensions of organizational justice to study its effect on employee's job satisfaction in Saudi Arabia. The three dimensions used in their study includes, distributive justice, procedural justice and interactional justice. They indicated that distributive justice and interactional justice are important variables for employees' job satisfaction. Similarly, Al-Zu'bi (2010) has also examined the relationship between organizational justice and job satisfaction. The organizational justice dimensions used in their study include: distributive justice, formal justice and interactive justice. Results of this study indicated that there exists a positive relationship between organizational justice and job satisfaction.

2.7.2 Relationship Between Overall OJ and Job Satisfaction (Mediators)

The literature reviewed in immediate preceding section reflects that OJ research by and large focused on individual dimension of justice and different outcomes. That is, how different dimensions of justice individually affect employee's attitude (JS) and behavior. However, contemporary researchers (Ambrose & Arnaud, 2005; Lind & Van den bos, 2002; Ambrose et al, 2015; Colquitt and Rodell, 2015; Colquitt & Zipay, 2015; Corpanzano, Fortin & Kirk, 2015) suggest that such singular dimension of justice may not capture the exact picture of individuals' justice experiences. In addition, Lind (2001) proposes fairness heuristic theory, which helps us to better understand as to how OJ-Performance relationship is unfolded.

Fairness heuristic theory argue that employees perceptions of overall fairness pertaining to supervisor, management, and social entity is significant contributor which help employees to decide and behave in accordance to events concerning to OJ (Lind, 2001; Van den Bos, Lind, & Wilke, 2001). This theory suggest that employees within the organization receive information regarding organizational justice dimensions and make a judgment of overall justice, and it is overall justice, rather than organizational justice dimensions, which forces employees to behave pertaining to justice (Lind, 2001). It was also mentioned that employees within an organization make overall justice perception as decision heuristic to determine whether to trust management and supervisor. So, employees use the information regarding the existence of overall OJ to judge whether to positively support the organization and supervisors. Therefore, overall OJ is considered more proximal to employee's attitudes and behavior than different dimensions of OJ (Lind, 2001).

This theory consists of three main phases, which include: judgmental phase, use phase, and phase shifting event. In the first phase, employees perceptions of overall justice is quickly formed, in which information regarding justice received earlier is mostly weighted, which is known as primacy effects (Van den Bos, Vermunt, &Wilke, 1997). When employee's perceptions pertaining to overall justice is formed, it is more likely to stable as employees enter into second phase, in which they use their overall justice to decide whether to cooperate with management and supervisor etc (Lind, 2001). The third phase in this theory starts when employee's perceptions pertaining to justice changes due to execution of new policy or manager behavior changes which significantly changes existing expectations; hence, employees are shifted back from use phase to judgmental phase.

Trust also supports OJ-Performance relationship. Trust refers to employee's positive expectations regarding actions, words, motives, intentions, and decisions of another in risk facing situation (McAllister, 1995; Lewicki & Bunker, 1995). Zamaros (2016) have mentioned three different aspect of trust, which includes interpersonaltrustworthiness, functional-stakeholder faith, and existential-making possible beyond what there is. The interpersonal aspect of trust is an orientation of the truster towards the trustee with whom the truster is in some way interdependent (an actor needs the specific person cooperation to attain his goal or resources). The interpersonal aspect of trust has received significant empirical and theoretical attention. A large number of theories (Kelley & Thibaut, 1978; Holmes & Rempel, 1989) and research (Mikulincer, 1998; Rempel, Holmes, & Zanna, 1985) on interpersonal aspect of trust is witnessed in the literature. However, critical review of the literature and theories regarding trust is beyond the scope of this study. Similarly, the functional aspect of trust has varied in most of the theories used in OJ research. In this regard, SET argues that trust is important to the growth and development of social exchange relationships as it minimizes ambiguities regarding partner's reciprocation while nurturing a sense of obligation (Blau, 1964). On the other hand, the functional aspect of trust is clearly different in uncertainty management theory (van den Bos & Lind, 2002; Lind & van den Bos, 2002).

Uncertainty management theory developed on the basis of fairness heuristic theory (Lind & van den Bos, 2002; van den Bos & Lind, 2002). This theory states that the large prevalence of justice can minimize the effects of any form of uncertainty, which may include employees concerns about trust and reciprocation. This theory expands the use of fairness from social uncertainties domain to more generalized conditions of any source of uncertainty. Therefore, the sense that management is fair may produce a reciprocation of obligations, and it may further introduce a sense of comfort that solve uncertainty in a much more general sense.

In a similar pattern, trust is also important in fairness heuristic theory, which states that trust guides employees in decision about whether to positively cooperate with management or supervisor when there exist doubt about possible exploitations (Lind, 2001; van den Bos, Lind, & Wilke, 2001). The theme of fairness heuristic theory is that employees are concerned with the fairness because it helps them to deal with unforeseen situation whether or not they can trust their supervisor or management. This theory helps us to better understand why employees behave in a certain way within the organization. Moreover, this theory suggests that overall OJ mediates between OJ dimensions and employee's attitude and behavior (Marzucco et al., 2014).

The seminal work presented by Lind (2001) helps the researchers to suggest that overall OJ should be linked with more proximal measures because they are theoretically and methodically easier to link. OJ dimensions are proximal to overall OJ, which itself is proximal to employee's attitudes (JS) and behavior (OCB). Ambrose and Schminke (2009) empirically examined the mediating mechanism of overall justice between different types of justice and employee attitudes. The three dimensions of OJ used in their study include: DJ, PJ, and IJ. SEM was applied to test OJ dimensions contribution towards overall justice. In their first data set, they found that all three dimensions are significant contributors towards overall OJ; while, in their second data set, DJ did not contribute towards overall OJ.

In this context, Holtz and Harold (2009) have used longitudinal data to test the mediating effect of overall OJ between OJ dimensions and employees attitude. The four dimensions used in their study include, DJ, PJ, INPJ, and INFJ. They found that DJ, PJ, and INPJ are the significant predicators of overall justice. Likewise, Jones and Martens (2009) have also tested the mediating mechanism of overall justice between OJ dimensions and employee's attitude. They reported that that DJ and INPJ were the main contributor relative to PJ and INFJ. In addition, Marzucco, Marique, Stinglhamber, De Roeck, & Hansez, (2014) reported that

overall justice mediates between OJ dimensions and employees attitude. More recently, Patel et al., (2012) have also used the concept of overall justice and found that all four dimensions are significant predicators of overall OJ. Therefore, OJ dimensions were used as antecedents to overall justice.

The literature reflect that researchers now commonly suggest that overall organizational justice should be linked with more proximal measures because they are theoretically and methodically easier to link. Overall OJ is proximal to attitudinal measures like job satisfaction (Ambrose & Schminke, 2009). In the proposed conceptual model it is assumed that overall organizational justice is more proximal to employee attitudes, which in turn lead to behavior. Therefore, overall justice was used as a mediator between different types of justice and employees attitudes.

2.7.3 Relationship Between Employee's Attitudes (JS) and Behavior (Performance)

Organizational justice literature has linked employee's fair treatment to many positive outcomes, such as, employee's attitude and behavior (Colquitt et al., 2012). For instance, research provides strong relationship of employee's justice perceptions to different dimensions of performance, namely, counterproductive behavior, citizenship behavior, and task performance (Masterson, Lewis, Goldman, & Taylor, 2000; Moorman, Blakely, & Niehoff, 1998; Tekleab, Takeuchi, & Taylor, 2005).

Organization citizenship behaviors (OCB) are the extra role behaviors, which represent employees' willingness to go above and beyond the duty which they have been assigned (Bateman and Organ 1983). These behaviors are additional contributions by employees, which may be related to organizational benefit or it may be related to specific individual benefits. Organizational citizenship behaviors are not explicitly recognized by a formal rewards system (Organ 1988). Williams and Anderson (1991) have categorized such behaviors into two major dimensions i.e. organization citizenship behavior towards organization (OCBO), which are related to the organization and organization citizenship behavior towards individual (OCBI), which are related to specific individuals.

Greenberg (1987) was among the earlier scholars who coined the theory of organizational justice as to how an employee evaluates the management decisions and then employee's subsequent attitude and behavior (e.g., if an organization makes poor decisions pertaining to their employees, they may feel the perceive treatment as unfair and subsequently change in their attitude and as a result productivity decreases). While, in his later work, (Greenberg, 1990) called it a basic necessary condition for proper functioning of the corporation.

Robbins & Judge (2013) have referred three types of attitudes, which help us to better understand the abovementioned attitude and behavior relationship. They referred three components of attitudes, which include; cognitive component, affective component, and behavioral component. The first component is the description of process and procedures and the way things are which provide basis for the next component. The second component is the feeling or emotional segment of attitude, which lead to behavioral component. The last component of an attitude explains employee's intentions to behave in a particular way towards his supervisor or management. It was also mentioned that such categorization is considered important to understand the complex relationship exist between attitude and behavior.

Colquitt and Rodell (2011) mentioned that the considerable attention of justice perception is due to the reason that it is reliable variable of employee's attitudes and resulting behaviors. Many meta-analyses also reported that employees perceptions of justice are related to substantial positive organizational outcomes, which include, employees attitudes (job satisfaction), and behaviors (OCB) (Cohen-Charash and Spector, 2001; Colquitt et al., 2001).

More recently, Yean & Yusof (2016) explicitly explain that when employees receive organizational order or decision, his perceptions towards such decisions as being fair or unfair, is essential as it can lead to employees attitude and resulting behavior. In addition, Chou, Chou, Jiang and Klein, (2013) have empirically tested and found that distributive and interactional justice were strongly related to employees attitude, which in turn lead to organizational citizenship behavior. Moreover, employee's attitude (affective commitment) in most cases is found to be better predictor of employee's turnover and performance then other dimensions of commitment (Robins & Judge, 2008). Dunham, Grube, & Castaneda (1994) have also found that employees attitude (affective commitment) was a better significant factor of outcomes (turnover & satisfaction) for majority of the cases (72 percent), as compared to few cases for normative commitment (36 percent), and continuance commitment (7 percent).

Moreover, employee's attitudes, such as, job satisfaction and motivation are the significant measures that forces people to show discretionary behavior (Katou & Budhwar, 2010; Purcell & Kinnie, 2007; Cafferkey & Dundon, 2015). Likewise, researchers have generally found that employee's attitudes, such as, job satisfaction has positive influence on OCB (Podsakoff, MacKenzie, Paine, & Bachrach, 2000; Organ and Ryan, 1995).

In line with this discussion, job satisfaction is also important determinant of organizational citizenship behaviour (Podsakoff et al. 2000). Similarly, Parnell and Crandall (2003) also reported that those employees who are given decision making opportunities would be more satisfied and as a result show citizenship behavior. Likewise, similar results were also reported by other scholars (Murphy et al., 2002; Kuehn and Al-Busaidi, 2002).

Contemporary literature also reflects that employee's attitudes are followed by behavioral measures which include organizational citizenship behavior, job performance and absenteeism (Robbins & Judge, 2013). Moreover, employee's behaviors finally lead to organizational performance which include productivity (Huselid, 1995; Kato & Morishima, 2002) quality of product and service (MacDuffie, 1995). Thus, literature so far revealed that overall OJ and its major dimensions are the corner stone's of this relationship; however, they do not directly lead to employees' behavior, rather they affect employee attitudes (job satisfaction) which in turn lead to OCB. Similarly, job performance theory (Campbell, 1997) states that, it is employee's attitudes that affect employee's behaviors (Luna & Camps, 2008). Thus, overall OJ and employee attitudes (JS) would mediate the relationship between OJ dimensions and OCB.

 H_6 : Organizational justice dimensions have positive and significant impact on overall OJ, which have significant affect on employee's attitudes, which in turn affect employee's behavior. Please note that the overall OJ, and its outcomes, that is, employee attitudes would serve as mediators. This process further improves the employees' performance (OCB). More specifically,

 H_{6A} : Organizational justice dimensions have positive and significant impact on overall OJ.

$$OJ = f(DJ, PJ, INPJ, INFJ)$$
(2.5)

 H_{6B} : Overall OJ mediates between different dimensions of organizational justice and employees' job satisfaction.

$$JS = f(DJ, PJ, INPJ, INFJ, OJ)$$
(2.6)

 H_{6C} : Overall OJ outcomes, that is, JS, mediate between overall organizational justice and employee behavior (OCB).

$$OCB = f(DJ, PJ, INPJ, INFJ, OJ, JS)$$
(2.7)

 H_7 : Organizational justice dimensions (DJ, PJ, INPJ, and INFJ) have significant impact on OCB; hence (OCB) would econometrically estimate as:

$$OCB = f(DJ, PJ, INPJ, INFJ)$$
(2.8)

2.8 Use of Organizational Size as a Moderating Variable

The literature on HRM-Performance link have consistently mentioned that specification error occur, when a model exclude a variable that is relevant with the HRM system and also have impact on performance (Boselie, Dietz, & Boon, 2005; Gerhart, 2007). These researchers also reported that pertaining to the performance; such variable may include: organizational size, type of industry, capital structure, type of strategy used by organization, and the quality of management used in other areas, such as, operations, marketing, and finance.

Mathieu and Zajac (1990) mentioned that the HRM-Performance link may be influence by organizational characteristics and the individual characteristics of employees. Similarly, Boselie, Dietz, & Boon (2005) have also identified three sets of moderating variables, which are, sector level moderating variables, organizational level moderating variables, and individual level moderating variables. More recently, Katou & Budhawar, (2010) & Katou (2012) have also used organizational size as moderating variables.

For the purpose of this study, the influence of organizational size was used as organizational level moderating variable. Organizational size here refers to number of employees working in organization. Given the Pakistani organizations as populations, which are relatively small and having different organization culture, and employees may be treated differently and impersonally, so employees in large seems to be a victim of unfairness and unethical activities. Moreover, large organizations may have more developed and comprehensive system of organizational justice compared to small organizations. In such conditions, it would be interesting to test whether the role of organizational size moderates OJ-employees JS relationship. It therefore seems justified to include the effect of organizational size as a moderator in the model. As per SME policy (2007) small and medium organizations would have less than or equal to 250 employees. All such organizations having 250 or less than 250 employees was marked (1); while, large organization would have more than 250 employees. Large organization was marked (0). The respective hypothesis was:

 H_8 : Organizational size moderates the effect of overall justice on employees' job satisfaction.

In econometric terms, organizational size would moderate the effect of the overall justice on JS as well as its outcomes; hence JS would econometrically estimate as:

$$JS = f(DJ, PJ, INPJ, INFJ, OJ, OS)$$
(2.9)

2.9 Conclusion

The review of literature presented in (sub-section 2.2) reflects much development of human resource management and its broader coverage, which has broadened the mental horizon of people concerned with management of human resources, this review also helps to conclude that there is a long list of HRM practices, and there has been little agreement amongst experts on common HRM practices. The experts and practitioners are concerned as to which of the HRM practices are relatively more important, which warrant priority in implementation relative to the other practices. Similarly, the review of literature on the (sub-section 2.3), also help us to conclude that, in spite of heavy research work carried out on informal categorizing of HRM practices, bundling, and development of HPWS, consensus could not be arrived at some common structure of HPWS practices. It may be said that HPWS practices vary in impact from situation to situation, industry to industry and organization to organization; so one cannot generalize HPWS practices for all situation and organizations. And, there is strong theoretical support for developing HPWSs, and there exists great need to do so, even if it can be possible on situational basis, for situation-to- situation and industry-to-industry.

Likewise, the review of the eight HRM-Performance perspectives (universalistic perspective, contingency perspective, configurational perspective, resource-based view, AMO theory, fully integrated model, social exchange theory, and balance perspective), helps us to conclude that, of the eight HRM-Performance perspectives already discussed, some perspectives provide good theoretical foundations to take insights from, for building a strong and practical base for the HRM-Performance linkages; such promising perspectives especially include: resourcebased view (RBV), AMO perspective, Fully-integrated model, Social exchange theory, and Balanced HR perspective. However, there seems a need to deeply consider which of the aspects of some of the stated practically-more-important perspectives would need to be combined, and how, so that the academically researched and identified gaps be taken care off.

The review of literature on black boxes and gaps help us to conclude that, there exist theoretical gaps and misconceptions in the existing research, and there is strong need of framing research basing it on relevant theories. Researchers specially suggest incorporation of mediators and moderators to fill the gaps. There exist methodological and analytic errors, and there is strong need to avoid repeating such errors. The review of literature on OJ helps us to conclude that, in spite of the fact that the concept of organizational justice has developed over time in both theory and practice, and the measuring scales of its various dimensions have intensively substantiated to a great extent, there is still a need to greatly adapt the existing scales to include the commonly accepted theories of OJ, for giving them a relatively more 'fair' and 'just' touch while keeping preserved their technical nature. This review also help us to conclude that the evaluation of existing OJ scales and relevant theories help us to add the above identified suggested additions in various OJ dimensions to substantiate it to yield the desired outcomes in terms of job satisfaction and OCB.

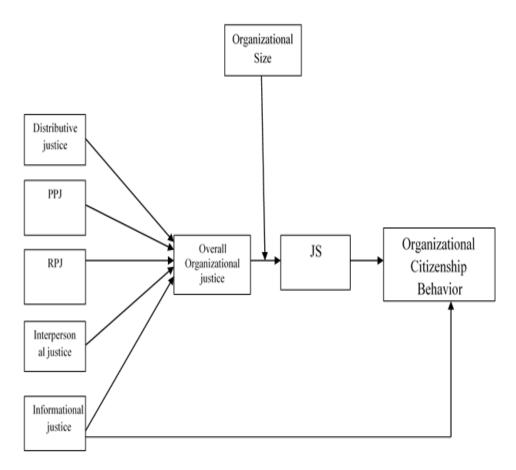


FIGURE 2.4: Theoretical Framework

Chapter 3

Methodology

3.1 Introduction

With an overall objective of finding out what a good working environment for an organizational employee is, and whether the outcomes of such an environment would turn out in to relatively better employees' performance, an effort was made to represent a review and evaluation of the relevant available literature on the topic. On the basis of preceding review, certain hypotheses were formulated, which provide us a base to develop relevant methodological framework for this study.

3.2 Proposed Research

3.2.1 Summary and Conclusions

The summary of the conclusions presented at the end of chapter two, and especially conclusions regarding organizational justice help justify that the concept of organizational justice, which has already been developed well over time, in both theory and practice, to the extent that it provides a relatively better and greater sense of 'fairness' and 'justice' to the employees, has the potential to be further substantiated, with the incorporation of the missing theories. This proposition provides the base for our proposed research, for this study.

3.2.2 Missing Theories

This proposed research would thus require analyzing and evaluating those presently missing theories of organizational justice, which can and should be added to the existing dimensions of organizational justice, to make it a complete system of service, capable of yielding employees' job satisfaction, organizational commitment, job involvement and organizational citizenship behavior (OCB).

3.2.3 Suggested Additions

Section 2.6 (in Chapter II) has elaborated well what contents have already been covered in various dimensions of organizational justice, as well as what additions need to be incorporated, to make OJ capable enough to yield outcomes like employees' job satisfaction, organizational commitment, job involvement and organizational citizenship behavior (OCB).

3.3 Research Approach

The concept of epistemology, as define by Easterby, Thorpe and Lowe (1991), is the study of method or grounds of knowledge. The concept of epistemology deal with the question of what is (or should be) considered as adequate knowledge in a field. Basically, four paradigms (positivism, constructivism, critical theory, and realism paradigms) are used in research.

3.3.1 The Positivism Paradigm

The positivism paradigm as explained by Comte (1868) is based on the logic that there can be no real knowledge but that which is based on observed facts. He basically shows the importance of observable facts which help us in theory formulation and vice versa. Recently, Easterby-Smith, Thorpe and Lowe (1991), explain it as a perspective in which social world exists externally and its properties should be measured through objective methods'(quantitative paradigm). The concept of Positivism is well established in the discipline of laws and is used in cause and affect relationships in particular contexts (Muijs, 2011). Researchers, who used positivist paradigm views the world thorough a one way mirror (Guba & Lincoln, 1994). As, this research intends to cover both (qualitative and quantitative approaches to data collection), so this paradigm seems to be unsuitable.

3.3.2 Constructivism

Constructivism state that reality is subjective and differ from individual to individual (Perry, Riege & Brown 1998). As people are different, their views and attitudes are different, so multiple realities exist. Some scholars, like Perry, Riege & Brown (1998) mentioned that constructivism is not appropriate for business research, as it neglects the true economic and technological variables of business organizations (Hunt, 1990). This paradigm principally covers qualitative approach, however, we intend to cover both (qualitative and quantitative). It is therefore, also seems unsuitable for this research.

3.3.3 Critical Theory Paradigm

Critical theory paradigm state that social phenomena are related to historical perspectives (Perry, Riege & Brown, 1998). In this paradigm, researchers usually engaged themselves in a dialectic approach to criticize macro-environmental factors and their existing order, and further suggest a new and better model (McMurray 2005). Guba & Lincoln (1994) mentioned that, until and unless the research scholar is a transformative intellectual the objective is to free people from mental, emotional and social structures that have been deep-rooted over a long time period (Perry, Riege & Brown 1998). This study does not intend to criticize the existing theory, concepts and systems, so this paradigm is also not suitable for this research.

3.3.4 Realism Paradigm

Realism paradigm involves both positivism and constructivism (Healy & Perry 2000), as it covers the social values of both a system and a researcher (Krauss 2005). Researchers by and large have traditionally focused on positivist approach (Bisman, 2010); however, this trend has been gradually shifted towards realism paradigm (Hunt 1990), which is more practice-based. This was also mentioned earlier by (Bashkar, 1989), that social concept emerges from different sources and there is a need for a paradigm that can cover the complex nature of a business problem rather than a confined viewpoint. Bashkar (2002) further mentioned that realism is diminishingly essential and scientifically tested. As, this research intends to evaluate the impact of organizational justice on performance in education sector of Pakistan through national and international experts/researchers, HODs/deans, and employees/faculty. So, the realism paradigm seems more appropriate because it provide an opportunity of (triangulation), which can cover both qualitative and quantitative approaches to data collection.

3.4 Research Methods

The research approaches, discussed in the immediate preceding section, would required, and we suggested, consulting the basic stakeholders, including, experts/researchers in the area, HOD/dean, and employees/faculty members. This would require multi-method (expert opinions & survey) approaches for data collection.

3.4.1 Procedures for Expert's Opinion

The experts/researchers in the field of organizational justice were consulted for their expert opinion on our proposed additions (questions with star) in organizational justice scale/questionnaire (Annexure table 3.1). The experts/researchers were also able to add their opinion and give additional remarks or so if they so desired. For this purpose, scale was sent via email and by post, to national and international experts listed in Annexure 3.4.

3.4.2 Procedures for Survey Approach

The survey approach covered the basic stakeholders; including, head of department/Dean and employees/faculty members. Organizational employees/faculty members were involved to get their responses regarding organizational justice and its effect on enhancing positive employee attitudes. In the employees/faculty member's survey, employees/faculty members rated the prevailing conditions of organizational justice and its impact on their attitudes.

Head of department/Dean were requested to appraise employee's behaviors in terms of OCB. For this purpose, HOD/Dean questionnaires (Annexure 3.2 having relevant employees codes) were distributed to HOD/Dean, to rate their subordinates (employees/faculty) performance in terms of organization citizenship behavior.

Hence, two separate measurement scales/questionnaires were used one each for each of the two stated stakeholders. All questionnaires were directly received by researchers either through mail or personal visit. Therefore, head of department/dean and employees/faculty members have no access to completed surveys.

3.5 Measurement Scale/Instruments

3.5.1 Scales and Instruments

Since we had to consult different stakeholders (head of department, and employees), we had adapted different scales, one each for each of the stakeholders. These scales/instruments are provided in Annexure 3.1 through 3.3.

3.5.1.1 Measurement Scale/Instrument for Experts

Annexure 3.1 provides a five point likert scale and contains questions on all dimensions of organizational justice, including, distributive justice, procedural justice, interpersonal, and informational justice. Two types of questions were included in each of the stated dimensions, some were without star and some were with star. Questions without star were adopted from eminent scholars whose references were also given along with the questions. Question with star were the additional suggested questions which were developed by this researcher to fill the gap felt necessary in our review of literature and theory to further substantiate OJ.

This measurement scale/questionnaire (Annexure 3.1) sought expert's opinion on the inclusion of suggested additions (questions with star) in the OJ scale. The experts/researchers were also able to add their opinion and give additional remarks or so if they so desired. For this purpose, scale/questionnaire were sent via email and by post, to national and international experts listed in Annexure 3.4.

3.5.1.2 Measurement Scale for Head of Department/Dean

Measurement scale/instrument for head of department/dean is placed in Annexure 3.2. Measurement scale/instrument for head of department/dean consisted of two parts, that is, part A, and B.

Part A covered demographics, such as, age, gender, education and experience etc, while, Part B was devoted for organizational citizenship behaviors. For this purpose, OCB scale/questionnaire was adopted from (Williams & Andersons, 1991), and HODs/deans were requested to evaluate employee's performance in terms of OCB.

3.5.1.3 Measurement Scale for Faculty Members

Measurement scale/instrument for faculty/employees, placed in appendix 3.3, covered two types of questions in the OJ scale/questionnaire, existing questions and our proposed questions; however, the two types of questions were separately given in part A and B of the measurement scale/instrument. Part A of the scale contains the existing questions adopted from eminent scholars, while part B contains our proposed questions in OJ scale.

The questions in part A were adopted from eminent scholars for measuring the prevalence of the existing OJ dimensions. While questions in part B, have been self prepared to measure the prevailing conditions of organizational justice. Further, part C of this scale was devoted to collect data from employees regarding OJ outcomes. For this purpose, JS scale was adopted from Cammann, Fichman, Jenkins & Klesh, (1983).

3.6 Population

People belong to private educational institutions of management sciences department constituted the population for this research study. To achieve the desired objectives of this study, we collected data from two types of respondent's, namely, head of department/dean, and employees/faculty members. So our population consisted of head of department/dean, and faculty members/employees. We tested theory in education sector because data was easy to collect and all respondents were approached within an organization.

Data was collected from higher educational institutions (Annexure 3.5 attached), which include private colleges and universities of management sciences. The criterion of multiple respondents was set to overcome measurement and nonmeasurement errors, as suggested by many researchers (Gerhart et al., 2000; & Boselie, Dietz, & Boon, 2005). They also suggested at least four raters per unit of analysis for HRM indicators and at least three for performance indicators.

The data was collected from all 69 universities; hence, the census size was 966 (14 * 69 = 966). We collected data from at least seven (7) faculty members regarding the prevalence of organizational justice within universities. Similarly, we collected data from their respective head of department/dean pertaining to faculty member's performance involved in the survey. So in total, 966 questionnaires were distributed, which include 483 faculty members' questionnaires, 483 head of department/dean questionnaires. It is important to mention that a census technique instead of sampling was applied.

Head of Department/Dean $7 \times 69 = 483$ (HOD/Dean/Coordinator)

Employees/Faculty $7 \times 69 = 483$ (Only teaching faculty members)

Total = 966

3.7 Selection Criteria

The selection criteria for the respondents were as under:

3.7.1 Criteria for Experts/Eminent Scholars

- 1. Should have at least two years of teaching/research in the field of management/organizational justice.
- 2. Should have some quality publications in the area of management and OJ.

3.7.2 Criteria for Head of Department/Dean

- 1. Should be working as head of department/dean or any other representative.
- 2. Should have at least one and half year of working experience in management or administration.

3.7.3 Criteria for Employees/Faculty Members

- 1. Should have at least one and half year of working experience.
- 2. Should have at least sixteen years of education.

3.8 Data Analysis Methods

3.8.1 Diagnostic Test

The above mentioned measurement questionnaires necessitated and we proposed a two-phase approach for data analysis. The first phase of the analysis was devoted for initial diagnostic tests. The diagnostic tests include reliability analyses, normality test, one sample t-test, exploratory and confirmatory factor analysis. The objective of the first phase was to justify that our proposed measurement scales and variables are reliable for the purpose of the study.

3.8.2 Testing of Hypotheses

The second phase of data analyses was objectively used for testing the hypotheses. Data collected from the first respondent, that is, organizational justice experts/researchers was analyzed using one-sample t-test. While, data collected from the last two respondents, that is, head of department, and faculty members was analyzed via simultaneous equation modeling (SEM), using SPSS 21 version.

The theoretical framework given in figure 2.4 reflects the relationship between different dimensions of organizational justice, overall organizational justice, employee's attitudes and behavior; such that organizational justice and its dimensions are hypothesized to have impact on overall OJ and employees' JS and that in turn have an impact on employee's performance (OCB). This framework covers multi-level form of analysis, from the organizational level (organizational justice and its major dimensions), to individual level (employee's JS) and behavior (OCB). Hence, multi-level techniques were required, such as, repeated measures regression and hierarchical modeling (Wright & Boswell, 2002). Similarly, other researchers like, Gerhart, (2007) have also suggested that simultaneous equation models (SEM) provide a more practical picture of this kind of relationship. Moreover, (SEM) is more useful when testing path analysis and intervening variables (Katou, 2012). Hence, SEM was considered more appropriate to test the hypotheses of this study.

Chapter 4

Results and Discussion

4.1 Introduction

This chapter provides the results of the statistical analysis along with interpretation and discussion. As discussed in the immediate preceding chapter, this chapter covers a two-phase approach for data analysis. The first phase of the analysis was devoted for initial diagnostic tests which cover one sample t-test, reliability test, exploratory factor analysis, confirmatory factor analysis and normality test. The objective of the first phase of data analysis was to justify that our proposed measurement scales are reliable for the purpose of the study. The second phase of data analysis was then objectively used to test the hypotheses. The data was analyzed via simultaneous equation modeling (SEM), using SPSS 21 version. More specifically, sequential mediation model or three path mediated effect model was applied to test the mediating mechanism between organizational justice dimensions and employee's performance in terms of organizational citizenship behavior.

To evaluate the above mentioned relationship, data was collected from two types of respondents, namely, faculty members and head of department/dean. Data pertaining to OJ and employees' JS was collected from faculty members only to rate the actual prevailing conditions within the organization. While, follow-up data from the HOD was then collected to evaluate employee's performance in terms of OCB. Census method was used to collect data from all sixty nine (69)

universities operated in the private higher educational institutions of Pakistan. A total of 966 questionnaires were distributed equally between faculty members and their respective head of department/dean. 618 questionnaires were returned to the researcher, out of which 21 questionnaires were eliminated either due to the missing of faculty member's questionnaires or their respective head of department/dean questionnaires. Moreover, 4 questionnaires were also eliminated due to the missing of relevant dependent or independent variables data. Similarly, the data of 5 respondents was also omitted due to the lowest extreme values creating normality problem. Therefore, the final census size for testing was 588, creating a response rate of 60 percent. The data of all 588 respondents were merged together and treated as one dataset. However, before the OJ scale was distributed among the faculty members, it was first evaluated by the eminent researchers/experts in this field. The eminent researchers/experts feedbacks, in this regard, were analyzed both qualitatively and quantitatively. The descriptive statics applied to present demographic information of the eminent researchers/experts are presented in table (4.1).

4.2 Descriptive Statistics of Experts/Eminent Researchers

The eminent researchers knowledge on the area of interest is the most significant assurance of the quality input, so the eminent scholars/researchers/experts in the field of OJ were selected due to their unique expertise in this area (Stone-Fish & Busby, 1996). The information regarding the general demographics of the eminent researchers, including their gender, number of years of schooling, numbers of years of experience, and job title is given in table (4.1).

Table (4.1) reveals that 37 eminent researchers/experts provided their expert opinion on our proposed items included in the OJ scale. The panel of the experts was comprised of 31 (83.8 %) male researchers/experts and 6 (16.2 %) female researchers/experts. The large majority (97.29 %) of researchers/experts have

01	1 /	
Variables	Ν	%
Gender		
Male	31	83.8
Female	6	16.2
Total	37	100
Education		
MS	1	2.7
PhD	36	97.29
Years of Services		
5-10 years	6	16.2
11-15 years	9	24.3
16-20 years	4	10.8
21-25 years	9	24.3
26-30 years	2	5.4
31 and above	7	18.9
Total	37	100
Job Title		
Lecturer	4	10.8
Senior Lecturer	2	5.4
Assistant Professor	7	18.9
Associate Professor	5	13.5
Professor	17	45.9
Training Consultant	1	2.7
Chair of Business Ethics	1	2.7
Total	37	100

TABLE 4.1: Demographics of Experts/eminent Researchers

completed their PhD (21 years of education), with the exception of only one (2.7 %) who have completed his Master of Sciences (18 years of education). On the basis of years of experience, experts were divided into six categories. The result reveals that most (83.8%) of the researchers/experts have greater than 10 years

of experience, with the exception of small percentage (16.2 %) of researchers/experts who have less than or equal to 10 years of experience. A significant number (48.64 %) of eminent researchers have more than 21 years of experience with some researchers even greater than 31 years of experience (18.9 %). The average experience of the experts was 20.27, with SD = 10 years; the experts/researchers number of years of experience ranges between 5 and 40 years. The experts/researchers represented different job titles which consist of 4 (10.8 %) lecturer, 2 (5.4 %) senior lecturer, 7 (18.9 %) assistant professor, 5 (13.5 %) associate professor, 17 (45.9 %) professor, and 1 each (2.7 %) was training consultant and chair of business ethics. The findings indicate that large numbers of researchers have more than 20 years of experience; hence, their opinion would provide a deep insight of missing theories.

It is highly relevant to mention that 11 experts quickly responded to our email; 18 experts provided their opinion after first email reminder, while 8 provided their feedback after second email reminder. It took about four months to collect data from experts.

4.3 Experts Opinion

4.3.1 One Sample t-Test

In order to evaluate the researchers or experts opinion whether or not our propose items measures organizational justice and its major dimensions, 48 new questions (our proposed items) were tested. The results of expert's opinions were presented in two ways. First, the data of expert's opinions was tested via one sample ttest; one sample statistics & one sample test of the researchers/experts feedback are given in the Annexure table (4.1 and 4.2 respectively). The results, in this context, were than further explored using the comments provided by the eminent researchers/experts to identify the challenges and their appropriate solutions pertaining to our proposed items.

The researchers or experts opinion on all questions have appeared on positive side, that is, they were more inclined toward agreed side than disagreed. Moreover, with the exception of some items (EE4, DJ1, DJ2, PPJ1, SDM3, INFJ2), the meandifferences of the majority items are statistically significant at (p < 0.05). This indicate that the researchers or experts opinion are significantly away from the midpoint (= 3) than near-to 'Agreed' situation. As far as the insignificant mean differences of the stated six items are concerned, these items were rephrased as per the valuable comments and suggestion of eminent researchers/experts.

P-values in most of the cases are lower than 0.05, which help us to conclude that this sample does not belong to that population whose average is equal to three. Annexure table (4.2) further reflects that mean score of the responses of OJ researchers in most of the cases are greater than three with the exception of few cases. This indicates that eminent researchers/experts by and large agree with proposed additions in organizational justice dimensions. Therefore, hypothesis H_1 is accepted.

4.3.2 Experts Comments

In addition to above statistical evaluation, the expert's opinions were further explored using their important comments and suggestions. In this process, the questionnaire was changed time and again and some of the items were deleted all together, some were revised; while, some other items were replaced as per the comments of eminent researchers/experts. For example, some of the items deleted from the internal equity were;

Q5: "Does your pay open to all employees?"

Q6: "Does your pay raise open to all employees?"

The above two items were deleted due to the reasons that "it was difficult for the respondents to understand what open to all employees means". It is possible that these two items were not clear to the researchers and as a result, one expert advised;

"Not clear- need to be rephrased"

Similarly, another expert also mentioned that;

"I don't understand these items"

Likewise, the items of "need" were eliminated due to the reason that some experts believe that all organizations are required to consider employees needs and provide special favor when they are in dire need. In this regard, one of the experts explained;

"I'm not sure that this item is relevant-there is an assumption that all firms should behave this way".

On the basis of eminent researchers/experts opinions following three questions were eliminated.

Q1: "This organization extends helping hand to employees when they need a special favor".

Q2: "This organization understands employees needs and sanctions additional leave when required".

Q3: "This organization considers individual employee needs and offer salary beyond the market rate".

Similarly, four questions of global/overall justice were self prepared to measure overall organizational justice within the organization. The basic assumption was that overall organizational justice would mediate between four dimensions of OJ and employees attitude. However, one of the reputed researchers suggested that it would be better to replace your items with Ambrose & Schminke items. He suggested that;

"I would strongly suggest that you include some or all of the (Ambrose & Schminke, 2007) items".

Similarly, according to one of the experts:

"It appears that there is something going on in the overall judgments about organizational justice that is not captured fully by the four components or by an overall index representing the four components".

In light of the stated suggestions, the below mentioned four questions were replaced with (Ambrose & Schminke, 2007) items" Q1: "This organization distributes resources fairly".

Q2: "This organization implements procedure consistently".

Q3: "This organization treats people with respect".

Q4: "This organization share information right on the time".

Moreover, some of our items in initial questionnaire were in question form; while some others were in statement form and our scale was anchored between strongly disagree to strongly agree (5 point Likert scale). In this context, researchers/experts suggested applying continuous statement instead of interrogative statement, as it does not fit with the Likert scale. Several researchers/experts suggested that: "Change your items so that they get phrased in a continuous manner", such as, "to what extent has your supervisor treated you with respect".

In this connection, one of the experts also advocated that:

"I think the items should be rephrased - particularly if the 5-point scale is agreed vs. disagree as given in the scale".

Another expert/researcher also advised that:

"Since you are using "agreement scale" (1 - strongly disagree, 5 - strongly agree) - it is advisable to ask questions in a statement form rather than question form.

Keeping in mind the valuable suggestions of experts/eminent researchers, all items were rephrased to continuous statement. Further, instead of using both questions and statement, only statements have been applied throughout the scale. This brings more clarity and continuity in our scale, and items are good fit with the Likert scale.

Furthermore, some of our items in initial questionnaire were double barreled questions. As double barrel questions would require two separate answers in a single question, therefore, if a respondent agrees with the statement, does it mean agree with the first or second question or agree with both? Many researchers/experts suggested avoiding double barreled/compound items. Some of the double barreled questions included in our study were; Q1: "This organization has formal system of information sharing, and it follows that system".

Q2: "This organization has formal system of information sharing, but it usually does not follow that system".

In this regard, some of the experts' suggestions were more attracting, as indicated in the below mentioned comments:

Expert number (30) commented that:

"Avoid compound questions, which require two separate answers in a single statement".

Another expert simply replied:

"Double barreled questions are not recommended".

According to expert (23):

"Some items are double-barreled and I would suggest to divide them into two items".

Moreover, our self prepared items on equality (second sub dimension of distributive justice) as usual were having no internal or external element. However, one of the experts also suggested that just like equity (first sub dimension of distributive justice); equality could also have internal and external elements. On the basis of his recommendation, the items of equality were than divided into internal equality and external equality. He proposed that:

"This sub-dimension could have an external or internal element. The remaining three items likely are internal elements (i.e., punishment, workload distribution, and opportunities)".

The evaluation of experts/researchers comments thus suggests that, although majority of experts/researchers are in agreement with the positive side of a number of our proposed items (p < 0.05); however, they did identified some errors in our initial questionnaire. Thanks to their time and commitment, we have rectified the errors according to their comments & suggestions, to make OJ capable enough to fulfill the gaps in existing OJ scales. The results, however, suggest that experts by and large agree with our proposed additions in existing OJ scales, indicating that there was a need of a scale which could cover the missing dimensions of OJ to make it a comprehensive system of service, capable of yielding desired outcomes. After incorporation of changes the final improved version of questionnaire was distributed among faculty members of private higher educational institutions of Pakistan.

4.4 Exploratory Factor Analysis (EFA)

Exploratory factor analysis (EFA) was used to evaluate whether there exist homogenous groups of variables that can lead to separate constructs of organizational justice or not. EFA was applied using the principal component analysis with a varimax rotation. Using factor analysis, 71 items were reduced to five components. The decision of how many factors to be extracted was based on fixed number of factors. The results of the factor analysis are given in Annexure table (4.3), and figure (4.1).

The appropriateness of the data was analyzed using the Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity to ensure that the data is reliable for factor analysis. Some of the researchers (Tabachnick and Fidell, 1996) suggest that the value of KMO should be greater than or equal to 0.60. Our KMO value equal to 0.892 and Bartlett's test of sphericity test equal to (0.000), suggesting that our data is suitable for factor analysis.

TABLE 4.2: KMO and Bartlett's Test

Kaiser-Meyer-Olk	0.892	
Bartlett's Test of	Approx. Chi-Square	17599.363
Sphericity	Df	1711
	Sig.	0.000

To decide whether an item should be included in a factor or not was based on the criteria of eigen value and factor loading. The factors with eigen value greater than or equal to one along with the support of scree plots were considered. Further, as reported by some scholars (Hair et al. 1998), a factor loading of 0.3 is the minimum level; 0.40 are important and 0.5 and above are significant. They also suggested that a factor loading of 0.30, 0.35, and 0.40 are required for a sample size of 350, 250, and 200 respectively. However, a factor loading of 0.40 was selected irrespective of census size (588), to ensure high level of significance. Therefore, all those items having value greater than or equal to 0.40 were retained; while, items having value lower than 0.40 were eliminated. In this regard, two items of neutrality (N1 & N2), three items of consistency (CN1, CN2, CN3), two items of bise suppression (BS2 & BS3), and one items each from process procedural justice (PPJ3), right of appeal (ROA1), external equality (EEQL2), advance notice (AN1) and procedural justice (PJ2) were removed due to their low eigen values or factor loading was less than 40 percent. With the exception of only one item (external equality), majority of the items (12) were removed from proceedural justice.

Annexure table (4.3) provides information pertaining to the total variance explained by our five components. The first component explains 16.78 % of the data, while the second, third, fourth and fifth component explains 15.83 %, 13.59%, 9.5%, and 8.613% data, respectively. Moreover, table (4.3) reports the results of rotated component matrix along with their factor loading, wherein 59 items have been grouped into five components. The factor loading of individual variable is greater than 0.40; and the overall factor loading is greater than 0.70; suggesting that our factors are reliable.

Factor					
Items	INPJ	DJ	PPJ	INFJ	RPJ
IM2	.871				
INPJ4	.853				
IM4	.849				
INPJ3	.815				
IM3	.795				
INPJ2	.780				

TABLE 4.3: Rotated Component Matrix

Continued on the next page...

Items	INPJ	DJ	PPJ	INFJ	RPJ
IC4	.732				
IC3	.731				
INPJ1	.715				
IM1	.699				
IS3	.689				
IC1	.681				
IC2	.660				
IS4	.608				
IS1	.589				
IS2	.589				
EE2		.840			
EQT1		.833			
EQT2		.817			
IEQL3		.802			
EE4		.794			
IE3		.783			
IE2		.779			
IEQL2		.768			
IE1		.744			
IE4		.743			
EE3		.742			
DJ1		.720			
DJ2		.715			
IEQL1		.714			
EEQL1		.654			
EE1		.608			
PPJ2			.897		
DE1			.887		
DE3			.835		

 Table 4.3: Rotated Component Matrix (contd...)

Continued on the next page...

Items	INPJ	DJ	PPJ	INFJ	RPJ
DE2			.805		
FH2			.765		
FH3			.739		
AN3			.720		
PPJ1			.707		
AN4			.694		
FH1			.676		
AN2			.644		
UC2				.869	
INFJ1				.802	
INFJ2				.780	
DC4				.689	
DC1				.687	
DC3				.676	
UC3				.672	
DC2				.642	
UC1				.572	
PJ1					.832
SDM3					.797
SDM2					.787
ROA3					.769
BS1					.766
ROA2					.757
SDM1					.732

Table 4.3: Rotated Component Matrix (contd...)

Note. DJ=distributive justice, PPJ=process procedural justice, RPJ=rater procedural justice, INPJ=interpersonal justice, INFJ=informational justice.

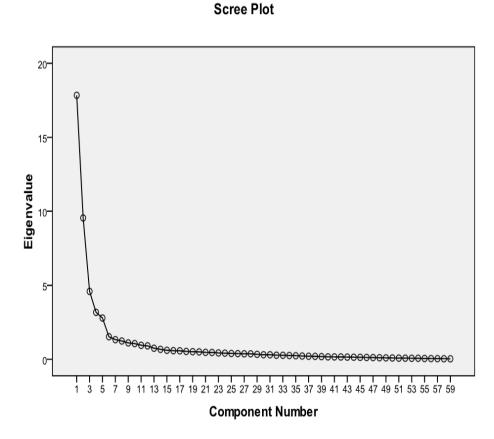


FIGURE 4.1: Scree Plot showing EFA for organizational Justice-dimensions.

On the basis of theory, the above mentioned five factors were extracted using varimax method. The scree plot provided in figure (4.1) also support to the five factor model for the concept of organizational justice.

The results of factor analysis are in compliance with the expert opinions in all dimensions and sub-dimensions of organizational justice, with the exception of only rater procedural justice. Eminent scholars/experts agree with our suggestion that procedural justice may be better conceptualized through two of its sub-dimensions, such as, process procedural justice and rater procedural justice. However, factor analysis suggests that they are two distinct dimensions of organizational justice. The results of factor analysis are in line with the recommendations of contemporary researchers (Erdogan, Kraimer, and Liden, 2001; Nabatchi, Bingham, and Good, 2007), that overall procedural justice should be divided into two different types; namely, process procedural justice and neutrality of managers/rater procedural justice. Therefore, process procedural justice and neutrality of managers/rater procedural justice have been separately used as two distinct dimensions of organizational justice in subsequent analysis, their interpretation and discussion.

4.5 Confirmatory Factor Analysis (CFA)

In social sciences, mostly researchers have to measure some latent variables which are not easier to measure directly; therefore, some aspects of the same latent variables are measured in order to figure out the measures which are reflecting the latent variable (Field, 2005). Factor analysis is a technique which is used for identifying groups and cluster of variables as well as understanding the structure is mainly utilized in social sciences. Mostly, EFA and CFA are conducted for this purpose, where EFA is conducted with the intention to explore the dimensions within given data set, while, CFA is used to test the hypothesized factor structure (Field, 2005; Hair et al., 1998). In other words, EFA determines the factor structure, while, CFA confirms the factor structure. In line with the convention, first EFA was conducted on the data which showed the five dimensions of the organizational justice construct. After conducting the EFA, next step was to conduct the CFA to validate the factor structure.

CFA is mostly used to assess the construct validity under investigation (Field, 2005). The statistical procedure CFA assesses whether the measurement model describes adequately the relationship between the latent factors (construct not directly observable) and their indicator variables (observable) (Field, 2005; Bagozzi, Yi and Philips, 1991). In CFA, model fitness refers to the degree to which the hypothetical factor model, which is developed matches with the data collected (Field, 2005). If the model shows a good fitness, it means that the developed model is good description of the reality. The existence of the proposed associations among different concepts established via goodness-of-fit indices is known as the nomological validity (Lages, 2000).

In CFA a lot of measurement can be used to evaluate the model fit however this study used the χ^2/df , goodness of fit index (GFI), Incremental fit index (IFI), Root mean squared-error of approximation (RMSEA), and comparative fit index (CFI), only. The χ^2/df statistics was chosen because it compensates for the small size problems associated with using only χ^2 statistics as χ^2 is found to be more sensitive to sample size. As suggested by Arbuckle (1997), an arbitrary ration of two for χ^2/df was taken as an indication of good fit. The CFI, IFI, and GFI were also chosen since they compare the fit of a model to a baseline model. The baseline model is usually the one with no covariance between the variables (Bentler, 1990). The value of CFI, IFI, and GFI shows a better fit if they are in closer to 1.00; however, 0.90 are also usually taken as an arbitrary indicator of a good fit (Hu and Bentler, 1999). RMSEA was another indicator used in the current study. It calculates the fit of the model to a baseline population covariance matrix (Brown & Cudeck, 1993). The differences among the models of the fit are reported relative to the degrees of freedom. For better fit, the value of RMSEA should be closer to zero, however, Browne and Cudeck (1993) suggests that values over 0.10 indicate a poor fit; between 0.08 and 0.10, a moderate fit; between 0.05 and 0.08, a reasonable fit; and less than 0.05 are taken to be a good fit. Some paths were conveniently fixed to 1 to achieve the identification.

To validate the factor structure, five separate models were run. In first model, all items were loaded on single factor of overall justice. Similarly, the number of factors were kept increasing as in model 2, there were two factors namely distributive justice and procedural justice were used. In model 3, three factors namely distributive justice, procedural justice, and interactional justice were utilized. In model 4, four factor structure namely distributive justice, procedural justice, interpersonal justice, and informational justice were tested. And finally, in model 5, five factor structure given in table (4.3) was tested. In summary, the model fitness was based on these values $\chi^2/df < 2, CFI > 0.90, IFI > 0.90, GFI > 0.90$, and RMSEA < 0.10. The summary results of the models are given in the table (4.4). Overall, based on the comparison of fitness indices of five models (table 4.4), it is clear that five factor model given in figure (4.2) is better than the rest

Model	$\chi^2/df < 2$	CFI > 0.90	IFI > 0.90	GFI > 0.90	RMSEA < 0.10
1	8.08	0.320	0.322	.237	.156
2	6.35	0.486	0.488	0.330	0.135
3	5.20	0.596	0.598	0.438	0.120
4	4.42	.672	0.673	0.502	0.108
5	3.57	0.755	0.756	0.604	0.094

TABLE 4.4: Comparison of Five Factor Models

of the model. In first model, only single dimension of organizational justice was hypothesized while model fitness shows that this solution is not acceptable $(\chi^2/df = 8.08, CFI = .320, IFI = 0.322, GFI = 0.237, \text{ and } RMSEA = 0.156).$ In second model, only two dimensions of organizational justice were hypothesized while data also showed poor fit to this model $(\chi^2/df = 6.35, CFI = 0.486, IFI =$ 0.488, GFI = 0.330, and RMSEA = 0.135). Similarly, in third model, three dimensions of organizational justice were used, while, data also did not show that this is a fit model $(\chi^2/df = 5.20, CFI = 0.596, IFI = 0.598, GFI = 0.438, and$ RMSEA = 0.120). In fourth model, four dimensions of organizational justice were used and this model also showed poor fit $(\chi^2/df = 4.42, CFI = 0.672, IFI =$ 0.673, GFI = 0.502, and RMSEA = .108). Finally, in model five, the five dimensions of organizational justice as explored in EFA were used, the fitness certainly improved, however, the five factor solution is moderate fit as its fit indices indicates $(\chi^2/df = 3.57, CFI = 0.755, IFI = 0.756, GFI = 0.604, \text{ and } RMSEA = 0.094).$ The five factor solution model is comparatively better fit and overall result indicates that as dimensions were increased, the model fitness increased as well. This suggests that there may be possibly other dimensions of organizational justice which are not yet developed in literature. For the fifth model, the individual factor loadings are also given in Annexure (4.4) and figure (4.2), which shows that all items load significantly on their respective factor (most factor loadings were above 1).

Table 4.5 provides the correlations coefficient of organizational justice dimensions and its outcomes, such as, employee's attitude and behavior. Table 4.5 also reflects

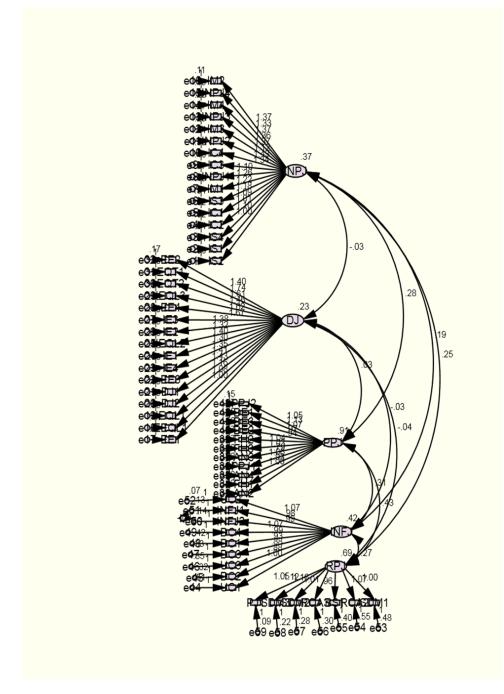


FIGURE 4.2: Five factor model of organizational justice.

that 20 out of 28 OJ-outcomes correlation coefficient were statistically significant. Hence, organizational justice measures possess a good degree of predictive validity. The first column of Table 4.5 illustrates reliability analysis, which is presented in the following section.

4.6 Reliability Test

The respondent's feedback on all eight dimensions (DJ, PPJ, RPJ, INPJ, INFJ, OJ, ATT & OCB) were individually evaluated through SPSS for reliability test; the Cronbach's alphas estimated were as under;

Construct	α	М	S.D	1	2	3	4	5	6
DJ	0.966	3.37	0.874	1					
PPJ	0.952	3.80	0.932	0.087	1				
RPJ	0.964	3.96	0.893	-0.036	0.500^{*}	1			
INPJ	0.950	4.02	0.722	-0.045	0.413^{*}	0.389^{*}	1		
INFJ	0.926	4.08	0.604	-0.076	0.405^{*}	0.419*	0.391^{*}	1	
OJ	0.888	4.06	0.586	-0.024	0.488^{*}	0.464^{*}	0.450^{*}	0.728^{*}	1

TABLE 4.5: Cronbach's Alpha & Correlation coefficient

Note. DJ=distributive justice, PPJ=process procedural justice, RPJ=rater procedural justice, INPJ=interpersonal justice, INFJ=informational justice, OJ=organizational justice, JS=job satisfaction, α =cronbach alpha,

 ${\rm M}{=}{\rm mean},$ ${\rm SD}{=}{\rm standard}$ deviation

The reliability results of our all six dimensions (DJ, PPJ, RPJ, INPJ, INFJ, & OJ) are near to one, which indicates that these measures provide good results (Table 4.5). Sekaran (2003) mentioned that Cronbach's alpha near to one is better. Generally, the Cronbach's alpha less than 0.60 is considered to be poor; its value in between 0.60 to 0.70 are acceptable, while reliability over 0.80 and 0.90 are good and very good. Similarly, the mean value of DJ, PPJ, RPJ, INPJ, INFJ and OJ were estimated at 3.37, 3.80, 3.96, 4.02, 4.08, and 4.06 respectively. Likewise, the standard deviation of DJ, PPJ, RPJ, INPJ, INFJ, and OJ, was 0.874, 0.932, 0.893, 0.722, 0.604, and 0.586, respectively. Table (4.5) also illustrate that the correlation coefficients are highly significant but not too strong among different dimensions, indicating that they are under the tolerable limit.

4.7 Normality Test

The normality of the data was assessed both graphically and numerically through SPSS 21 version. Five outliers were identified on the basis of extreme values, and as a result the respondents having lowest extreme values were eliminated. Annexure (4.5) helps us to identify extreme values in both lowest and highest cases. Respondents having highest values are logically acceptable here, but the value of some of the respondents, such as, 228, 31, 196, 253, and 198 are very low. The data of aforementioned five respondents was omitted due to their lowest extreme values and normality was than tested.

TABLE 4.6: Test of Normality

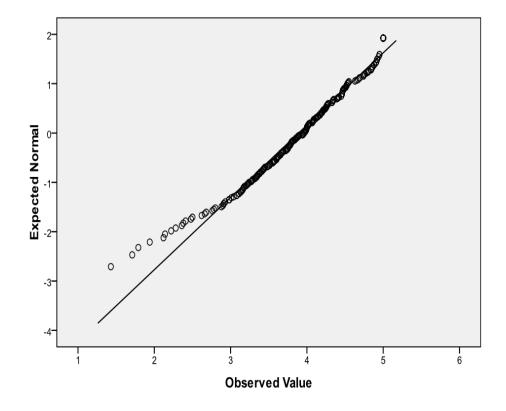
Kolmogorov-Smironov Shapiro-Wilk							
	Statistic	Df	Sig.	Statistic	df	Sig.	
OCB	.052	294	.052	.970	294	.000	

Note. OCB=organizational citizenship behavior

Table (4.6) indicates that organizational citizenship behavior was significant in first test, however, the second test could not provide significant results. Generally, the results suggest that data for organizational citizenship behavior largely falls in the normal distribution. However, it is yet to be seen whether the same pattern follows graphically?

The data of organizational citizenship behavior show that with the exception of some cases in beginning and at the end the data mostly follows the straight line. The same pattern is also reflected in Normal Q-Q Plot given in figure (4.5). The detrended Normal Q-Q Plot, given in figure (4.6) further suggest that the data of organizational citizenship behavior mostly follows normally distribution.

On the basis of both graphical and numerical test it is concluded that our data regarding organizational citizenship behavior follows normal distribution. However, it is yet to be tested whether our data is plagued with multicollinerity problem or not. For this purpose, a series of tests were applied which are presented in below-mentioned section.



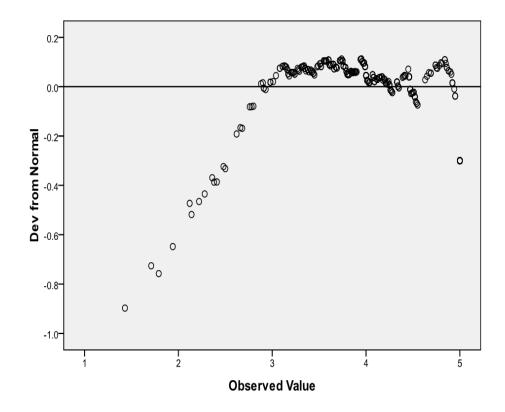
Normal Q-Q Plot of OCBM

FIGURE 4.3: Normal Q-Q Plot of OCB

4.8 Detection of Multicollinearity

Multicollinearity is not an issue pertaining to model specification or its estimation, rather it is an issue arising from the nature of data, and more specifically it exists when one independent variables affects another independent variable. According to Gujrati (2004), multicollinearity is a problem arising from the nature of data, which may lead to high R^2 , few significant variables, and ordinary least square estimator (β), and t-statistics are sensitive to small changes.

Moreover, (Gujrati, 2004) have referred many approaches used to test the level of multicollinearity; however, correlation between independent variables, tolerance & VIF, and eigen values and CI, were used to test the degree of multicollinearity.



Detrended Normal Q-Q Plot of OCBM

FIGURE 4.4: Detrended Normal Q-Q Plot of OCB

4.8.1 Using Correlation Between Independent Variables

The findings of correlation between independent variables are provided in table (4.7); it reflects that RPJ is significantly correlated with PPJ. INPJ is significantly correlated with PPJ, & RPJ; while, INFJ is significantly correlated with PPJ, RPJ, & INPJ.

The criterion of 0.80, as suggested by some researchers was used to identify whether the independent variables are plagued with the problem of multicollinearity (Gujarati, 2004). Our results reflect the correlation coefficients of independent variables are not equal to or greater than 0.80. So, on the basis of correlation test, we may conclude that the problem of multicollinearity does not exist in our data.

	DJ	PPJ	RPJ	INPJ	INFJ
DJ	1				
PPJ	.087	1			
RPJ	036	.500**	1		
INPJ	045	.413**	.389**	1	
INFJ	076	.405**	.419**	.391**	1

TABLE 4.7: Results of Correlations

Note. DJ=distributive justice, PPJ=process procedural justice, RPJ=rater procedural justice, INPJ=interpersonal justice, INFJ=informational justice

4.8.2 Eigenvalues and CI

Likewise, collinearity diagnostics were used to test whether multicollinearity exist in our data or not. Collinearity diagnostics include conditions index (CI) and eigen values; the rule of thumb for the use of CI (Gujarat, 2004) is that, multicollinearity would be moderate to strong, when CI falls within a range of 10 to 30; and It would be severe, when CI exceeds 30.

Dimension EV	FV	CI	Variance Proportions					
	Ľv		(Constant)	DJ	PPJ	RPJ	INPJ	INFJ
1	5.848	1.000	.00	.00	.00	.00	.00	.00
2	.070	9.167	.00	.65	.04	.06	.01	.00
3	.032	13.458	.05	.07	.67	.01	.09	.05
4	.025	15.369	.00	.04	.23	.90	.12	.01
5	.017	18.748	.06	.05	.02	.04	.73	.33
6	.009	25.796	.88	.19	.04	.00	.05	.61

TABLE 4.8: Collinearity Diagnostics

Note. Dependent variable= OJ, DJ=distributive justice, PPJ=process procedural justice, RPJ=rater procedural justice, INPJ=interpersonal justice, INFJ=informational justice, OJ=organizational justice The findings provided in table (4.8), indicates that CI of our independent variables ranges between 9 to 25; so on the basis of CI we may suspect that our model is plagued with moderate to strong multicollinearity with respect to PPJ, RPJ, INPJ, and INFJ. However, it is yet to be checked with tolerance and VIF to confirm whether or not the model is plagued with the problem of multicollinearity.

4.8.3 Tolerance and VIF

In addition to prior two tests, multicollinearity was also tested through tolerance and VIF. Tolerance ranges between zero and one, that is, 0 < TOL < 1; thus the closer is tolerance to zero, the greater the level of multicollinearity of that independent variable with other independent variables or when tolerance is closer to 1, there is clear evidence of no multicollinearity of independent variable with other independent variables. Moreover, some researchers suggest that the threshold for multicollinearity is that VIF should be lower than 10 and tolerance value should be greater than 0.10 (Katsikea et al., 2005; Hair et al., 2010).

The results presented in table (4.9), reflects that TOL of our independent variables 0.654 to 0.972. TOL of our all independent variables are greater than 0.10; hence, on the basis of TOL we conclude that our model is not plagued with the problem of multicollinearity. In the same token, VIF value of our explanatory variables ranges between 1.029 - 1.52; indicating that our explanatory variables are not correlated with one another.

4.9 Descriptive Statistics of Respondents

The results pertaining to the general demographics of the faculty members participated in this research is provided in table (4.10). It includes participant's age, their levels of education, and numbers of years of experience. This table reflects that in total 294 faculty members responded to the questionnaire whose average age was 32.88 years and a standard deviation (SD) of 8.96; the faculty member's age ranged between 23 and 65 years. The faculty members levels of education is

	Unstandardized		zed Standardized			Collinea	rity
Model	Coefficients		efficients Coefficients		Sig.	Statisti	cs
Widdei	В	Std. Error	Beta			Tolerance	VIF
(Constant)	.713	.194		3.681	.000		
DJ	.011	.025	.016	.418	.676	.972	1.029
PPJ	.096	.029	.153	3.297	.001	.654	1.529
RPJ	.064	.030	.097	2.129	.034	.672	1.489
INPJ	.100	.035	.124	2.849	.005	.745	1.342
INFJ	.561	.043	.578	13.193	.000	.730	1.369

TABLE 4.9: Tolerance and VIF Results

Note: Dependent variable= organizational justice, DJ=distributive justice,

PPJ=process procedural justice, RPJ=rater procedural justice,

INPJ=interpersonal justice, INFJ=informational justice

averaged at 17.50 years, with SD= 1.65 years; the level of education ranges between 16 and 21 years. The participants on average have 5.8 years of experience, with SD = 5.20 years; the participants have number of years of experience between a minimum-maximum range of 1.5 and 32 years.

TABLE 4.10: Demographics of Respondents

	Ν	Min	Max	Mean	S.D.
Age	294	23	65	32.88	8.96
Education	294	16	21	17.50	1.65
Experience	294	1.50	32	5.8	5.20

Further, table given in Annexure (4.6) reflects that out of 294 participants, 125 female faculty members and 169 male faculty members participated in this survey with a response rate of 42.5 and 57.48 percent, respectively. While, table provided in Annexure (4.7) reveals that the sample was consist of 64 Assistant Professor, 19 Associate Professor, 190 lecturers, and 21 Professor. Moreover, the information provided in Annexure (4.8) further reveals that 132 faculty members have sixteen years of education, 123 faculty members have completed eighteen years of education, while the remaining 39 faculty members have completed their 21 years of education.

4.10 Structural Equation Modeling (SEM)

In this study, structural equation model was applied to test the relationship between organizational justice dimensions and employee performance through mediating mechanism of overall OJ and JS. Further, organizational size was used as moderating variable in the stated relationship. To test the stated relationship, five specific models were used, which are as under;

$$DJ = \beta_0 + \beta_1 EQT + \beta_2 EQL + e \tag{4.1}$$

$$PPJ = \beta_0 + \beta_1 AN + \beta_2 FH + \beta_3 DE + e \tag{4.2}$$

$$RPJ = \beta_0 + \beta_1 SDM + \beta_2 BS + \beta_3 ROA + e \tag{4.3}$$

$$INPJ = \beta_0 + \beta_1 IS + \beta_2 IC + \beta_3 IM + e \tag{4.4}$$

$$INFJ = \beta_0 + \beta_1 DC + \beta_2 UC + e \tag{4.5}$$

Where $\beta_0 = a$ constant; $\beta_1 \beta_2 \beta_3 = the$ independent variable effect on dependent variable; and e = the error term.

In the first model (4.1), distributive justice (DJ) was regressed on independent variables equity (EQT), and equality (EQL). The results are provided in table (4.11).

	Unstandardized		Standardized		
Model	Coefficients		Coefficients	t	Sig.
	В	Std. Error	Beta		
Constant	.434	.197		2.198	.029
EQT	.419	.071	.389	5.897	.000
EQL	.400	.079	.334	5.061	.000

TABLE 4.11: EQT & EQL contribution in DJ

Note: Dependent variable= distributive justice,

EQT=equity, EQL=equality

 $F = 123.79(p=0.000), R^2 = 0.46, R^2 \text{ adjusted} = 0.456$

Table (4.11) reflect that overall model is statistically significant (F = 123.79, p < 0.01), and 46 percent changes in distributive justice has been explained by equity and equality ($R^2 = 0.46$). P-value of individual variable reflect that, both equity and equality turned out to be statistically significant, with equity variable has slightly larger contribution ($b_1 = 0.419, p < 0.001$), as compared to equality ($b_2 = 0.400, p < 0.001$). These results reflect that variables equity and equality have positive and significant contribution towards measuring of distributive justice. Therefore, hypotheses H_2 is accepted.

	Unst	andardized	Standardized			
Model	Coefficients		Coefficients	\mathbf{t}	Sig.	
	В	Std. Error	Beta			
Constant	.401	.072		5.552	.000	
AN	.421	.027	.500	15.393	.000	
$_{\rm FH}$.369	.049	.395	7.536	.000	
DE	.102	.052	.116	1.961	.051	

TABLE 4.12: AN, FH & DE Contribution in PPJ

Note: Dependent variable=PPJ, PPJ=process procedural justice,

AN=advance notice, FH=fair hearing, DE= decision based on evidence.

 $F = 829.97 (p=0.000), R^2 = 0.896, R^2 adjusted = 0.895$

Table 4.12 shows the results of process procedural justice (PPJ). F = 829.970, p < 0.01, indicate that model is statistically significant. $R^2 = 0.896$ reflect that 89.6 percent variation in the dependent variable process procedural justice is due to advance notice, fair hearing, and decision based on evidence. The p-values of individual variables suggest that all three variables largely contribute in the process procedural justice. The first two variables significantly contribute ($b_1 = 0.421, p < 0.001, b_2 = 0.369, p < 0.001$) in the process procedural justice, while later variable moderately contribute towards PPJ ($b_3 = 0.102, p = 0.051$). The survey shows that variable advance notice, fair hearing, and decision based on evidence have significant and positive contributions in process procedural justice. Therefore, hypotheses H_{3A} is accepted.

	Unst	andardized	Standardized		
Model	Coefficients		Coefficients	\mathbf{t}	Sig.
	В	Std. Error	Beta		
Constant	.214	.034		6.216	.000
SDM	.588	.012	.633	48.331	.000
BS	.372	.012	.424	32.316	.000

TABLE 4.13: SDM & BS contribution in RPJ

Note: Dependent variable= RPJ, RPJ=rater procedural justice, SDM=selection of decision maker, BS=bise suppression $F= 6265.114 \ (p=0.000), R^2= 0.977, R^2 \ adjusted = 0.977$

In model 4.3 RPJ was regressed on SDM, and BS. Results are provided in table (4.13).

The results provided in table (4.13) indicate that the model as a whole was statistically significant (F = 6265.114, p < 0.01). $R^2 = 0.977$ suggest that 97.7 percent variations in the RPJ has been explained by explanatory variables SDM and BS. Both variables have considerable contributions towards RPJ. SDM have a little large contribution ($b_1 = 0.588, p < 0.001$) than BS ($b_2 = 0.372, p < 0.001$). The findings suggest that variables SDM and BS positively contribute towards measuring of RPJ. It is however, important to note that right of appeal was excluded by the model itself.

In model 4.4, INPJ was regressed on IS, IC, and IM. Results are given in table (4.14).

It can be seen from table (4.14), that F = 489.214, p < 0.01, which reflect that overall model is significant. Similarly, $R^2 = 0.835$ suggest that 83.5 percent variation in the interpersonal justice is due to interaction of employees with supervisor, interaction with colleagues, and interaction with top management. Results reflect that all three factors of interpersonal justice have statistically significant contributions towards interpersonal justice. Interaction with top management factor has the greatest contribution ($b_3 = 0.346, p < 0.001$), followed by interaction with supervisor ($b_1 = 0.262, p < 0.001$) and interaction with colleagues

	Unst	andardized	Standardized		
Model	Coefficients		Coefficients	t	Sig.
	В	Std. Error	Beta		
Constant	.597	.093		6.430	.000
IS	.262	.032	.295	8.213	.000
IC	.240	.038	.283	6.376	.000
IM	.346	.039	.417	8.884	.000

TABLE 4.14: IS, IC, & IM contribution in INPJ

Note: Dependent variable= INPJ, INPJ=interpersonal justice, IS=interaction with supervisor, IC=interaction with colleagues,

IM=interaction with top management.

F = 489.214 (p=0.000), $R^2 = 0.835$, R^2 adjusted = 0.833

 $(b_2 = 0.240, p < 0.001)$. Results suggest that variables interaction with supervisor, interaction with colleagues, and interaction with top management have significant positive contributions towards measuring of interpersonal justice. Therefore, hypotheses H_4 is accepted.

Model 4.5 measures informational justice (INFJ) through both downward (DC) and upward communication (UC).

	Unstandardized		Standardized	t	Sig.
Model	Coefficients		Coefficients		
	В	Std. Error	Beta		
Constant	.922	.106		8.721	.000
DC	.344	.039	.392	8.886	.000
UC	.454	.037	.538	12.193	.000

TABLE 4.15: DC & UC contribution in INFJ

Note: Dependent variable= INFJ, INFJ=informational justice, DC=downward communication, UC=upward communication $F= 471.264 (p=0.000), R^2= 0.764, R^2 adjusted = 0.762$ The findings of table (4.15) reflects that overall model was significant (F = 471.264, p < 0.01); $R^2 = 0.764$ indicates that 76.4 percent variation in the informational justice has been explained by DC and UC. Both variables significantly contribute towards overall INFJ. However, UC has slightly greater contribution ($b_2 = 0.454, p < 0.001$) than DC ($b_1 = 0.344, p < 0.001$). The findings indicate that variables DC and UC have positive and considerable contribution in measuring of INFJ. Therefore, hypotheses H_5 is accepted.

4.11 Mediating Effect of OJ and JS

This study hypothesized that organizational justice dimensions have positive and significant impact on overall OJ, which have significant affect on employees attitudes (job satisfaction), which in turn affect employees behavior. It is important to note that the overall OJ, and its outcomes, that is, JS were used as mediators. For this purpose, models 6 through 9 were used to measure the mediating mechanism between organizational justice dimensions and organizational citizenship behavior.

To test this assumption, the three-path mediation model of (Taylor, MacKinnon & Tein, 2007) was used to check the mediated effect of both overall OJ and JS. The SEM model, as suggested by (Taylor, MacKinnon & Tein, 2007) required the following specific econometric equations:

$$OJ = \beta_{01} + \beta_1 DJ + \beta_2 PPJ + \beta_3 RPJ + \beta_4 INPJ + \beta_5 INFJ + e_1$$

$$(4.6)$$

$$JS = \beta_{02} + \beta_6 OJ + \beta_7 DJ + \beta_8 PPJ + \beta_9 RPJ + \beta_{10} INPJ + \beta_{11} INFJ + e_2 \quad (4.7)$$

$$OCB = \beta_{03} + \beta_{12}DJ + \beta_{13}PPJ + \beta_{14}RPJ + \beta_{15}INPJ + \beta_{16}INFJ + \beta_{17}ATT + \beta_{18}OJ + e_3$$
(4.8)

In these equations, OCB is the dependent variable; DJ, PPJ, RPJ, INPJ, and INFJ are the independent variables, and overall OJ and employees' JS are the two mediators. In the sixth equation, $\beta_1 - \beta_5$ is the regression of overall OJ on independent variables (DJ, PPJ, RPJ, INPJ, and INFJ). In the seventh equation,

 b_6 is the regression of employees' JS on overall OJ (first mediator), and $\beta_7 - \beta_{11}$ is the regression of employees' JS on independent variables (DJ, PPJ, RPJ, INPJ, and INFJ). In the eighth equation, β_{17} is the regression of OCB on employees' JS (second mediator), $\beta_{12} - \beta_{16}$ is the regression of OCB on independent variables (DJ, PPJ, RPJ, INPJ, and INFJ), and β_{18} is the regression of OCB on OJ (first mediator). The constants in the 4.6, 4.7, and 4.8 equations, respectively, are β_{01} , β_{02} , and β_{03} , while, e_1 , e_2 , and e_3 are the error terms of equation 4.6, 4.7, and 4.8, respectively.

The direct effect of independent variables on dependent variable, controlling for both mediators, is $\beta_{12}\beta_{13}\beta_{14}\beta_{15}\beta_{16}$ in equation 4.8; while, the indirect effects was calculated as a result of multiplication of the coefficients estimated for each of the paths in the mediating mechanism (Alwin & Hauser, 1975). Therefore, the mediated effect, which is the indirect effect passing through mediator one and two, that is, overall OJ and employees' JS, is $(\beta_1\beta_2\beta_3\beta_4\beta_5\beta_6\beta_{17})$. In addition to equation 4.6, 4.7, and 4.8, (Taylor, MacKinnon & Tein, 2007) have also referred yet another equation, which is some time used for testing of mediation is the Baron & Kenny's first step, usually estimated in case of single mediator context (Baron & Kenny, 1986; Judd & Kenny, 1981). Baron and Kenny's first step requires that the total effect of independent variables (DJ, PPJ, RPJ, INPJ, and INFJ) on dependent variable should be significant, indicating that there is an effect that may be mediated.

$$OCB = \beta_{04} + \beta_{19}DJ + \beta_{20}PPJ + \beta_{21}RPJ + \beta_{22}INPJ + \beta_{23}INFJ + e_4 \quad (4.9)$$

It is, however, important to note that contemporary researchers (Taylor, MacKinnon & Tein, 2007; Kenny, 2012) in the field of mediation believe that this equation is not necessary to establish the mediation. Models 4.6-4.9 as proposed for sequential were tested using SPSS 21 version. The results of SEM are provided in table 4.16 to 4.19. In model 4.6, overall OJ was regressed on DJ, PPJ, RPJ, INPJ, and INFJ. The results are presented in table (4.16).

Model 4.6 incorporates the effects of five predicted dimensions of OJ to measure

Model	Unstandardized		Standardized	t	Sig.
Widder	Coefficients		Coefficients	U	518.
	В	Std. Error	Beta		
Constant	.176	.216		.817	.415
DJ	.038	.035	.038	1.064	.288
PPJ	.038	.031	.058	1.239	.216
RPJ	.029	.029	.043	.991	.322
INPJ	.091	.039	.103	2.357	.019
INFJ	.767	.050	.691	15.249	.000

TABLE 4.16: OJ Dimensions Contribution in Overall OJ

Note: Dependent Variable= OJ, DJ=distributive justice,

PPJ=process procedural justice, RPJ=rater procedural justice,

INPJ=interpersonal justice, INFJ=informational justice,

OJ=organizational justice

F = 106.31 (p=0.000), $R^2 = 0.649$, R^2 adjusted = 0.643

overall OJ, as suggested by Ambrose and Schminke (2009). The model as whole was significant (F = 106.631, p < 0.001), and DJ, PPJ, RJP, INPJ, and INFJ are collectively responsible for 64.9 percent changes in overall OJ ($R^2 = 0.649$). However, DJ ($b_1 = 0.038, p > 0.001$), PPJ ($b_2 = 0.038, p > 0.001$), and RPJ ($b_3 = 0.029, p > 0.001$) have statistically insignificant contribution; while, INPJ ($b_4 = 0.091, p < 0.05$) and INFJ ($b_5 = 0.767, p < 0.001$) have statistically significant contribution towards overall OJ. These results reflect that INPJ, & INFJ have significant positive contribution in measuring of overall OJ; while, DJ, PPJ, RPJ have insignificant contribution, which need special attention for overall organizational justice of Pakistani private sector higher educational institutional employees. Therefore, hypothesis H_{6A} is partially accepted.

However, somewhat different results were reported by (Ambrose and Schminke, 2009); they presented two different studies to test their hypotheses. In their first study, they found that all three dimensions (distributive justice, procedural justice, and interactional justice) significantly contribute towards overall OJ; while, in

their second study distributive justice was not contributing towards overall OJ. The possible explanation in differences of our results may be attributed to the context under which data was collected, which largely affects the results of the study.

In model 4.7, employees' JS was regressed on predicted value of DJ, PPJ, RPJ, INPJ, INFJ and OJ. The results are provided in table (4.17).

	Unstandardized		Standardized		
Model	Co	efficients	Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	2.75	.360		7.653	.000
DJ	083	.057	082	-1.455	.147
PPJ	048	.052	070	920	.358
RPJ	.017	.048	.025	.349	.727
INPJ	.108	.066	.119	1.634	.103
OJ	.354	.107	.277	3.321	.001

TABLE 4.17: The Mediating Effect of Overall OJ

Note: Dependent variable= JS, DJ=distributive justice, PPJ=process procedural justice, RPJ=rater procedural justice, INPJ=interpersonal justice, OJ=organizational justice, JS=job satisfaction. $F= 8.111 (p=0.000), R^2= 0.123, R^2 adjusted = 0.108$

The results suggest that the model as a whole is statistically significant (F = 8.111, p < 0.01), and $R^2 = 0.123$ suggest that 12.3 percent variations in the dependent variable employees attitude is due to DJ, PJ, RPJ, INPJ, and overall OJ. As per the condition set for contemporary mediation, overall organizational justice (OJ) variable is significant ($b_5 = 0.345, p = 0.001$); hence, it fulfills the requirements of mediation. Further, in compliance with mediation criteria, with the incorporation of 'overall organizational justice' (OJ), the significant variables are either no more significant or the contributions of independent variables DJ, PPJ, RPJ, INPJ have reduced from $b_1 = 0.038, b_2 = 0.038, b_3 = 0.029$, and $b_4 = 0.091$,

(Model 4.6) to $\beta_1 = -0.0831$, $\beta_2 = -0.048$, $\beta_3 = 0.017$, and $\beta_4 = 0.108$ (Model 4.7), respectively. Hence, overall OJ fulfils the criteria set for mediation analysis, and since variable INPJ is still significant at 10 percent level of significance, therefore, variable overall OJ is partially mediating. Results suggest that variable overall OJ positively contribute towards measuring of employees' JS. The results further reflect that organizational justice dimensions affect employees' JS through overall OJ. Thus, hypotheses H_{6B} is partially accepted. However, it is important to mention that INFJ was excluded by the model itself.

Our results are consistent with (Ambrose and Schminke, 2009) findings; they found that overall OJ mediates the relationship between different types of justice and employees' JS. It is important to note that overall OJ is partially mediating in our results; while, their results supported for full mediation. In addition, (Marzucco et al., 2014) also reported that overall OJ mediates between OJ dimensions and employees' JS.

Model 4.8 measures whether the predicted value of distributive justice (DJ), process procedural justice (PPJ), rater procedural justice (RPJ), interpersonal justice (INPJ), overall organizational justice (OJ), and employees' JS further determines organizational citizenship behavior (OCB). The stated independent variables were regressed on OCB; results are given in table (4.18).

The empirical results reflect that overall model is significant (F = 4.303, p < 0.01), and 5.6 percent changes in the dependent variable OCB is collective contribution of DJ, PPJ, RPJ, and employees's JS ($R^2 = 0.056$). Further, the individual contribution of employees' JS variable is significant ($b_4 = 0.628, p = 0.013$), which fulfills the criteria set for mediation. In line with mediation condition, with the incorporation of JS, the contributions of DJ, PPJ, and RPJ variables have reduced from $b_1 = 0.038, b_2 = 0.038$, and $b_3 = 0.029$, (Model 4.6) to $\beta_1 = -0.044, \beta_2 = 0.000$, and $\beta_3 = 0.036$, (Model 4.8), respectively. However, the last two variables (INPJ and overall OJ) were excluded from the later model due to high multicollinearity problem. Therefore, employees' JS also fulfils the criteria set for mediation analysis, and since all other variable are insignificant suggesting that the variable employees' JS is largely mediating. Results indicate that variable JS positively

	Unsta	ndardized	Standardize		
Model	Coe	Coefficients Coefficients		t	Sig.
	В	Std. Error	Beta		
Constant	1.246	1.031		-1.209	.228
DJ	-0.044	.072	-0.038	-0.616	.539
PPJ	0.000	.056	0.000	-0.014	.989
RPJ	0.036	.058	0.046	0.614	.540
JS	0.628	.251	0.195	2.506	.013

TABLE 4.18: The Mediating Effect of Employees' JS

Note: Dependent variable= OCB, DJ=distributive justice,

PPJ=process procedural justice, RPJ=rater procedural justice, JS=job satisfaction, OCB=organizational citizenship behavior.

 $F = 4.303 (p=0.005), R^2 = 0.056, R^2 adjusted = 0.043$

contribute towards determination of organizational citizenship behavior. The results also suggest that overall OJ affect employees' performance (OCB) through mediating mechanism of employee's attitudes. Therefore, hypotheses H_{6C} is partially accepted for existing and our proposed sub-dimensions data.

Model 4.9 measures whether the predicted value of distributive justice (DJ), process procedural justice (PPJ), rater procedural justice (RPJ), and interpersonal justice (INPJ) further determines organizational citizenship behavior (OCB). In model 4.9, the above stated independent variables were regressed to measure OCB; the findings are given in table (4.19).

The empirical results reflect that overall model was statistically significant (F = 3.85, p < 0.01); and $R^2 = 0.051$ indicate that 5 percent changes in the dependent variable is due to DJ, PPJ, RPJ, and INPJ. Most of the organizational justice dimensions have turned out to be statistically insignificant, with the exception of interpersonal justice (INPJ) variable ($b_4 = 0.332, p < 0.05$). Results reflect that with the exception of variable INPJ, other variables (DJ, PPJ, and RPJ) do not contribute in determination of OCB. Results also suggest that PPJ, and RPJ need special attention for organizational citizenship behavior of Pakistani private

Model	Unstandardized Coefficients		Standardize Coefficients	t	Sig.
	В	Std. Error	Beta		
Constant	3.313	.355		9.326	.000
DJ	091	.067	079	-1.354	.177
PPJ	.003	.057	.003	.047	.962
RPJ	.067	.055	.087	1.237	.217
INPJ	.151	.071	.146	2.128	.034

TABLE 4.19: The Direct Effect of OJ Dimensions on OCB

Note: Dependent variable= OCB, DJ=distributive justice,

PPJ=process procedural justice, RPJ=rater procedural

justice, INPJ=interpersonal justice,

OCB=organizational citizenship behavior

 $F = 3.850 (p=0.005), R^2 = 0.051, R^2 adjusted = 0.037$

higher educational institutions employees. Therefore, hypotheses H7 is partially accepted. Model 4.1-4.9 collectively answers our third research question, that is, the inclusion of such missing theories would contribute to yield desired outcomes in terms of employee's attitude and behavior.

4.11.1 Calculation of Total, Indirect and Direct Effect

Wherever researchers (Kenny, 2012) by and large suggest not to focus on traditional statistical significance testing of the estimated coefficients, they have also recommended more emphasis be given to total effect and its division into indirect $(b_1b_2b_3)$ and direct effect (c'); therefore:

Total effect = Direct effect + Indirect effect
$$(4.10a)$$

$$c = c' + b_1 b_2 b_3 \tag{4.10b}$$

Where, c is the total effect of explanatory variables on the dependent variable, c' is the direct effect of explanatory variables on dependent variable (controlling for both mediators), and $b_1b_2b_3$ is the mediated effect passing through mediator M1 (overall OJ), and M2 (employees' JS). It is highly relevant to mention that the equality of above mentioned equation holds only in certain conditions. More specific to structural equation modeling (SEM), equality holds in: (a) when (SEM) is used without latent variables; (b) when the same (SEM) models are used throughout the analyses; and (c) when the same covariates are applied in simultaneous equations. However, both sides of the equation are only approximately equal for (SEM) when latent variables are included in the model. Moreover, the total effect (c) should be computed through direct and indirect effect (c' + $b_1b_2b_3$), and not directly computed from equation one (Kenny, 2012). It is, however, required that the mediated effect be analyzed for its statistical significance via (i) causal steps tests, (ii) product of the coefficients test/Sobel test, (iii) difference in coefficient test and (iv) bootstrapping/resampling methods (MacKinnon et al., 2004).

The most contemporary approach to mediation analysis requires putting the values of direct effect (c') and indirect/mediated effect $(b_1b_2b_3)$ in above mentioned model, and solving it for total effect (c) (Kenny, 2012). The total effect is than divided in to indirect (b1b2b3) and direct effects (c') by applying the following formulas.

Direct effect(%) =
$$\frac{c'}{c} \times 100$$
 (4.11a)

Indirect effect(%) =
$$\frac{b_1 b_2 b_3}{c} \times 100$$
 (4.11b)

The values of c', $b_1b_2b_3$, required for the above mentioned models 4.10 and 4.11 (a - b), are provided in their respective models 4.6-4.9. It is, however, important to be mentioned that the contribution of our first three independent variables (DJ, PPJ, RPJ) in structural equation models seems either insignificant or holds negative signs, which suggest that these three variables are 'inconsistent candidate' for mediation analysis. Most recently, (Kenny, 2012) have discussed a number of reasons, which make a variable 'inconsistent candidate' for mediation. However,

the calculations made for direct and indirect effect are provided in Annexure table (4.9).

The direct and indirect effects have been computed using formulas 4.10 and 4.11 (a - b); the results of direct and indirect effects indicate that the direct effect of variable INPJ on OCB is 88.18 percent; while, the mediated effect of 'overall OJ' and employees's JS relative to this variable is 11.81 percent. To analyze whether or not our two mediators considerably mediates between organizational justice dimensions and OCB, researchers (MacKinnon et al., 2004; Kenny, 2012) generally suggest to test the mediated effect ($b_1b_2b_3$) through following tests.

- 1. Causal step test
- 2. Product of coefficient test/Sobel test
- 3. Difference in coefficient test
- 4. Resampling method/bootstraping

The first two tests have been applied here to check the mediated effect of overall OJ and employees' JS between organizational justice dimensions and OCB.

4.11.2 Causal Step Test

As one way to test H_0 : $b_1b_2b_3 = 0$, is to test $b_1 = 0, b_2 = 0$, and $b_3 = 0$. Most contemporary researchers (Kenny, 2012; Fritz and MacKinnon, 2007; Fritz, Taylor and MacKinnon, 2012) recommends that scholars use causal step test in combination with other tests, such as Sobel test.

Hypothesis H_0 : $b_1 = 0$ was substantiated in Model 4.6; which reflects that pvalue of DJ ($b_1 = 0.038$, p = 0.288), PPJ ($b_2 = 0.038$, p = 0.216), and RPJ ($b_3 = 0.029$, p = 0.322) are statistically insignificant, and that of INPJ ($b_4 = 0.091$, p = 0.019) and INFJ ($b_5 = 0.767$, p = 0.000), are statistically significant. Hypothesis $H_0: b_2 = 0$ was substantiated in Model 4.7; the results indicate that p-value of b_5 , relating to first mediating variable 'overall OJ', is statistically significant (0.001). Hypothesis H_0 : $b_3 = 0$ was also tested in Model 8; the results indicates that p-value of b_4 , relating to second mediating variable JS, is statistically significant (0.013). The causal step test help us to identify that, the mediated or indirect effect $(b_1b_2b_3)$ of variable INFJ appears to be strongly statistically significant (p = 0.000), followed by variable INPJ, which have moderately significant effect (p = 0.019), while remaining variables (DJ,PPJ, RPJ) have no or very little mediated effect.

4.11.3 Product of Coefficient Test/Sobel Test

To test H_0 : $b_1b_2b_3 = 0$, Sobel test or the product of coefficient test uses the following test statistic.

$$Z_{b_1b_2b_3} = \frac{b_1b_2b_3}{sb_1b_2b_3} \tag{4.12a}$$

This test follows Z-distribution, specifically, $b_1b_2b_3/sb_1b_2b_3$ will fall within ± 1.96 interval for $b_1b_2b_3 = 0$; if not, it will fall outside of the stated interval. Where $sb_1b_2b_3$ were calculated, using the following formula:

$$sb_1b_2b_3 = \sqrt{b_1^2b_2^2S^2b_3 + b_1^2b_3^2S^2b_2 + b_2^2b_3^2S^2b_1}$$
 (4.12b)

Where, S_{b1} , S_{b2} and S_{b3} are the standard errors of b_1 , b_2 and b_3 , respectively. The detailed calculations made for the product of coefficient test, applying formulae given in 4.9 (a & b) are provided in Annexure table (4.10). Statistic $Z_{b_1b_2b_3}$, calculated for indirect/mediated effect ($b_1b_2b_3$) of overall organizational justice and employees' JS on explanatory variables distributive justice, rater procedural justice, falls within the critical region (1.96); indicating that the mediating effect ($b_1b_2b_3$) of the former five variables are statistically insignificant, and latter variable insignificant. However, it is to be noticed that the former three variables are inconsistent candidate for mediation either due to insignificant contribution or hold negative signs (Kenny, 2012).

4.12 Moderating Effect of Organizational Size

This study also assumes that OJ-performance relationship may be moderated by organizational size. More specifically, the hypothesis was, organizational size moderates the effect of overall justice on employees' JS. To test this hypothesis, following regression model was used.

$$JS = \beta_0 + \beta_1 DJ + \beta_2 PPJ + \beta_3 RPJ + \beta_4 INPJ + \beta_5 OJ + \beta_6 OS + \beta_7 DJOS + \beta_8 PPJOS + \beta_9 RPJOS + \beta_{10} INPJOS + \beta_{11} OJOS + e_2$$

$$(4.13)$$

As per the criteria of moderation the interaction effect of moderating variable with independents variables, that is, coefficient ' β_7 to β_{11} ' should be significant for the moderator to work.

Model 4.13 measures the moderating effect of OS on OJ dimensions and JS. Therefore, JS was regressed on predicted value of DJ, PPJ, RPJ, INPJ, OJ, and OS and is interaction effect with the stated independent variables. The results are provided in table (4.20). It is pertinent to mention that the first model of moderation, that require JS to be regressed on DJ, PPJ, RPJ, INPJ, and OJ without moderating variable OS and its interaction effect have already been estimated in model 4.7 and its results have been provided in table (4.17). The diagnostic statistic of model 4.13 revealed that although R^2 value has increased as compared to model 4.7; however, its F-statistic has also decreased.

The results illustrate that the model as a whole is statistically significant (F = 6.036, p < 0.01); organizational justice dimensions along with moderator and its interaction effects are collectively responsible for 22 percent changes in dependent variable JS ($R^2 = 0.220$). As per the criteria of moderation, the interaction effect of overall organizational justice (OJ) is significant ($b_{11} = 0.555, p = 0.017$), and the interaction effect of rater procedural justice (RPJ) and INPJ are also significant; while, other interaction effects (DJ, PPJ, INPJ) turn out to be insignificant. Further, in accordance with moderation criteria, with the incorporation of moderating variable and its interaction effect; the relationship of some independent

	Unstandardized		Standardized	t	Sig.
Model	Coefficients		Coefficients		
	В	Std. Error	Beta		
Constant	2.67	.541		4.948	.000
DJ	110	.087	105	-1.265	.207
PPJ	081	.085	113	949	.344
RPJ	.148	.072	.217	2.063	.040
INPJ	.380	.103	.400	3.685	.000
INFJ	.002	.140	.002	.013	.990
OS	.487	.775	.393	.628	.531
MDJ	035	.124	099	280	.780
MPPJ	.046	.120	.151	.385	.701
MRPJ	.254	.103	.861	2.461	.015
MINPJ	395	.154	-1.301	-2.572	.011
MOJ	.555	.230	1.842	2.410	.0170

TABLE 4.20: The Moderating Effect of Organizational Size

Note: Dependent variable= JS, DJ=distributive justice,

PPJ=process procedural justice, RPJ=rater procedural justice,

INPJ=interpersonal justice, OJ=organizational justice,

OS=organizational size

F = 6.036 (p=0.000), $R^2 = 0.220$, R^2 adjusted = 0.184

variables with JS have decreased; while, others have increased this relationship. The relationship of independent variables DJ, PPJ, RPJ, and INPJ have changed from $\beta_1(p = 0.147, \beta_2(p = 0.358), \beta_3(p = 0.727)$ and $\beta_4(p = 0.103)$, (Model 4.7) to $\beta_1(p = 0.207), \beta_2(p = 0.344), \beta_3(p = 0.040)$, and $\beta_4(p = 0.000)$, (Model 4.13), respectively

The findings indicates that effect of overall justice and rater procedural justice increases on JS, as organizational size increases from small to large organization. However, it is important to note that effect of INPJ decreases on JS, as organizational size increases from small to large. As, RPJ and overall OJ fulfill the criteria set for moderation, therefore, hypothesis H_8 is partially accepted. Model 4.13 is reproduced in the following form for further interpretation.

$$Y = 2.675 - 0.110X_1 - 0.081X_2 + 0.148X_3 + 0.380X_4 + 0.002X_5 + 0.487OS + 0.035X_1OS + 0.046X_2OS + 0.254X_3OS - 0.395X_4OS + 0.555X_5OS + e_2$$

$$(4.14)$$

Since, the results of only two interaction effect $(X_3\&X_5)$ are positive and statistically significant, therefore, we take the derivative of Y (JS) with respect to X_3 (RPJ) and X_5 (OJ), to check the affect of RPJ and overall OJ in the presence of moderator (OS). By taking the derivatives with respect to X_3 and X_5 , we get:

$$\frac{\delta Y}{\delta X_3} = 0.148 + 0.254OS \tag{4.15}$$

$$\frac{\delta Y}{\delta X_5} = 0.002 + 0.555OS \tag{4.16}$$

Further, the range of minus and plus one $(-1 \rightarrow 0.00 \rightarrow +1)$ is used to check the effect of RPJ, OJ, and OS on employees attitude. Analyzing the effect of RPJ, using the equation (15) would provide:

 $\delta Y / \delta X_3 = 0.148 + 0.254(-1) = 0.106$ $\delta Y / \delta X_3 = 0.148 + 0.254(0) = 0.148$ $\delta Y / \delta X_3 = 0.148 + 0.254(1) = 0.402$

This suggests that the effect of RPJ on employees' attitude increases as organizational size goes from 0 to 1.

Likewise, by putting the value of OS in equation (16), we get the effect of overall OJ, OS, on employees' attitude:

$$\delta Y / \delta X_5 = 0.002 + 0.555(-1) = -0.553$$

 $\delta Y / \delta X_5 = 0.002 + 0.555(0) = 0.002$

 $\delta Y / \delta X_5 = 0.002 + 0.555(1) = 0.557$

This reflects that the effect of overall OJ on JS increases as organizational size goes from 0 to 1. This indicates that organizational size partially moderates the effect of overall justice on JS. Hence, hypothesis H_8 is partially accepted.

4.13 Discussions

The purpose of this study was to identify the present missing theories of OJ which if added to its existing dimensions would further substantiates the concept of OJ. The results of this study fully support our first five hypotheses and reveals that the concept of OJ is better conceptualize with the incorporation of missing theories; however, our results partially support the hypotheses 6 & 7, that their exist the mediating mechanism of overall OJ and employees attitudes in between different dimensions of OJ and employees performance (OCB). Likewise, the hypothesis regarding moderating affect of organizational size was also partially supported.

4.13.1 Identification of Missing Theories

The identification of missing theories suggests that there exist considerable theoretical gaps and misconceptions in existing OJ scales and literature. Although concept of OJ has been developed both theoretically and practically, there still exist theoretical gaps in existing scales. Our results are supported by existing literature. Whereas, Colquitt (2001) have already recognized the importance of some of these missing theories (equality & need), Greenberg (1993) has earlier called it a state of "intellectual adolescence", due to stated missing theories. The findings also suggest that the measurement scales of organizational justice have limited the scope of organizational justice to only few sub-dimensions; and such limited focus creates problems for both theoretical and practical advancement. Consistent with this argument; in her response to Cropanzano et al. review of organizational justice literature, (Shapiro, 2001) has referred the alarming situations and asked the researchers to stop avoiding the existing theories.Similarly, omission of relevant variable/theory from the model (for example, external equity) not only leads to specification error, but also provide biased results (Gujarati, 2004; Becker & Gerhart, 1996; & Huselid & Becker, 1996). Hence, like existing well established theories of OJ, the missing theories are equally important for the concept of OJ.

4.13.2 Incorporation of Missing Theories

The results of this study support our first hypothesis H_1 . The results of one sample t-test revealed that researchers or expert's opinion on all questions have appeared on positive side, that is, they were more inclined toward agreed side than disagreed. Moreover, with the exception of some items (EE4, DJ1, DJ2, PPJ1, SDM3, INFJ2), the mean-differences of the majority items are statistically significant at (p < 0.05). The results of researcher's opinions are according to our prior expectations that the concept of OJ is better covered with the incorporation of missing theories. The results of one sample t-test are consistent with existing literature. Greenberg (1993) argue that although the concept of organizational justice made significant theoretical advancement, but it still far away from the final stage of concept development, either due to underlying missing theories or inappropriate research objectives. Further, missing a relevant sub-dimension from the model (for example, external equity or equality) would not only confine the scope of organizational justice dimensions, but it would also restrict our understanding of employees' justice experiences and their relevant attitude and behavior towards them. In fact, missing theories was one of the reason that many researchers mentioned that the focus of individual organizational dimension may not capture the exact picture of employees justice experiences (Ambrose & Arnaud, 2005; Lind & van den Bos, 2002; Tornblom & Vermunt, 1999). Thanks to their concerns, that Ambrose & Schminke (2009) had to introduce the concept of overall OJ to better capture the prevailing conditions of employees' justice experiences within the organization. However, including rather than omitting the relevant missing theories are important to contribute both theoretically and methodologically.

4.13.3 Five Major Dimensions

The results of EFA and CFA suggest that the concept of organizational justice is better covered in five major dimensions, namely, distributive justice, process procedural justice, rater procedural justice, interpersonal justice, and informational justice. It may be argued that organizational policies, procedures, rules, standard operating procedures differ from the implementation or execution of these procedures by neutral managers or supervisor. Therefore, transparency in procedures may be the first part of PJ, while, the fair implementation of these procedures may be its second part; and it might be the reason that they have been separated in two different dimensions. There is a debate whether process procedural justice and rater procedural justice be considered the sub-dimensions of procedural justice (Erdogan, Kraimer, and Liden, 2001; Nabatchi, Bingham, and Good, 2007). The results of this study is consistent with Erodogan (2002), who clearly mentioned that the two referred dimensions seem to be related, but they are two different constructs, and with Nabatchi, Bingham, and Good (2007), they found support for dividing process justice into process and mediator component. Hence, covering the stated two dimensions into overall PJ would hide the considerable variations exist in these two dimensions.

4.13.4 Missing Theories of DJ

The results of this study fully support the hypothesis H_2 . Many researchers have referred the missing theories of distributive justice, such as, external equity, equality, and need. The positive and significant contribution of missing theories in distributive justice suggest important determinant of distributive justice. This reflect that employees not only expect distribution of resources on the rule of internal equity, rather they also expect distribution of resources on the rule of external equity, equality and need etc. So, the private sector universities and colleges should take notice of this fact and use all three rules for distribution of resources. Literature provides considerable support for the results of this study. For example, Deutsch (1975) was among the earlier researchers who proposed the concept of equality and need, and Colquitt (2001) have also recognized the importance of some of these missing theories (equality & need); however, he focused on internal equity for the purpose of generalizability. Hence, in addition to internal equity, external equity, and equality also significantly contribute towards distributive justice.

4.13.5 PPJ and RPJ

The results of this study partially support the hypothesis H_3 . The results of SEM reflected that advance notice, fair hearing and decision based on evidence are important contributor towards process procedural justice; while, selection of decision maker, bise suppression, and right of appeal are important contributor towards rater procedural justice. It may be argue that the first component of procedural justice, that is, process procedural justice is mainly related to standard operating procedures, practices, and policies; while, its second component, such as, rater procedural justice is based on their fair implementation. Standard operating procedures consist of policy, rules, procedures and regulations as to how employees perform his job within the organization. It is generally expected that when procedures are transparent, employees are provided with hearing opportunities, and decisions are based on factual evidence, then it leads to process procedural justice. Similarly, having a neutral decision maker, who can and should implement the procedures in consistent manner, and employees are provided with a right of appeal to challenge the decision would lead to rater process justice. Similar results were obtained by Nabatchi, Bingham, and Good, (2007), they found support for dividing procedural justice into process and mediator aspect of procedural justice. Hence, process procedural justice and rater procedural justice are related but two different construct of overall procedural justice.

4.13.6 IS, IC, and IM

The results of this study fully support the hypothesis H4. The results revealed that interaction with supervisor, interaction with colleagues, and interaction with top management are significantly related to interpersonal justice. This reflects that employees have friendly and positive interaction with their supervisor, colleagues, and top management. Such an interaction could increase support and cooperation among employees, employees and top management, and among employees and their supervisor. Very limited research has been conducted on the interaction between employees and his colleagues, and interaction between employees and top management with respect to interpersonal justice. However, the result of this study is consistent with (Baron & Kreps, 1999) arguments that employees within organization not only interact with their immediate supervisor but they also interact with their colleagues and top management. Therefore, interaction with supervisor, interaction with colleagues, and interaction with top management significantly contribute towards interpersonal justice.

4.13.7 DC and UP

The results of this study also support the hypothesis H5. The empirical results revealed that both downward and upward communications are significantly related to informational justice. This reflects the prevalence of two way communication among employees and management. Downward and upward communication is equally important for both employees and organization to achieve their particular objectives. Robbins and Judge (2013) have referred two types of communication, such as, downward and upward communication; however, few studies have been conducted to measure their impact on informational justice. Hence, downward and upward communications should be further investigated on informational justice to validate the results of this study.

Further, the results of first five SEM models (4.1-4.5) suggest that overall organizational justice measure works in Pakistani organization, specifically for measuring the prevailing conditions of OJ in the private higher educational institutions of Pakistan. The significant results of our proposed additions (missing theories) and existing sub-dimensions towards measuring their respective organizational justice dimensions suggest that prior research have missed relevant variables (external equity, equality, need, due process model, interaction with colleagues, interaction with top management, and upward communication) in their model. The results of model (4.1-4.5) fulfill the bandwidth-fidelity theory criteria which recommend that it is necessary to match the breadth (bandwidth) of exogenous variable to that of the endogenous variable (Cronbach, 1970; Cronbach & Gleser, 1965). Significant relationships and maximum variations are achieved, when the complexity of the exogenous variable matches to that of the endogenous variable. As our independent variables provides significant positive relationship with dependent variables; and maximum variation in the dependent variables have been explained by our independent variables; indicating that the missing theories determine their respective dimensions. These findings on the one hand reinforce the results of expert's opinion, and on the other hand they further support the idea that if missing theories are incorporated in organizational justice dimensions, they would positively contributes towards measuring their respective dimensions.

4.13.8 OJ Dimensions' Contribution Towards Overall OJ

The results of this study partially support the hypothesis H_{6A} . The results indicates that interpersonal and informational justice positively and significantly contribute towards overall OJ; while, distributive justice, process procedural justice, and rater procedural justice did not contribute towards overall OJ. These results suggest that high prevalence of interpersonal and informational dimensions of justice may cover the problems of procedural and distributive dimensions of justice in the form of overall perceptions of justice. Somewhat different results were obtained by Ambrose and Schminke (2009), they presented two different data sets to test their hypotheses. In their first data set, they found that all three dimensions are significant contributors towards overall OJ; while, in their second data set distributive justice did not contribute towards overall OJ. However, our results are very well supported by Jones & Martin (2009) study; they found that some dimensions of OJ are strongly related to overall OJ relative to other dimensions, and by Lind (2001) argument that the interplay between different dimensions contributions towards overall OJ is context specific. Therefore, the possible explanation in differences of our results may be attributed to the context under which data was collected, which largely affects the results of the study. Hence, this study should be conducted in both public and private sector higher educational institutions and other sector as well to further validate the results.

4.13.9 Mediating Effect of Overall OJ

The results of this study partially support the hypothesis H_{6B} . The results reflect that overall OJ partially mediates between OJ dimensions and JS. The findings suggest that organizations interested in improving JS and their desired behaviors have to work on organizational justice dimensions to improve their work life. That is, organizational justice dimensions contribute towards JS through the underlying mechanism of overall organizational justice. This also suggests that employees receive information pertaining to existing prevailing conditions of OJ dimensions and make overall judgment and subsequently respond towards the situations. Our results are consistent with the theory, that organizational justice dimensions are the antecedents of overall justice, and overall OJ is more proximal measure to JS than organizational justice dimensions (Lind, 2001; Ambrose & Schminke, 2009; & Jones & Martens, 2009). More recently, Ambrose & Schminke (2009) found that overall organizational justice mediate between different types of organizational justice and JS. Hence, overall OJ mediates between organizational justice dimensions and JS.

4.13.10 Mediating Effect of Job Satisfaction

The results of this study also partially support the hypothesis H_{6C} . The findings indicate that JS partially mediates between overall OJ and employee's behavior. These results suggest that OJ dimensions are proximal to overall OJ, and overall OJ is proximal to JS. These results further suggest that employee's perceptions of JS and behavior largely depend on overall OJ than individual dimension of OJ. Our results are supported by Lind (2001), who clearly mentioned that employees within an organization form overall justice (OJ) perception as they receive information pertaining to OJ dimensions. So, employees observe the existence of overall OJ to measure whether to support the supervisors or management, and then behave accordingly. Therefore, overall OJ is more proximal to JS and behavior than different dimensions of OJ (Lind, 2001). Similarly, job performance theory (Campbell, 1997) also states that, it is employee's attitudes that effect employee's behavior (Luna & Camps, 2008). The results of sequential mediation therefore suggests that there is a chain of relationship starting from organizational justice dimensions, which contribute towards overall organizational justice, which further lead to JS, which finally effect employees behavior. These results further suggest the inclusion of missing theories in OJ dimensions contributes towards overall OJ, JS, and organizational citizenship behavior.

The results of this study indicate that OJ lead to JS which in turn affect employees behaviors. As, it has been observed that some of the private sector organizations provides below the market rate wages, no job security, and having tough working environment. Hence, given such an organizational culture, the solution may be a total reward, which includes both financial and non financial aspect of rewards. The total rewards may include base pay, variable pay, share options, recognitions, autonomy, opportunities, work life balance, an extra day off and so on. Whatever the total reward, it is essential that people understand what the incentive plan is and how fairly it is distributed. Further, many people in private sectors are not properly communicated the policy, procedures and practices of the organization. In such situations, the managers or decision makers may be properly trained and procedures may be made more transparent and accessible. Whatever the policy and procedures may be, employees should be convinced that it would be fairly implemented. If managers are properly trained and encouraged to implement procedures consistently, JS pertaining to their supervisor and organization could be improved. In the same token, all HRM practices such as fair recruitment and selection, training, and orientation etc could also improve overall JS. Hence, the message convey to people via HRM practices should be clear, consistent, and in compliance with moral and ethical standards.

4.13.11 Direct Effects

The results of this study partially support the hypothesis H_7 . The results revealed that with the exception of interpersonal justice, other OJ dimensions did not contribute towards organization citizenship behavior. It is usually believed that when employees are fairly treated they are more likely to show citizenship behavior. Such a positive and supportive behavior continues until unfairness is observed, at that time relationship is once again evaluated as economic rather than social. Our results are supported by agent system model and the findings of Materson, Lewis, Goldman, and Taylor (2000), they found that interactional justice is strongly related to OCB. Hence, interpersonal justice has significant impact on OCB

4.13.12 Moderating Effect of Organization Size

The results of this study also partially support the hypothesis H_8 . It is generally believed that large organization may have more developed and established system of justice than small organization. Our results reflect that the moderating variable organizational size seems to be statistically significant in case of overall OJ and rater procedural justice. Therefore, OS moderates only overall OJ and RPJ relationship with JS. The results suggest that the effect of both OJ and RPJ on JS increases as organizational size goes from 0 to 1. Similar results were obtained by Huselid (1995), who found that large organizations have more comprehensive and developed system of HRM than small organizations. Hence, organizational size moderates the effect of overall organizational justice and rater procedural justice on JS.

Chapter 5

Summary, Conclusion and Recommendations

The purpose of this study, as already explained in preceding chapters, was to identify, and analyze the missing elements (presently missing theories) of organizational justice, which should be added to the existing dimensions of organizational justice, to make it a complete system of service, capable of yielding employees' job satisfaction and organizational citizenship behavior. Chapter II and IV of the thesis, respectively, provide identification and detailed evaluation of the proposed additions (missing theories) in organizational justice dimensions. The stated two chapters have identified and explained the significant contributions of missing theories in organizational justice dimensions in detail. This chapter reproduces the results of identified missing theories in a brief form along with the explanation as to why these missing theories need to be included in organizational justice dimensions.

5.1 Summary of Major Findings

5.1.1 Missing Theories of Distributive Justice

First, the identified missing theories of distributive justice (DJ) include external equity, equality and need; while, the missing theories of procedural justice (PJ)

include due process model and especially its first two elements, namely, advance notice/transparency, and selection of decision maker. Likewise, the missing theories of interpersonal justice (INPJ) include interpersonal interaction between employees, and interaction between employees and top management. Finally, the missing element of informational justice (INFJ) includes upward communication. Therefore, the well identified missing theories in existing OJ scales include: external equity, equality, need, due process model, interaction with colleagues, interaction with top management, and upward communication. The identification of stated missing theories helps us to answer our first research question, that is, what are the present missing theories of organizational justice, which if included would further improve organizational justice and its four major dimensions?

5.1.2 Researcher's Opinions about Missing Theories

Second, the well identified missing theories, enlisted in immediate preceding section, were incorporated to the existing dimensions of organizational justice, to evaluate whether they justify theoretically, from the eminent researchers/experts point of view? Majority of eminent researchers or experts opinion on above stated missing theories (our proposed additions) have appeared on positive side, that is, they were more inclined toward agreed side than disagreed. Moreover, the mean-differences of the majority items were statistically significant at (p < 0.05), with the exception of few items (EE_4 , DJ_1 , DJ_2 , PPJ_1 , SDM_3 , $INFJ_2$). Therefore, hypothesis H1 was accepted. These results answer to our second research question that, indeed the inclusion of missing theories in organizational justice justify theoretically, from the expert's/researcher's point of view.

5.1.3 Results of Exploratory Factor Analysis

Third, the results of exploratory factor analysis provided in table (4.3) illustrate that the concept of organizational justice be better covered in five major dimensions; hence, procedural justice dimension was divided into process procedural justice (PPJ), and rater procedural justice (RPJ). The results of confirmatory factor analysis further support the findings of exploratory factor analysis. Five factor model provides significant better results ($\chi^2/df = 3.57, CFI =$ 0.755, IFI = 0.756, GFI = 0.604, and RMSEA = 0.094), than four factor model ($\chi^2/df = 4.42, CFI = 0.672, IFI = 0.673, GFI = 0.502$, and RMSEA = 0.108).

5.1.4 Five Econometric Models

Fourth, the first five econometric models (4.1-4.5) used for testing of hypotheses, one each for each of the OJ dimension have been significant on the basis of Fvalue (p < 0.05). R^2 of these five models respectively, are 0.46, 0.89, 0.97, 0.83; and 0.76, indicating the level of variations in the dependent variables. As for as the individual variables of the first five models are concerned, majority of our proposed additions (external equity, equality, need, due process model, interaction with colleagues, interaction with top management, and upward communication) and existing sub-dimensions turn out to be significant (p - value < 0.05); hence, hypotheses H_2, H_3, H_4 , and H_5 , have been accepted.

5.1.5 Mediators

Fifth, the four econometric models (4.6-4.9) used to test the mediating mechanism of overall justice and JS have also been found significant on the basis of F-value (p < 0.05). The indirect/mediated effect of overall OJ, and JS tested in model 4.6, 4.7, and 4.8, respectively; were also found statistically significant (p < 0.05). The results of individual variables thus confirmed the mediation effect between organizational justice and OCB. Hypothesis H_{6A} , which states that organizational justice dimensions have positive and significant impact on overall OJ has been partially accepted; with the exception of (INPJ) and (INFJ), all other variables (DJ, PPJ, and RPJ) turn out to be insignificant (p - value > 0.05). Similarly, hypothesis H_{6B} , which states that overall OJ mediates between different dimensions of organizational justice and JS has been partially accepted, the mediating variable OJ is significant (p < 0.05). Likewise, hypothesis H_{6C} , which hypothesizes that overall OJ outcomes, that is, JS, mediate between overall organizational justice and employees' behavior (OCB) has also been partially accepted; the mediating variable JS is significant (p < 0.05). The indirect or mediated effect for RPJ was 8.77 percent, while mediated effect for INPJ was 11.81 percent. Hence, the hypotheses (H_{6A}, H_{6B}, H_{6C}) pertaining to the mediating mechanism have been partially accepted.

Likewise, the direct effect of organizational dimensions on organizational citizenship behavior was tested in model 4.9; the model as whole was significant (p < 0.05). However, the results of individual variable reflect that, with the exception of INPJ, all other variables (DJ, PPJ, and RPJ) were statistically insignificant (p > 0.05). Hence, hypothesis H_7 is partially accepted. These results (model 4.1-4.9); therefore, collectively answer to our third research question, that in fact the inclusion of missing theories contribute to yield desired outcomes, such as, overall OJ, JS and OCB.

5.1.6 Moderator

Finally, model 4.13 was used to test whether or not organizational size moderates the relationship between OJ dimensions and JS. The model as a whole was statistically significant (F = 6.036, p < 0.01); however, only two variables, that is, overall organizational justice ($b_{11} = 0.555, p = 0.017$) and rater procedural justice ($b_9 = 0.254, p = 0.015$) provide positive significant results. Thus, hypothesis H_8 is partially accepted.

5.2 Conclusion

The overall objective of this study was to find out what a good working environment for organizational employees is, and what the outcomes of such an environment would be, for this purpose a review of the relevant available literature on the topic was made to identify the most suitable option for HRM-Performance relationship. Our review helps us to conclude that the most suitable option for the above stated relationship is organizational justice, and its existing dimensions. It was further concluded that there exist significant theoretical gaps in existing questionnaires; therefore, the concept of organizational justice need further exploration. Moreover, the concept of organizational justice has the potential to enhance employee's performance through the mediating mechanism of overall justice and JS. Hence, researchers and practitioners should take notice of these facts, and take appropriate decisions.

Our second objective was to evaluate whether the inclusion of such missing theories in organizational justice justify theoretically. In this regard, majority of experts/researchers agree with our proposed additions in existing OJ questionnaire. This helps us to conclude that the concept of OJ has been developed over the time in both theory and practice; however, it would be further substantiated with the incorporation of missing theories. It was further concluded that in additions to well established theories, the less prevalent theories of OJ are equally important. Hence, the management concerned should adopt both well established theories along with the less prevalent theories for effective functioning of the private sector universities. Likewise, researchers should consider these missing theories for further investigation to validate the results of this study.

Our third objective was to evaluate whether the inclusion of such missing theories in organizational justice would contribute to yield desired outcomes. In this context, we found that overall OJ mediates between different dimensions of justice and JS. However, interpersonal and informational justices have significant contribution towards overall OJ; while, distributive justice, process procedural justice, and rater procedural justice did not contribute in overall OJ. This suggests that informational justice and interpersonal justice prevail within the private sector universities; however, the remaining three dimensions are less prevalent. Hence, the management of private sector universities should consider this point and take remedial measures to overcome the problems associated with these dimensions. The management in this regard would require to fairly compensate employees using the rule of external equity, equality and need in order to promote distributive justice within private sector universities. Similarly, management would also require the execution of fair and transparent policies and procedures to enhance procedural justice within private sector universities.

This study helps us to conclude that organizational justice dimensions affect overall OJ which in turn affects JS. Moreover, JS further effect employee's behavior. This suggests that there is a chain of relationship starting from organizational justice dimensions, which contributes in overall OJ, which further lead to JS, which finally affect employee's behavior. In other words, the missing theories of OJ along with prevailing theories enhance employee's performance (OCB) through the intervening mechanism of JS.

5.3 Implications for Theory and Practice

5.3.1 HRM Performance Debate

The research was based on the ongoing debate regarding HRM-Performance relationship, in which prior researcher's claims a significant positive relationship (Boselie et al., 2005; MacDuffie, 1995; Choi & Lee, 2013; Tian, Cordery & Gamble, 2015); however, some researchers doubt or even deny the stated relationship (Wall and Wood, 2005; Wright and Gardner, 2003). The study in hand contributed to the literature by reviewing existing available perspectives, and found that some of the existing perspectives did provide good theoretical foundations; however, the most suitable and realistic option for the HRM-Performance relationship is organizational justice. Hence, the concept of organizational justice provides strong base for researchers to further test the stated relationship. This study was particularly useful for policy makers and HR managers to take important decisions in light of organizational justice.

5.3.2 Missing Theories of OJ

This study contributes to the literature by identifying the missing theories of OJ, which were included in existing OJ scales, to complete the concept. The identification of relevant missing theories are important to contribute both theoretically and methodologically. Theoretically the concept of OJ would be completed; while, methodologically, it would help the researchers to avoid specification error and misleading results. Thus, the identification of missing theories provide basis for researchers to further validate their contributions in their respective dimensions. Moreover, management of private sector universities are required to adopt these missing theories in order to enhance overall justice which in turn leads to positive employees attitudes and behavior.

5.3.3 Additional Dimension of OJ

The concept of OJ developed from one dimension to two dimensions, two to three dimensions, and finally from three to four dimensions. This study contributes to the literature by confirming one additional dimension in to the construct and further suggests that future research need to explore OJ dimensions and test their contribution towards overall OJ. The measure used in this study should be further replicated to confirm the results. Future research need to identify how the five types of organizational justice can be efficiently and effectively executed in both public and private sector universities.

5.3.4 Two-path Mediating Mechanism

The literature on HRM-Performance relationship revealed that the mediating mechanism between HRM and performance is still unclear. This study contributes to the literature by specifying two path mediating mechanisms to clear the black box. The results of this study would enabled researchers and practitioners to better understand the underlying mechanisms of HRM-Performance relationship, and further suggest that more and more relevant sequential/temporal mediators needs

to be incorporated & tested in future research on the basis of relevant theories. Therefore, future research needs to adopt and further test the two path sequential mediation model for the OJ-performance relationship.

5.3.5 Needs of Training Sessions

The chain of relationship starting from organizational justice dimensions towards overall OJ and JS and behavior in our results also suggest that JS survey should be formally conducted to identify the reasons behind employees' dissatisfaction. If the reason pertains to processes or procedures; they may be made more transparent and consistent; however, if the reasons are related to their managers or supervisors; they may be effectively trained to comply with OJ concern. A sufficient literature in this regard indicates that supervisors or managers can be effectively trained to work in compliance with justice rules (Skarlicki & Latham, 1996; & Skarlicki & Latham, 2005). Hence, managers of private sector universities should identify the reasons of employee's dissatisfaction and accordingly arrange customized training sessions for their managers and employees.

5.3.6 Importance of Overall OJ

Likewise, many researchers mentioned that the focus of individual organizational dimension may not capture the exact picture of employee's justice experiences (Ambrose & Arnaud, 2005; Lind & van den Bos, 2002; Tornblom & Vermunt, 1999). This study therefore contribute to the literature by developing a relatively complete organizational justice measure, which would helps to better understand employees' justice experiences and their relevant attitude and behavior towards them. The measure used in this study should be replicated in other sectors in order to validate the results of this study. Future research should therefore focus on the employees experiences of overall justice to capture the exact picture with in the organizations.

5.3.7 Importance of Missing Theories

The missing theories of organizational justice with respect to external equity, equality, need, advance notice, selection of panel/manger, interaction with colleagues, interaction with top management, and upward communication, as significantly experienced by people within the organization, represent the most important sub-dimensions of OJ. These theories further affect overall OJ and JS, thus, missing theories should be thoroughly evaluated at policy formulation level and carefully executed at implementation level. Moreover, future research needs to test the missing theories contributions towards their respective dimensions of OJ.

5.3.8 Prevailing Conditions

The results of this study provide a picture of prevailing conditions within organizations and further identify the areas (DJ, PPJ, and RPJ), which need special attention for overall organizational justice of Pakistani private sector higher educational institutional employees. The two dimensions of OJ, such as, INPJ and INFJ, significantly contribute in overall OJ; and DJ, PPJ, and RPJ appears to insignificantly contribute in overall OJ. These results suggest that although all OJ dimensions prevails in private sector educational institutions; however, their existence be further strengthened. Further, the management of private sector universities should take appropriate decisions to make procedures more consistent and transparent, and the same may be fairly implemented through neutral decision maker. Similarly, policy makers should also consider the insignificant contribution of distributive justice towards overall OJ; they should take remedial measures to rectify the problem with stated dimension. In summary, policy makers and management need to take notice of these facts, and take suitable decisions to minimize the problems with process procedural justice, rater procedural justice, and distributive justice.

5.3.9 Fair Implementation of HRM Practices

Finally, the results of this study reflect that OJ dimensions lead to overall OJ, which further effect JS, which in turn affect employee's behaviors. This suggests that HRM practices should be implemented in light of organizational justice. Whatever, the HRM practice may be, employees should be clear that they would be fairly treated, communicated and fairly compensated. Therefore, policy makers and implementers should take sensitive decisions regarding HRM practices in light of organizational justice in order to maintain good working environment within the organization. Such an environment would have positive effect on JS, which in turn would lead to optimal performance.

5.4 Limitations of the Study and Future Directions

5.4.1 Cross-Sectional Data

First, the data used for analysis was cross-sectional in nature; hence, limiting the ability of researcher to test the causality. Although most of the results of this study are according to our prior expectations and well established theories; therefore, majority of hypotheses are accepted; however, having cross sectional data one is not confident on the causation. Moreover, given the three path mediated model assumptions, such paths could better be tested on longitudinal data than cross sectional. Therefore, future research should use longitudinal data to draw more confident conclusions.

5.4.2 Need for Multiple Stakeholders

Second, data was collected from only two types of respondents, namely, faculty members and their head of department. Faculty members were involved to rate the prevailing conditions of organizational justice dimensions and their attitudes towards them; while, head of department/dean were requested to evaluate the faculty member's performance in terms of organizational citizenship behavior. Future research should use three respondents, there by adding students to the list to measure quality of services providing by the universities. This would also imply stakeholder approach for measuring performance commonly suggested by large majority of researchers (Paauwae, 2004; Paauwae, 2007; & Paauwae & Boselie, 2009).

5.4.3 One-way Causation

Third, it was assumed that there is one way causation, that is, organizational justice dimensions affect overall OJ, which have significant impact on employees' attitude, which in turn improve employees' performance. This assumption, however, overlook the possibility of the reverse causation. The significant relationship between organizational justice and performance may only be witnessed for effective organizations, which are more intended and able to create a good working environment (organizational justice), than less effective organizations (Hiltrop, 1999). Therefore, future research should consider the reverse causation to better understand the stated relationship.

5.4.4 Problem of Generalization

Fourth, the data was collected from higher educational institutions of management sciences department, which could only represent the private universities operated in Pakistan. However, the results of this study could not be generalized to other department working within the same private universities, and to public sector universities working in Pakistan. Therefore, one has to be very careful to generalize the results of this study to general population. For this purpose, future research should collect data from other departments within the same private sector higher educational institutions, and public sector universities, and from other sectors as well, such as, banking and finance, telecom etc. This would help the researchers to generalize the results to education, banking and finance, and telecom sectors.

5.4.5 Contemporary Approaches to Mediations

Finally, the results of mediations were evaluated through causal step test and product of coefficient test. However, there exist other contemporary approaches to evaluate the mediating mechanism, such as, boot strapping and simulation. Therefore, future research should also apply the latest evaluation approaches.

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APPENDICES Annexure Table 2.1

Commonalities and difference in HRM

Pfeffer (1994) &	Pfeffer (1994) &	Pfeffer (1994) &	Pfeffer (1994) &
Patterson <i>et al.</i> , (2010)	Patterson <i>et al.</i> , (2010)	Boselie <i>et al.</i> , (2005)	Boselie <i>et al.</i> , (2005)
Commonalities	Differences	Commonalities	Differences
(i) Staffing	(i) Work design	(i) Employment security	(i) Wage compression
(ii) Training &	(ii) Family friendly	(ii) Recruitment &	across levels
development	(iii) Bundles	selection	(ii) Cross training and
(iii) Compensation and	(iv) Employment	(iii) 'Good' wages	cross utilization
rewards	security	(iv) Training &	(iii) Long term
(iv) Performance	(v) Wage compression	development	perspective
management	across levels	(v) Sharing information	(iv) Overarching
(v) Communication	(vi) Promotion from	(v) Sharing information (vi) Symbolic	vision/rationale
(vi) Employee	within	egalitarianism	(v) Job design
involvement	(vii) Teams & job	(vii) Team working &	(vi) Social
(vii) Single status	redesign	collaboration	responsibility practices
(viii) Job security	(viii) Cross training and	(viii) Performance	(vii) Formal procedures
(viii) soo security	cross utilization,	management	(viii) HR planning
	(ix) Long term	(ix) Contingent pay &	(ix) Attitude survey
	perspective	rewards	(x) Diversity & equal
	(x) Overarching vision	(x) Internal promotion	opportunities
		(xi) Employee	(xi) Job analysis
		ownership	(xii) Socialization &
		(xii) Participation and	social activities
		empowerment	(xiii) Family-friendly
		I State State	policies & work life
			balance (WLB)
			(xiv) Employee exit
			management
			(xv) Professionalization
			& effectiveness of the
			HR function/department
			fire function, department
	I	I	

Pfeffer (1994) & Jiang	Pfeffer (1994) & Jiang	Patterson <i>et al.</i> , (2010)	Patterson <i>et al.</i> , (2010)
et al., (2012)	et al., (2012)	& Boselie <i>et al.</i> , (2005)	& Boselie <i>et al.</i> , (2005)
Commonalities	Differences	Commonalities	Differences
(i) Recruitment & selection (ii) Information sharing (iii) Training & development (iv) Performance appraisal (v) Compensation (vi) Incentives (vii) Promotion & career development (viii) Job security (ix) Work teams (x) Employee involvement	 (i) Overarching vision (ii) Job design, (iii) Formal grievance & complaints (iv) Symbolic egalitarianism, (v) Wage compression across levels (vi) Employee ownership (vii) job redesign (viii) Cross training and cross utilization, (ix) Long term perspective and 	(i) Recruitment & selection (ii) Training& development (iii) Performance management (iv) Compensation & reward (v) Job design (vi) Communication (vii) Employee involvement (viii) Single status (ix) Family friendly	 (i) Bundles (ii) Team working & collaboration (iii) Internal promotion opportunities (iv) Autonomy & decentralization (v) Diversity and Equal opportunities (vi) Employment security (vii) Formal procedures (viii) HR planning (ix) Attitude survey (x) Diversity (xi) Job analysis (xii) Socialization & social activities (xiii) Employee exit management (xiv)Professionalization & effectiveness of the HR function/department (xv) Social responsibility practices

Patterson <i>et al.</i> , (2010) & Jiang et al., (2012) Commonalities	Patterson <i>et al.</i> , (2010) & Jiang et al., (2012) Differences	Boselie <i>et al.</i> , (2005) & Jiang et al., (2012) Commonalities	Boselie <i>et al.</i> , (2005) & Jiang et al., (2012) Differences
 (i) Work design (ii) Recruitment & selection (iii) Compensation (iv) Training & development (v) Sharing information (vi) Participation & involvement (vii) Performance management 	 (i) Family friendly (ii) Single status (iii) Bundles (iv) Promotion (v) Job security (vi) Work teams (vii) Formal grievances and complaints 	 (i) Recruitment & selection (ii) Training and development (iii) Performance appraisal (iv) Compensation (v) Incentives (vi) Benefits (vii) Promotion & career development (viii) Job design (ix) Job security (x) Employee involvement (xi) Formal grievance (xii) Information sharing (xiii) Work teams 	 (i) Autonomy & decentralization (ii) HR planning (iii) Financial participation (iv) Symbolic egalitarianism (v) Attitude survey (vi) Social responsibility practices (vii) Indirect participation (viii) Job analysis (ix) Professionalization of the HR function (x) Diversity & equal opportunities (xi) Socialization & social activities (xii) Family-friendly policies (xiii) Employee exit
			management

Annexure 2.2 List of 26 HRM practices (Adopted from Boselie, Dietz & Boon, 2005)

- 1. Training & development
- 2. Contingent pay & rewards (PRP, bonuses, profit sharing, etc)
- 3. Performance management (also appraisal & performance metrics)
- 4. Recruitment & selection (also staffing)
- 5. Team working & collaboration
- 6. Direct participation (e.g. empowerment, employee involvement, suggestion schemes, etc)
- 7. 'Good' wages (e.g. high, or above market rate remuneration; also fair pay)
- 8. Communication & information sharing
- 9. Internal promotion opportunities & labour market
- 10. Job design (also job rotation, job enrichment, broad jobs)
- 11. Autonomy & decentralized decision-making (also self-management)
- 12. Employment security
- 13. Benefits packages
- 14. Formal procedures (grievances, etc)
- 15. HR planning (e.g. career planning & succession planning)
- 16. Financial participation (e.g. employee stock/share ownership)
- 17. Symbolic egalitarianism (e.g. single status & harmonization)
- 18. Attitude survey
- 19. Indirect participation (e.g. consultation with trade unions, works councils; consultation Committees, voice mechanisms)
- 20. Diversity & equal opportunities
- 21. Job analysis
- 22. Socialization, induction & social activities
- 23. Family-friendly policies & work life balance (WLB)
- 24. Employee exit management (e.g. layoffs, redundancy policy)
- 25. Professionalization & effectiveness of the HR function/ department
- 26. Social responsibility practices

Annexure 2.3					
EXISTING ORGANIZATIONAL JUST 1. DISTRIBUTIVE JUST		CALE	8		
Organizational Justice (Price and Mu		086)			
1= rewards are not at all distributed fairly to 5= rewards	,		irly di	strihut	ha
Distributive justice	<u>15 are</u>	$\frac{1}{2}$	<u>111y un</u> 3	<u>4</u>	<u>5</u>
1. To what extent are you fairly rewarded considering the				-	5
responsibilities that you have.					
2. To what extent are you fairly rewarded taking into account					
the amount of education and training that you have had?					
3. To what extent are you fairly rewarded in view of amount					
of experience that you have.					
4. To what extent are you fairly rewarded for the amount of					
effort you have put forth?					
5. To what extent are you fairly rewarded for the work you					
have done well?					
6. To what extent are you fairly rewarded for the stresses and					
strains of your job?					
Organizational Justice (Moorman	. 1991))	11		
0	gree =		rongly	agree	= 5
Distributive justice	0			0	
1. Fairly rewarded considering the responsibilities.					
2. Fairly rewarded in view of the amount of experience you					
have.					
3. Fairly rewarded for the amount of effort you put forth.					
4. Fairly rewarded for the work you have done well.					
5. Fairly rewarded for the stresses and strain of your job.					
Organizational Justice (Niehoff and Mo	orman	, 1993))		
Strongly disagree = 1 Slightly disagree = 2 Disagree = 3	Neu	tral (N	lot disa	gree/n	either
agreed) = 4 Agreed = 5 Slightly more agreed =	<u>6 St</u>	rongly	agree	d = 7	
Distributive justice items	1	2	3	4	5
1. My work schedule is fair					
2. I think that my level of pay is fair					
3. I consider my workload to be quite fair					
4. Overall, the rewards I receive here are quite fair					
5. I feel that my job responsibilities are fair					
Organizational Justice (Colquitt's					
1 = To a Very Small Extent to 5 = To a Ver	y Larg	ge Exte	ent.		
Distributive justice					
The following items refer to your (outcome). To what extent:					
1. Does your (outcome) reflect the effort you have put into					
your work?					

Annexure 2.3

		1			
2. Is your (outcome) appropriate for the work you have					
completed?					
3. Does your (outcome) reflect what you have contributed to					
the organization?			-		
4. Is your (outcome) justified, given your performance?					
Blader and Tyler (2003) MEASURES,	STUI	DY 1			
a. $1 = rarely, 6 = very often$					
b. $1 = not fair at all, 6 = very fair$					
c. $1 = not$ at all, $6 = definitely$					
d. $1 = none, 6 = a lot$					
e. $1 = strongly disagree, 6 = strongly agree$					
f. $1 = not at all, 6 = very$					
g. The organization's name was placed in these slots but have b	een rei	noved	here f	or rease	ons of
confidentiality.					
Distributive Justice					
• How fairly are resources (e.g., salary, bonuses, etc.) allocated work? ^b	among	g empl	oyees v	where y	<i>'</i> ou
• Overall, how fair is the salary you receive at work? ^b					
• Would you say that there is an emphasis where you work on d	istribu	ting th	ings fa	irly? ^c	
Outcome Favorability		0		2	
• How favorable are the resources and outcomes you receive at	work? ^t	f			
• Do the resources and outcomes where you work exceed your			oc		
• Overall, how favorable are the outcomes you receive at work				ving ar	eas: ^f
a. Your salary?				U	
b. Your job responsibilities?					
Your work load?					
Ahmad & Raja (2010)					
1 = strongly disagree to 5 = strongly					_
Distributive justice	1	2	3	4	5
1. Does your pay/pay increases reflect the effort you have put					
into your work?					
2. Is your pay/pay increases appropriate for the work you have					
completed?					
3. Does your pay/pay increases reflect what you have					
contributed to the organization?					
4. Is your pay/pay increases justified, given your					
performance?					
(Thamendren A/c Moorthy, 2011) Strongly diagrams = 1 Diagrams = 2 Average = 3			trongly	a o o mod	- 5
Strongly disagree = 1 Disagree = 2 Average = 3 Ag Distributive justice	ree = 1	4 5	trongly 3	y agree	e = 5
	1		3	4	5
1. My performance was fairly rated by considering my responsibilities.					
	1	1	1	1	1

1		1	1	1
				-
	. E. 4			
			4	_
1	2	3	4	5
		1		
£				
opa	nzano	, 1987)	
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ky, 1	1989)			
	1989) 4 Si	trongly	y agree	= 5
		trongly 3	y agree	= 5
	4 S			1
	4 S			1
	4 S			1
	4 S			1
	4 S			1
	4 S			1
	4 S			1
	4 S			1
	4 S			1
	4 S			1
	4 S			1
	4 S			1
	4 S			1
	<u>1</u>	1 2 		

ST RA	ISE D	ECISI	ON, fo	r you
1991))			
-		trongl	v agree	e = 5
	1	3	4	5
1	2	5	–	
1	2	5		
1	2			
1	2	5		
1	2	5		
1	2			
1	2			
1	2			
1	2			
1	2			
1	2			
1				
1				
1				
1				
	1991)		1991)	-

Organizational Justice (Niehoff and Moo Strongly disagree = 1 Disagree = 2 Neutral (Not di		, .		eed) – 3	3
Agreed = 4 Strongly agree =	0	/ 110101	ci agi	ccu) – .	9
Formal procedural justice items	1	2	3	4	5
1. Job decisions are made by my supervisor in an unbiased					
manner					
2. My supervisor makes sure that all employee concerns are					
heard before job decisions are made					
3. To make formal job decisions, supervisor collects accurate					
& complete information					
4. My supervisor clarifies decisions and provides additional					
information when requested by employees					
5. All job decisions are applied consistently across all affected					
employees					
6. Employees are allowed to challenge or appeal job decisions					
made by the supervisor					
Organizational Justice (Colquitt's					
1 = To a Very Small Extent to 5 = To a Very	y Larg	ge Exte		1	1
Procedural justice	1	2	3	4	5
The following items refer to the procedures used to arrive					
at your (outcome). To what extent:					
1. Have you been able to express your views and feelings					
during those procedures?					
2. Have you had influence over the (outcome) arrived at by					
those procedures?					
3. Have those procedures been applied consistently?					
4. Have those procedures been free of bias?					
5. Have those procedures been based on accurate information?					
6. Have you been able to appeal the (outcome) arrived at by					
those procedures?					
7. Have those procedures upheld ethical and moral standards?					
	OTH	NT7 1			
Blader and Tyler (2003) MEASURES,	STUL	JY I			
a. $1 = rarely, 6 = very often$					
b. $1 = not fair at all, 6 = very fair$					
c. $1 = not at all$, $6 = definitely$					
 d. 1 = none, 6 = a lot e. 1 = strongly disagree, 6 = strongly agree 					
e. $1 = strongly alsagree, 6 = strongly agree$ f. $1 = not at all, 6 = very$					
g. The organization's name was placed in these slots but have b	een rei	movad	here f	or reaso	ne of
confidentiality.		noveu		JI 10450	115 01
Procedural Justice					
• How often do you feel that decisions are made in fairways at y		L 9a			

• Overall, how fair would you say decisions and processes are where you work?^b

• How would you rate the overall fairness with which issues and decisions that come up at work are handled?^b

• Is there a general sense among employees that things are handled in fairways at work?^c

• How much of an effort is made to be fair to employees when decisions are being made?^d

Quality of Decision-Making Procedures

Formal^e

• The rules dictate that decisions should be fair and unbiased.

• The rules and procedures are applied consistently across people and situations.

• The rules ensure that decisions are made based on facts, not personal biases and opinions.

• The rules and procedures are equally fair to everyone.

Informal^e

• My supervisor's decisions are consistent across people and situations.

• My supervisors' decisions are made based on facts, not their personal biases and opinions.

• My supervisor's decisions are equally fair to everyone.

Quality of Treatment

Formal^e

• The rules lead to fair treatment when decisions are being made.

• The rules lead to fair treatment when decisions are being implemented.

• The rules require that I get an honest explanation for how decisions are made.

• My views are considered when rules are being applied.

• The rules ensure that my needs will be taken into account.

• I trust _____ g to do what is best for me.

• The rules respect my rights as an employee.

• The rules respect my rights as a person.

• I am treated with dignity by .g

• g follows through on the promises it makes.

• g really cares about my well-being.

• _____g cares about my satisfaction.

Informal^e

• My supervisor treats me fairly when decisions are being made.

• My supervisor treats me fairly when decisions are being implemented.

• My supervisor listens to me when I express my views.

• My supervisor usually gives me an honest explanation for the decisions he/she makes.

• My supervisor considers my views when decisions are being made.

• My supervisor takes account of my needs when making decisions.

• I trust my supervisor to do what is best for me.

• My supervisor respects my rights as an employee.

• My supervisor respects my rights as a person.

• My supervisor treats me with dignity.

• My supervisor follows through on the decisions and promises he/she makes.

• My supervisor really cares about my well-being.

• My supervisor cares about my satisfaction.

Ahmad & Raja (2010)

1 = strongly disagree to **5** = strongly agree

Procedural Justice	1	2	3	4	5
1. Have you been able to express your views and feelings					
during those procedures?					
2. Have you had influence over the pay/pay increases arrived					
at by those procedures?					
3. Have those procedures been applied consistently?					
4. Have those procedures been free of bias?					
5. Have those procedures been based on accurate information?					
6. Have you been able to appeal against the pay/pay increases					
arrived at by those procedures?					
7. Have those procedures upheld ethical and moral standards?					
Colquitt et al., (2011)					
1 = To a Very Small Extent to 5 = To a Very	y Larg	ge Exte	1	1	
Procedural justice	1	2	3	4	5
1. Are you able to express your views during those					
procedures?					
2. Can you influence the decisions arrived at by those					
procedures?					
3. Are those procedures applied consistently?					
4. Are those procedures free of bias?					
5. Are those procedures based on accurate information?					
6. Are you able to appeal the decisions arrived at by those					
procedures?					
7. Do those procedures uphold ethical and moral standards?					
3. INTERACTIONAL JUST	ICE				
Organizational Justice (Folger & Kono		1989)			
	gree =		trongly	y agree	= 5
Procedural and interactional justice	1	2	3	4	5
Indicate the extent to which your supervisor did each of the					
following:					
1. was honest and ethical in dealing with you.					
2. Gave you an opportunity to express your side.					
3. Used consistent standard in evaluating your performance.					
4. Considered your views regarding your performance.					
5. Gave you feedback that helped you learn how well you					
were doing.					
6. Was completely candid and frank with you.					
7. Showed a real interest in trying to be fair.					
8. Become thoroughly familiar with your performance.					
9. Took into account factors beyond your control. (R)					
10. Got input from you before a recommendation.					
11. Made clear what was expected of you.					

	1	1	1	1
ASTRA	ISE D	DECISI	ON, for	you
t				
5	-			
	-			
•		•	•	•
n, 1991)				
1	2	3	4	5
			1	
oorman	, 1993)		
oorman 1	1993) 3	4	5
oorman 1			4	5
	AST RA	AST RAISE D	AST RAISE DECISIO	n, 1991)

	1		1		г
2. When decisions are made about my job, the supervisor					
treats me with respect & dignity					
3. When decisions are made about my job, supervisor is					
sensitive to my own needs					
4. When decisions are made about my job, the supervisor					
deals with me in truthful manner					
5. When decisions are made about my job, the supervisor					
shows concern for my rights as an employee					
6. Concerning decisions about my job, the supervisor					
discusses the implications of the decisions with me					
7. My supervisor offers adequate justification for decisions					
made about my job					
8. When decisions are made about my job, the supervisor					
offers explanations that make sense to me					
9. My supervisor explains very clearly any decision made					
about my job					
Organizational Justice (Colquitt'	's 2001)				
1 = To a Very Small Extent to 5 = To a Ver			ent.		
Interpersonal justice	1	2	3	4	5
The following items refer to (the authority figure	-		5		5
who enacted the procedure). To what extent:					
1. Has (he/she) treated you in a polite manner?					
2. Has (he/she) treated you with dignity?					
3. Has (he/she) treated you with respect?					
4. Has (he/she) refrained from improper remarks or					
comments?					
Ahmad & Raja (2010)					
		_		-	
Interactional Justice	1	2	3	4	5
1. Has (he/she) treated you in a polite manner?					
 Has (he/she) treated you in a polite manner? Has (he/she) treated you with dignity? 					
 Has (he/she) treated you in a polite manner? Has (he/she) treated you with dignity? Has (he/she) treated you with respect? 					
 Has (he/she) treated you in a polite manner? Has (he/she) treated you with dignity? 					
 Has (he/she) treated you in a polite manner? Has (he/she) treated you with dignity? Has (he/she) treated you with respect? Has (he/she) refrained from improper remarks or comments? 					
 Has (he/she) treated you in a polite manner? Has (he/she) treated you with dignity? Has (he/she) treated you with respect? Has (he/she) refrained from improper remarks or 					
 Has (he/she) treated you in a polite manner? Has (he/she) treated you with dignity? Has (he/she) treated you with respect? Has (he/she) refrained from improper remarks or comments? Has (he/she) been candid in (his/her) communications with you? 					
 Has (he/she) treated you in a polite manner? Has (he/she) treated you with dignity? Has (he/she) treated you with respect? Has (he/she) refrained from improper remarks or comments? Has (he/she) been candid in (his/her) communications with you? Has (he/she) explained the procedures thoroughly? 					
 Has (he/she) treated you in a polite manner? Has (he/she) treated you with dignity? Has (he/she) treated you with respect? Has (he/she) refrained from improper remarks or comments? Has (he/she) been candid in (his/her) communications with you? 					
 Has (he/she) treated you in a polite manner? Has (he/she) treated you with dignity? Has (he/she) treated you with respect? Has (he/she) refrained from improper remarks or comments? Has (he/she) been candid in (his/her) communications with you? Has (he/she) explained the procedures thoroughly? Were (his/her) explanations regarding the procedures reasonable? 					
 Has (he/she) treated you in a polite manner? Has (he/she) treated you with dignity? Has (he/she) treated you with respect? Has (he/she) refrained from improper remarks or comments? Has (he/she) been candid in (his/her) communications with you? Has (he/she) explained the procedures thoroughly? Were (his/her) explanations regarding the procedures reasonable? Has (he/she) communicated details in a timely manner? 					
 Has (he/she) treated you in a polite manner? Has (he/she) treated you with dignity? Has (he/she) treated you with respect? Has (he/she) refrained from improper remarks or comments? Has (he/she) been candid in (his/her) communications with you? Has (he/she) explained the procedures thoroughly? Were (his/her) explanations regarding the procedures reasonable? 					

(Thamendren A/c Moorthy, 2011)	Thesis	5			
Interactional justice	1	2	3	4	5
1. When performance appraisal ratings are made, my					
supervisor considered my view point.					
2. When performance appraisal ratings are made, my					
supervisor was able to suppress personal biases.					
3. When performance appraisal ratings are made, my					
supervisor provided me with timely feedback about the ratings					
and its implications.					
4. When performance appraisal ratings are made, my					
supervisor treated me with kindness and considerations.					
5. When performance appraisal ratings are made, my					
supervisor showed concerns for my rights as an employee.					
6. When performance appraisal ratings are made, my					
supervisor took steps to deal with me in a truthful manner.					
Colquitt et al., (2011)					
1 = To a Very Small Extent to 5 = To a Very	y Larg	e Exte	ent.		
Interpersonal justice	1	2	3	4	5
1. Has your supervisor treated you in a polite manner?					
2. Has your supervisor treated you with dignity?					
3. Has your supervisor treated you with respect?					
4. Has your supervisor refrained from improper remarks?					
4. INFORMATIONAL JUST					
Organizational Justice (Colquitt's 1 = To a Very Small Extent to 5 = To a Very			ent		
Informational justice	1	2	3	4	5
The following items refer to (the authority figure who enacted the	he proc	cedure). To w	hat ext	ent:
1. Has (he/she) been candid in (his/her) communications with					
you?					
2. Has (he/she) explained the procedures thoroughly?					
3. Were (his/her) explanations regarding the procedures					
reasonable?					
4. Has (he/she) communicated details in a timely manner?					
5. Has (he/she) seemed to tailor (his/her) communications to					
individuals' specific needs?					
Organizational Justice (Colquitt's	2011)			1	1
1 = To a Very Small Extent to 5 = To a Very			ent.		
Informational justice	1	2	3	4	5
1. Has your supervisor been candid when communicating with you?					
			1		
2. Has your supervisor explained decision-making procedures					

3. Were your supervisor's explanations regarding procedures reasonable?			
4. Has your supervisor communicated details in a timely manner?			
5. Has your supervisor tailored communications to meet individuals' needs?			

Annexure 3.1 (A) Letter Addressed to the experts

Dear Sir/Madam,

I am a research student, doing Ph.D in management sciences, with specializing in the area of Human Resource Management (HRM). I am currently working on my dissertation research entitled "Organizational Justice a new theoretical perspective: A study from private higher educational institutions of Pakistan", being supervised by Dr. Muhammad Ishfaq Khan, Assistant Professor, at Muhammad Ali Jinnah University, Islamabad (Pakistan). www.jinnah.edu.pk.

Our review of relevant literature on HRM practices, organizational justice (OJ) and employers performance help this researcher to suggest that the concept of organizational justice, which has been developed well over time, in both theory and practice, to the extent that it provides a relatively better and greater sense of 'fairness' and 'justice' to the employees, has the potential to be further substantiated, with the incorporation of some missing theory of OJ which at the moment are not included in OJ but their exist a strong ground for their inclusion. This is the basic theme of our proposed research.

Accordingly, we have developed the attached questionnaire which includes two types of questions, some are without asterisk and some are with asterisk. Questions without asterisk have been adopted from the eminent scholars and are given here for your information, so there is no need to answer those questions. Questions with asterisk are the additional suggested questions which have been developed by this researcher on the basis of the theory to further substantiate OJ. Experts are requested to give their opinion for the inclusion or otherwise of these suggested additions.

An earliest response from your end will be very much appreciated and in case of any question/ambiguity, please feel free to contact me at <u>shah2138@gmail.com</u>. Please send filled in questionnaire on the following email address: <u>shah2138@gmail.com</u>.

Thank you very much, in advance, for reviewing this questionnaire.

Looking forward, With Best Regards,

Ahmed Ullah Shah Ph.D Scholar, Contact: 0092333-9685969 Muhammad Ali Jinnah University, Islamabad, Pakistan.

				Annexure 3.1	(B)						
	Questionnaire for experts PART A: ORGANIZATIONAL JUSTICE SCALE										
			PA	AKTA: ORGANIZATIONA	L JUSTICE SCALE						
just for you	r information,	so there is no n	eed to give yo ed to add, and	ns): one without asterisk our opinion on such quest d are the questions on wh uestions by ticking one th	tions; questions and di ich your opinion is so	mensions/sub dimension ught; so please express	ns with	h aste	risk a	re the	е
		You have to	select one	of the following 5 ch	oices, in all the in	coming sections					
	1		2	3 4 5		5					
	Strong	·	agree	Neutral	Agree	Strongly					
	disagre	e				Agree					
Type of Criteria Justice		teria			Items		1	2	3	4	5
		and called it d Note: In this s of equity theo include the ite	listributive justicale we have bry. As an em tems of both ir	ives, and recognition), bu stice, while they have larg included the aforemention inent scholar of this field tternal and external equity	ely ignore its second di ned two dimensions (in kindly review this scal ? Furthermore, either t	mension i.e. external equi nternal and external equi e and express your opin he items included in external	uity. ty) to ions, o ernal o	comp either equity	lete th it is r	ne cor releva	ncept int to
				ity theory? It may be men						**	
		Internal Equity		IT pay reflect the effort yo incentives reflect what yo	· ·		X X	X X	X X	X X	X X
		(Colquitt's	-	ecognition appropriate for			л Х	АХ	л Х	АХ	A X
	Equity	2001)		alary raise justified, given			X	X	X	X	X
	theory			this organization offer bet		me other organizations?					
	(Adam, 1965)	(*)External	2. (*) Doe organization	es this organization offers	er better incentives r	elative to some other					
Equity 3. (*) Does this organization offer salary beyond the market rate?											
Distributive Justice	ustice within the industry?										
Justice 1. (*) This organization ensures that similar jobs are compensated almost similarly Total Equity within the industry.											

		2. (*) This organization ensures that employees are better compensated relatively to other organization within the industry.					
	called it distril rules for distri distributive jus Note: In this s field kindly re- of aforementio	ustice Gaps: A study of different questionnaire shows that researchers have largely fourive justice, but contemporary theories in the area of distributive justice indicate that bution of resources, such as, equity, equality and need. Similarly, reviews of different stice scales have not fully covered how roles and punishment should be distributed? cale we have incorporated the rules of equality to improve the concept of distributive j view the subsequent two sections of equality and express your views, whether or not it is poned sub dimension. Likewise, the items included in equality are relevant and meas important to mention here that all items of equality are self-prepared. 1. (*) Does this organization provide equal health benefits across employees within	t there nt scal ustice is valid	are o les als . As a d to in	other a so ind in expondence	alloca icate ert of the it	that that this tems
(*) Equality	Equality	the industry?2. (*) Does this organization provide equal health benefits across organizations within the industry?					
(Deutsch, 1975)	(*) Internal Equality	 (*) Does this organization distribute workload equally across employee's cadre wise? (*) Does this organization distribute punishment equally across employee's cadre 					
	Equality	wise? 3. (*) Does this organization provide equal employment opportunities?					
Distributi	ve justice	 (*) This organization has established decision criteria for distribution of resources, and it follows that criteria. (*) This organization has established decision criteria for distribution of resources, 					
	and it does not follow that criteria. Procedural justice Gaps: A review of different scales also reflect that researchers by and large have used a single scale to n overall procedural justice, however, some researchers (Erdogan, Kraimer, and Liden, 2001; Nabatchi, Bingham, and Good believe that overall procedural justice can be divided into two types; namely, process procedural justice and neutral managers/supervisors. Note: As suggested by (Erdogan, Kraimer, and Liden, 2001; Nabatchi, Bingham, and Good, 2007), we have divided procedural justice into process procedural justice and neutrality of decision maker. As an expert of this field kindly review scale and mentioned your views, whether or not it is justified to divide the items of procedural justice into two dimension as, process procedural justice and neutrality of managers/supervisors. Similarly, kindly review the section of process procedural justice in first place and express your views, whether or not it is legitimate to include its different sub dimensions in procedural justice. Furthermore, kindly mention either the items included in this scale measure process procedural justice.						007) y of erall this such lural
	(*) Advance Notice/ transparency	 (*) Does this organization ensure transparency in procedures? (*) Does this organization provide easy access to procedures? (*) Does this organization formally communicate these procedures? (*) Does this organization reasonably explain these procedures? (*) Have you been able to explain your position before your supervisor? 					

		Fair Hearing	2. Have you been able to express your views during those procedures? (Thibaut & Walker, 1975 & Colquitt, 2001)	Х	X	Х	Х	X	
			3. Have you had influence over the decision arrived at by those procedures?(Thibaut & Walker, 1975 & Colquitt, 2001)	Х	Х	Х	Х	Х	
	ba ev A	Decision	1. Have those decisions been based on accurate information? (Leventhal (1980) & Xcolquitt, 2001)						
		based on evidence /	2. Have those decision been based on complete information? (Niehoff & Moorman, 1993).	Х	X	X	Х	X	
Procedural		Accurate 3. (*) Have those decision been based on employee's performance recorded over the							
Justice			1. (*) Does this organization provides right of appeal to employees?						
	Justice	Right of	2. Have you been able to challenge the decision made by supervisor? (Niehoff & Moorman, 1993).	Х	Х	Х	Х	Х	
		Appeal	3. Have you been able to appeal regarding the decision arrived by those procedures? (Leventhal, 1980, & Colquitt, 2001)	Х	Х	Х	Х	Х	
	Process Procedural1. (*) This organization has well established procedures in place, it usual communicates these procedures.2. (*) This organization provides fair hearing opportunities to employees.		1. (*) This organization has well established procedures in place, it usually						
		Justice	3. (*) This organization collect full information before final decision is made.						
		justice. The or representativen the neutrality procedural just Note: In the be bias suppression		acc and b hicali m. election our vi	uracy, bias su ty mo on of ews, v	corr ppres easure decisi whethe	ectab sion c es pro on ma er or r	ility, over ocess aker, not it	
		(*) Selection	 (*) This organization hires managers whose educational background is relevant to the job. (*) This organization hires managers whose values are similar to organization 						
		() 2000000	values. 3. (*) This organization has an established process of selecting managers', and it						
			follows that process.						
	Bias		1. Have your supervisor decisions been free of bias? (Leventhal (1980) & Colquitt, 2001)	Х	Х	Х	Х	Х	
	(*) Neutrality	suppression	2. Have your supervisor take decisions in an unbiased manner? (Niehoff & Moorman, 1993)	Х	Х	Х	Х	Х	

		3. (*) Have your manager promote self-interest at the stake of other employees?					
		1. Have your supervisor decisions been consistent across the people? (Niehoff &	Х	Х	Х	Х	Х
		Moorman, 1993)					
	Consistency	2. Have your supervisor decisions been consistent over the time?	Х	Х	Х	Х	Х
		3. Have your supervisor applied procedures consistently? (Leventhal (1980) & Colquitt, 2001)	Х	Х	X	X	Х
	Neutrality (*)	1. (*) Has your supervisor been neutral in implementing procedures?					
		2. (*) Has your supervisor been neutral and take decision in un biased manner?					
		1. (*) This organization has formal procedures in place and it usually follows it.					
	Procedural Justice	2. (*) This organization has formal procedures in place but it does not follow it.					
	their immediate Note: Keeping with colleague views, whether	justice Gaps: Review of literature reveals that interpersonal justice is limited to how e supervisor and have ignored interpersonal interaction between employees and top may the above gaps in mind we have included two additional sub dimensions of interpers s and interaction with top management. As an expert of this field kindly review this r or not it is suitable to include these two additional sub dimensions under the heading	nager onal scale	nent. justic e and inter	e i.e. i menti persor	intera oned nal jus	ction your stice.
		press your views, regarding the items included in these sub dimensions, whether they me			all int	erpers	sonal
	justice. It is rel	evant to mention that majority of items in interpersonal justice are adapted from Colqui					
		1. Has (your supervisor) treated you with respect?	Х	Х	Х	Х	Х
	Interaction with supervisor	2. Has (your supervisor) treated you with dignity?	Х	Х	X	Х	Х
	(Colquitt's 2001)	3. Has (your supervisor) treated you in a polite manner?	Х	Х	Х	Х	Х
		4. Has (your supervisor) refrained from improper remarks or comments?	Х	Х	Х	Х	Х
Interpersonal		1. (*) Have (your colleagues) treated you with respect?					
Justice	(*)Interaction with	2. (*) Have (your colleagues) treated you with dignity?					
	Colleagues	3. (*) Have (your colleagues) treated you in a polite manner?					
		4. (*) Have (your colleagues) refrained from improper remarks or comments?					
		1. (*) Has (top management) treated you with respect?					
		2. (*) Has (top management) treated you with dignity?					
	(*) Interaction with top	3. (*) Has (top management) treated you in a polite manner?					
	management	4. (*) Has (top management) refrained from improper remarks or comments?					
		1. (*) Does this organization treat people with respect?					
		2. (*) Does this organization treat people with dignity?					
	Interpersonal justice	3. (*) Does this organization treat people in a polite manner?					
		4. (*) Does this organization refrained people from improper remarks or comments?					

	Informational justice Gaps: A detail study of different questionnaire reflects that researchers in the field of organization justice are less concern with how HRM related information's i.e. job design, job description, attitude survey and other sensitive information are communicated to employees, rather, they are more concerned with how procedures are communicated. Simila						sitive
	researchers ge bottom up/upv practices in bo Note: In this completed. As these dimensio	nation are communicated to employees, rather, they are more concerned with how procedures are communicated. Simil chers generally have measured informational justice with top-down/downward communication and have totally ig n up/upward communication. This indicates that there is a need of informational justice scale which can cover major ces in both upward and downward communication. In this scale, we have included both upward and downward communication so that the concept of communication eted. As an expert of this field kindly review this scale and share your opinion, whether or not it is justified to include dimensions? Similarly, whether items included in these dimensions measures overall informational justice? It may be ajority of items have been adapted from Colquitt, 2001, with the exception of upward communication.					
	Internation 1. Has (he/she) been sincere in sharing information?			X	Х	Х	Х
	Downward Communication	2. Has (he/she) been reasonable in sharing information?	Х	Х	Х	Х	Х
	(Colquitt's 2001)	3. Has (he/she) communicate information right on time?	Х	Х	Х	Х	Х
		4. Has (he/she) fit information to individual specific need?	Х	Х	Х	Х	Х
Informational		1. (*) Has (he/she) provides an opportunity to employees, to communicate their problem/ grievances?					
Justice	(*) Upward Communication	2. (*) Has (he/she) provides an opportunity of suggestion box?					
		3. (*) Has (he/she) conducts attitude survey regarding organizational working environment?					
	Informational Justice	1. (*) This organization has formal system of information sharing, and it follows that system.					
		2. (*) This organization has formal system of information sharing, but it usually does not follow that system.					
Organizationa		Overall, I'm treated fairly by my organization					
1 Justice		Usually, the way things work in this organization are not fair ®					
	Organizational Justice Ambrose and Schminke	In general, I can count on this organization to be fair					
	(2009)	In general, the treatment I receive around here is fair.					
		For the most part, this organization treats its employees fairly					
		Most of the people who work here would say they are often treated unfairly ®					
	•	Part B		•	•		
	-	provement (alteration/addition/subtraction) in the above suggested additi	ons	or wi	ish to) giv(e

In case if you want to suggest some improvement (all some new ones, please give those in following lines.

	Annexure 3.2 Questionnaire for HOD/Dean Faculty Name/Code						
	Part A: Personal Informatio	n					
1.	Your Age (in years):						
2. 3.	Gender						
4.	Experience (in Years):						
5.	Your area of specialization:						
6.	Your education level (in years, like 14 years; 17 y						
7.	Size of your organization (number of employees):						
This (Questionnaire contains questions regarding OJ Outc	omes	, that	is, org	aniza	tional	
	nship behavior. You are requested to express your of			-			
condi	tions.				_	_	
	Part B: Employees performance (OCB	s)				
Q.No	OCBI	1	2	3	4	5	
1.	Help others who have been absent.						
2.	Help others who have heavy workload.						
3.	Assists supervisor with his work (when not asked).						
4.	Take time to listen to co-workers problems and worries.						
5.	Goes out of way to help new employees.						
6	Takes a personal interest in other employees.						
7.	Passes long information to co-workers.						
Q.No	ОСВО	1	2	3	4	5	
1.	Attendance at work is above the norm.						
2.	Gives advance notice when unable to come to work.						
3.	Takes underserved work break (R).						
4.	Great deal of time spent with personal phone conversations (R).						
5.	Complains about insignificant things at work (R).						
6.	Conserves and protects organization property.						
7.	Adheres to informal rules devised to maintain order.						
Q.No	ОСВ	1	2	3	4	5	
1.	Feel happy to help those who have been absent.						
2.	Feel happy to help people having heavy workload.						
3.	Feel happy to protect organizational property.						
4.	Feel happy to spend most of the time on phone conversations (R).						

	Annexure 3.3 Questionnaire for employees					
Porco	nal Information					
1.	Your Age (in years):					
2.	Gender Male Female					
3.	Job Title:					
4.	Experience (in Years):					
5.	Your area of specialization:					
6. 7	Your education level (in years, like 14 years; 17 ye					
7.	Size of your organization (number of employees):					
X 7	Part A: Existing Organizational Just			•		
	u have to select one of the following 5 choices, in a			ming	sectio	
1		4				5
	Strongly Disagree Neutral		Agı	ree		
Sire	ongly disagree Agree					
Q.No	8	1	2	3	4	5
1.	Your pay reflects the effort you have put into your work.	1	Z	5	4	5
2.	Your incentives reflect what you have contributed to the					
	organization.					
3.	Your recognition is appropriate for the work you have					
4	completed.					
4.	Your salary raise is justified, given your performance.	1	2	2	4	5
Q.No	Fair Hearing (FH) You have been able to express your views during those	1	2	3	4	5
1.	procedures					
	1					
2.	You have influence over the decision arrived at by those					
0.11	procedures		-			
Q.No		1	2	3	4	5
1.	Those decisions have been based on accurate information					
2.	Those decisions have been based on complete					
	information					
Q.No		1	2	3	4	5
1.	You have been able to challenge the decision made by					
	supervisor					
2.	You have been able to appeal regarding the decision					
	arrived by those procedures					
Q.No		1	2	3	4	5
1.	Your supervisor decisions have been free of bias.					
2.	Your supervisor takes decisions in an unbiased manner					
Q.No	Consistency (CN)	1	2	3	4	5
1.	Your supervisor decisions have been consistent across					
	the people					
2.	Your supervisor applied procedures consistently.	-				
Q.No	Interaction with supervisor (IS)	1	2	3	4	5

1.	Your supervisor treated you with respect.					
2.	Your supervisor treated you with respect.					
3.	Your supervisor treated you will digitly.					
	Your supervisor refrained from improper remarks or					
4.	comments					
Q.No		1	2	3	4	5
	He/she has been sincere in sharing information.	1	<i>L</i>	5	4	5
$\frac{1}{2}$.	He/she has been reasonable in sharing information.					
-	He/she has communicated information right on time.					
3.						
4.	He/she fit information to individual specific need.	1	2	2	4	~
Q.No	Overall Organizational Justice (OJ)	1	2	3	4	5
1.	Overall, I'm treated fairly by my organization					
2.	Usually, the way things work in this organization are not fair ®					
3.	In general, I can count on this organization to be fair					
4.	In general, the treatment I receive around here is fair.					
5.	For the most part, this organization treats its employees fairly					
6.	Most of the people who work here would say they are often treated fairly.					
	Part B: Our Proposed OJ Quest	ione				
	Tart D. Our Troposed Of Quest	IOIIS				
Q.No	External Equity (EE)	1	2	3	4	5
1.	This organization offers better salary relative to some	1	-	5	•	5
1.	other organizations					
2.	This organization offers better incentives relative to					
	some other organizations					
3.	This organization offers salary higher then market rate					
4.	This organization frequently raises salary relative to					
	some other organizations within the industry.					
Q.No	Equity (EQT)	1	2	3	4	5
1.	This organization ensures that similar jobs are					
	compensated almost similarly.					
2.	This organization ensures that employees are better					
	compensated relative to other similar organizations.		_			
Q.No	External Equality (EEQL)	1	2	3	4	5
1.	This organization provides equal health benefits across					
	employees relative to some other organizations					
2.	This organization provides equal health benefits across					
	employees within the industry.					
Q.No	Internal Equality (IEQL)	1	2	3	4	5
1.	This organization distributes workload equally across					
	employee's pay scale.					
2.	This organization distributes punishment equally across					
	employee's pay scale.					
3.	This organization provides equal employment					
	opportunities					
Q.No	Distributive Justice (DJ)	1	2	3	4	5

4						
1.	This organization has established decision criteria for					
-	distribution of resources.					
2.	This organization follows established decision criteria for distribution of resources.					
Q.No		1	2	3	4	5
		1	Z	5	4	5
1.	This organization ensures transparency in procedures					
2.	This organization provides easy access to procedures					
3.	This organization formally communicates these procedures					
4	This organization reasonably explains these procedures					
$\frac{4}{0}$ No		1	2	3	4	5
Q.No		1	Z	3	4	3
1.	You have been able to explain your position before your					
	supervisor.					
Q.No		1	2	3	4	5
3.	Those decisions have been based on employee's					
<u> </u>	performance recorded over the year.		_			
Q.No		1	2	3	4	5
1.	This organization provides right of appeal to employees.					
Q.No		1	2	3	4	5
1.	This organization usually communicates it procedures to					
	all employees.					
2.	This organization provides fair hearing opportunities to					
	employees.					
3.	This organization collects full information before final					
0 N	decision is made.			-		
Q.No		1	2	3	4	5
1.	This organization hires managers whose educational					
2	background is relevant to the job.					
2.	This organization hires managers whose values are					
3.	similar to organization values. This organization has an established process of selecting					
	managers.	1	-	2	4	~
Q.No		1	2	3	4	5
1.	Your manager promotes self-interest at the stake of other					
	employees					
Q.No		1	2	3	4	5
2.	Your supervisor decisions been consistent over the time					
Q.No	Neutrality (N)	1	2	3	4	5
1.	Your supervisor have been neutral in implementing					
	procedures					
2.	Your supervisor have been neutral and take decision in					
	un biased manner			-		
Q.No		1	2	3	4	5
1.	This organization has formal procedures in place.					
2.	This organization formally communicates its procedures					
0.1-	to employees.					
Q.No	Interaction with Colleagues (IC)	1	2	3	4	5
1.	My colleagues treated me with respect					
2.	My colleagues treated me with dignity					

r	r					
	My colleagues treated me in a polite manner					
4.	My colleagues refrained from improper remarks or comments on me.					
Q.No	Interaction with top management (IM)	1	2	3	4	5
1.	Top management treated you with respect					
2.	Top management treated you with dignity					
3.	Top management treated you in a polite manner					
4.	Top management refrained from improper remarks or					
	comments					
Q.No	Interpersonal Justice (INPJ)	1	2	3	4	5
1.	This organization treats people with respect					
2.	This organization treats people with dignity					
3.	This organization treats people in a polite manner					
4.	This organization refrained people from improper					
	remarks or comments					
Q.No	Upward communication (UC)	1	2	3	4	5
1.	He/she provides an opportunity to employees, to					
	communicate their problems/grievances.					
2.	He/she provides an opportunity of suggestions.					
3.	He/she conducts attitude survey regarding organizational					
	working environment.					
Q.No	Informational Justice (INFJ)	1	2	3	4	5
1.	This organization has formal system of information					
	sharing.					
2.	This organization follows the standard system of information sharing.					
	Part C: OJ Outcomes scales					
O No		1	2	3	4	5
Q.No	All in all, I am satisfied with my job.	1		3	4	3
1.						
2.	In general, I like my job.					
3.	In general, I like working here.					

	Annexure 3.4					
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6	Kees Van Den Bos	k.vandenboss@fss.uu.nl.				
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			Annexure 3.5			
Na		cation Accred	PAKISTAN litation Council (N	BEAC	RDING INSTITUTIO	
	Total Private Universities= 69		Private Universiti n Registered Priva = 37		NBEAC Registered Universities= 32	Private
			nartered by the G	overn	ment of Pakistan	
S. No	University/DA		Main Campus Location		Vebsite Address	NBEAC Registered
1	Aga Khan Univers	ity, Karachi	Karachi		www.aku.edu	No
2	Foundation Un Islamaba	iversity,	Islamabad	V	www.fui.edu.pk	Yes
3	Lahore Unive Management S (LUMS), La	ciences	Lahore	w	ww.lums.edu.pk	No
4	National Unive Computer and E Sciences, Lahore.	Emerging	Islamabad		www.nu.edu.pk	Yes
5	Riphah International University, Islamabad		Islamabad	www.riphah.edu.pk		Yes
6			Islamabad	w	ww.stmu.edu.pk	No
	Univer	sities/DAIs c	hartered by Gove	ernme	nt of the Punjab	I
S. No	University/DA		Main Campus Location		Vebsite Address	NBEAC Registered
1	Ali Institute of H	Education	Lahore	V	www.aie.edu.pk	No
2	Beaconhouse N University, L		Lahore	v	www.bnu.edu.pk	No
3	Forman Christian Lahore (universi	0,	Lahore	WW	w.fccollege.edu.pk	No
4	Global Institute	, Lahore	Lahore	W	ww.global.edu.pk	Yes
5	Hajvery Universi	ty, Lahore	Lahore	WW	ww.hajvery.edu.pk	Yes
6	HITEC Universi	ty, Taxila	Taxila www.hitecuni.edu		w.hitecuni.edu.pk	
7	Imperial College of Studies, La		Lahore	ww	w.imperial.edu.pk	Yes
8	Institute of Man Sciences, La	U	Lahore	ww	w.pakaims.edu.pk	Yes
9	Institute of Southe Multan	•	Multan	v	vww.usp.edu.pk	No
10	Lahore Leads U Lahore		Lahore	W	ww.leads.edu.pk	No
11	Lahore School of Lahore		Lahore	WWW	.lahoreschoolofecon omics.edu.pk	Yes

12	Minhaj University, Lahore	Lahore	www.mul.edu.pk	No
13	National College of Business Administration & Economics, Lahore	Lahore	www.ncbae.edu.pk	No
14	Qarshi University	Lahore	www.qu.edu.pk	No
15	The GIFT University, Gujranwala	Gujranwala	www.gift.edu.pk	Yes
16	The Superior College, Lahore	Lahore	www.superior.edu.pk	Yes
17	The University of Faisalabad, Faisalabad	Faisalabad	www.tuf.edu.pk	No
18	University of Central Punjab, Lahore	Lahore	www.ucp.edu.pk	Yes
19	University of Lahore, Lahore. (Islamabad)	Lahore	www.uol.edu.pk	Yes
20	University of Management & Technology, Lahore	Lahore	www.umt.edu.pk	Yes
21	University of South Asia, Lahore	Lahore	www.usa.edu.pk	No
22	University of Wah, Wah	Wah	www.uw.edu.pk	Yes
	Universities/DAI	s chartered by G	overnment of Sindh	
S. No	University/DAI Name	Main Campus	Website Address	NBEAC
		Location		Registered
1	Baqai Medical University, Karachi	Karachi	www.baqai.edu.pk	No
2	Commeces Institute of Business & Emerging Sciences, Karachi	Karachi	www.commecsinstitute.e du.pk	No
3	Dadabhoy Institute of Higher Education,Karachi	Karachi	www.dadabhoy.edu.pk	No
4	DHA Suffa University, Karachi	Karachi	www.dsu.edu.pk	Yes
5	Greenwich University, Karachi	Karachi	www.greenwichuniversit y.edu.pk	Yes
6	Hamdard University, Karachi	Karachi	www.hamdard.edu.pk	No
7	Habib University, Karachi	Karachi	www.habib.edu.pk	No
8	Indus University, Karachi	Karachi	www.indus.edu.pk	Yes
9	Indus Valley School of Art and Architecture, Karachi	Karachi	www.indusvalley.edu.pk	No
10	Institute of Business Management, Karachi	Karachi	www.iobm.edu.pk	Yes
11	Institute of Business and Technology, Karachi	Karachi	www.biztek.edu.pk	Yes
12	Iqra University, Karachi	Karachi	www.iqra.edu.pk	Yes
13	Isra University, Hyderabad	Hyderabad	www.isra.edu.pk	Yes
14	Jinnah University for Women, Karachi	Karachi	www.juw.edu.pk	Yes

15	Karachi Institute of Economics & Technology, Karachi	Karachi	www.pafkiet.edu.pk	Yes
16	KASB Institute of Technology, Karachi	Karachi	www.kasbit.edu.pk	Yes
17	Karachi School for Business & Leadership	Karachi	www.ksbl.edu.pk	No
18	Muhammad Ali Jinnah University, Karachi (Islamabad)	Karachi	www.jinnah.edu	Yes
19	Newport Institute of Communications & Economics, Karachi	Karachi	www.newports.edu.pk	No
20	Preston Institute of Management, Science and Technology, Karachi	Karachi	pimsat-khi.edu.pk	No
21	Preston University, Karachi	Karachi	www.preston.edu.pk	No
22	Shaheed Zulfikar Ali Bhutto Institute of Sc. & Technology (SZABIST), Karachi	Karachi	www.szabist.edu.pk	Yes
23	Shaheed Benazir Bhutto City University, Karachi	Karachi	www.sbbcu.edu.pk	Yes
24	Sir Syed University of Engg. & Technology, Karachi	Karachi	www.ssuet.edu.pk	No
25	Sindh Institute of Medical Sciences, Karachi	Karachi	www.siut.org	No
26	Textile Institute of Pakistan, Karachi	Karachi	www.tip.edu.pk	No
27	The Nazeer Hussian University, Karachi	Karachi	www.nhu.edu.pk	No
28	Zia-ud-Din University, Karachi	Karachi	www.zu.edu.pk	No
		ed by Governme	nt of Khyber Pakhtoonkhy	va
S. No	University/DAI Name	Main Campus Location	Website Address	NBEAC Registered
1	Abasyn University, Peshawar	Peshawar	www.abasyn.edu.pk	No
2	CECOS University of Information Technology and Emerging Sciences, Peshawar	Peshawar	www.cecos.edu.pk	Yes
3	City University of Science and Information Technology, Peshawar	Peshawar	www.cityuniversity.edu. pk	No
4	Gandhara University, Peshawar	Peshawar	www.gandhara.edu.pk	Yes
5	Ghulam Ishaq Khan Institute of Engineering Sciences & Technology, Topi	Торі	www.giki.edu.pk	Yes
6	Iqra National University, Peshawar	Peshawar	www.iqrapsh.edu.pk	No

7	Northern University, Nowshera	Nowshera	www.northern.edu.pk	No
8	Preston University, Kohat	Kohat	www.preston.edu.pk	No
9	Qurtaba University of Science and Information Technology, D.I. Khan	D.I.Khan	www.qurtuba.edu.pk	Yes
10	Sarhad University of Science and Information Technology, Peshawar	Peshawar	www.suit.edu.pk	Yes
	Universities/DAIs cl	nartered by Gove	ernment of Balochistan	
S. No	University/DAI Name	Main Campus Location	Website Address	NBEAC Registered
1	Al-Hamd Islamic University, Quetta	Quetta	http://www.aiu.edu.pk	No
	Universities/DAIs chartere	d by Governmen	t of Azad Jammu & Kash	mir
S. No	University/DAI Name	Main Campus Location	Website Address	NBEAC Registered
1	Al-Khair University, AJ&K	Bhimber	www.alkhair.edu.pk	No
2	Mohi-ud-Din Islamic University, AJK	Nerain Sharif	http://www.miu.edu.pk	No

One-Sample Statistics											
Item	N	Mean	Std. Deviatio n	Std error Mean	Item	N	Mean	Std. Deviation	Std. error Mean		
EE1	37	3.4595	.98867	.16254	SDM2	37	3.3514	1.05978	.17423		
EE2	37	3.5946	.86472	.14216	SDM3	36	3.2500	1.05221	.17537		
EE3	37	3.6486	.88870	.14610	BS3	35	3.4857	.85307	.14420		
EE4	37	4.6757	6.69599	1.10081	N1	37	3.4865	.90128	.14817		
EQT1	37	3.4865	.96095	.15798	N2	37	3.4324	.95860	.15759		
EQT2	37	3.4865	.90128	.14817	PJ1	37	3.4324	.92917	.15276		
EEQL1	37	3.5946	.79790	.13117	PJ2	37	3.3784	.98182	.16141		
EEQL2	37	3.5676	.95860	.15759	IC1	37	3.5405	.93079	.15302		
IEQL1	37	3.5405	.83648	.13752	IC2	37	3.5405	.93079	.15302		
IEQL2	36	3.5833	.84092	.14015	IC3	37	3.4865	.96095	.15798		
IEQL3	37	3.6486	.78938	.12977	IC4	37	3.4865	.96095	.15798		
DJ1	37	3.2432	1.11568	.18342	IM1	37	3.5135	.90128	.14817		
DJ2	37	3.1351	1.13437	.18649	IM2	37	3.5676	.86732	.14259		
AN1	37	3.7027	.87765	.14428	IM3	37	3.5135	.90128	.14817		
AN2	37	3.6486	.75337	.12385	IM4	37	3.5135	.90128	.14817		
AN3	37	3.7568	.79601	.13086	INPJ1	37	3.6486	.82382	.13544		
AN4	37	3.6757	.85160	.14000	INPJ2	37	3.6486	.82382	.13544		
FH1	37	3.3514	.97799	.16078	INPJ3	37	3.6486	.82382	.13544		
DE3	37	3.6486	.85687	.14087	INPJ4	37	3.6216	.86124	.14159		
ROA1	37	3.6486	.75337	.12385	UC1	37	3.7297	.76915	.12645		
PPJ1	36	3.4444	1.02663	.17110	UC2	37	3.4595	.96017	.15785		
PPJ2	36	3.6944	.85589	.14265	UC3	37	3.4324	.95860	.15759		
PPJ3	36	3.5833	.87423	.14571	INFJ1	37	3.5676	.86732	.14259		
SDM1	37	3.4595	.90045	.14803	INFJ2	37	3.2703	1.01786	.16733		

Annexure Table 4.1

	Annexure Table 4.2 One-Sample Test											
					Jin -Daili	pre 1001				Interva	nfidence l of the rence	
Item	t	Sig. (2- tailed)	Mean Difference	Lower	Upper	Item	t	Sig. (2- tailed)	Mean Difference	Lower	Upper	
EE1	2.827	.008	.45946	.1298	.7891	SDM2	2.017	.051	.35135	0020	.7047	
EE2	4.183	.000	.59459	.3063	.8829	SDM3	1.426	.163	.25000	1060	.6060	
EE3	4.440	.000	.64865	.3523	.9450	BS3	3.368	.002	.48571	.1927	.7788	
EE4	1.522	.137	1.67568	5569	3.9082	N1	3.283	.002	.48649	.1860	.7870	
EQT1	3.079	.004	.48649	.1661	.8069	N2	2.744	.009	.43243	.1128	.7520	
EQT2	3.283	.002	.48649	.1860	.7870	PJ1	2.831	.008	.43243	.1226	.7422	
EEQL1	4.533	.000	.59459	.3286	.8606	PJ2	2.344	.025	.37838	.0510	.7057	
EEQL2	3.601	.001	.56757	.2480	.8872	IC1	3.532	.001	.54054	.2302	.8509	
IEQL1	3.931	.000	.54054	.2616	.8194	IC2	3.532	.001	.54054	.2302	.8509	
IEQL2	4.162	.000	.58333	.2988	.8679	IC3	3.079	.004	.48649	.1661	.8069	
IEQL3	4.998	.000	.64865	.3855	.9118	IC4	3.079	.004	.48649	.1661	.8069	
DJ1	1.326	.193	.24324	1287	.6152	IM1	3.466	.001	.51351	.2130	.8140	
DJ2	.725	.473	.13514	2431	.5134	IM2	3.980	.000	.56757	.2784	.8567	
AN1	4.870	.000	.70270	.4101	.9953	IM3	3.466	.001	.51351	.2130	.8140	
AN2	5.237	.000	.64865	.3975	.8998	IM4	3.466	.001	.51351	.2130	.8140	
AN3	5.783	.000	.75676	.4914	1.0222	INPJ1	4.789	.000	.64865	.3740	.9233	
AN4	4.826	.000	.67568	.3917	.9596	INPJ2	4.789	.000	.64865	.3740	.9233	
FH1	2.185	.035	.35135	.0253	.6774	INPJ3	4.789	.000	.64865	.3740	.9233	
DE3	4.605	.000	.64865	.3630	.9343	INPJ4	4.390	.000	.62162	.3345	.9088	
ROA1	5.237	.000	.64865	.3975	.8998	UC1	5.771	.000	.72973	.4733	.9862	
PPJ1	2.597	.014	.44444	.0971	.7918	UC2	2.911	.006	.45946	.1393	.7796	
PPJ2	4.868	.000	.69444	.4049	.9840	UC3	2.744	.009	.43243	.1128	.7520	
PPJ3	4.004	.000	.58333	.2875	.8791	INFJ1	3.980	.000	.56757	.2784	.8567	
SDM1	3.104	.004	.45946	.1592	.7597	INFJ2	1.615	.115	.27027	0691	.6096	

Annexure Table 4.2

				Total varia	otal Variance Explained					
		Initial Eigenv	alues	Extraction	n Sums of Squar	Rotation Sur	ns of Squa	red Loadings		
						Cumulative		% of		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	%	Total	Variance	Cumulative %	
1	17.839	30.235	30.235	17.839	30.235	30.235	9.900	16.780	16.780	
2	9.554	16.194	46.429	9.554	16.194	46.429	9.340	15.830	32.610	
3	4.589	7.777	54.207	4.589	7.777	54.207	8.022	13.597	46.206	
4	3.176	5.383	59.590	3.176	5.383	59.590	5.607	9.503	55.709	
5	2.792	4.732	64.322	2.792	4.732	64.322	5.082	8.613	64.322	
6	1.528	2.589	66.911							
7	1.332	2.257	69.169							
8	1.238	2.098	71.267							
9	1.112	1.885	73.152							
10	1.064	1.803	74.955							
11	.948	1.607	76.562							
12	.912	1.547	78.109							
13	.751	1.272	79.381							
14	.677	1.147	80.529							
15	.610	1.034	81.563							
16	.585	.992	82.555							
17	.576	.976	83.531							
18	.535	.907	84.438							
19	.518	.878	85.316							
20	.503	.852	86.168							
21	.474	.803	86.971							
22	.466	.789	87.760							
23	.432	.732	88.492							
24	.417	.707	89.199							
25	.395	.670	89.869							
26	.384	.651	90.520							
27	.373	.632	91.152							
28	.371	.629	91.781							
29	.336	.570	92.350							
30	.311	.527	92.877							
31	.309	.524	93.402							
				201						

Annexure 4.3 Total Variance Explained

32	.281	.477	93.879
33	.276	.468	94.347
34	.259	.439	94.786
35	.244	.413	95.198
36	.224	.380	95.578
37	.209	.353	95.932
38	.200	.339	96.270
39	.182	.309	96.579
40	.166	.282	96.861
41	.164	.277	97.138
42	.160	.270	97.409
43	.151	.257	97.665
44	.142	.241	97.907
45	.135	.228	98.135
46	.127	.216	98.351
47	.123	.208	98.558
48	.111	.188	98.746
49	.101	.172	98.918
50	.092	.157	99.074
51	.084	.142	99.217
52	.081	.137	99.354
53	.075	.127	99.482
54	.073	.124	99.606
55	.075	.124	99.000
56	.053	.090	99.796
57	.045	.076	99.873
58	.040	.068	99.940
59	.035	.060	100.000

Extraction Method: Principal Component Analysis.

	Factor									
Items	INPJ	DJ	PPJ	INFJ	RPJ					
IS2	1.000									
IS1	1.098*									
IS4	1.007*									
IC2	1.094*									
IC1	1.177*									
IS3	1.221*									
IM1	1.257*									
INPJ1	1.098*									
IC3	1.337*									
IC4	1.426*									
INPJ2	1.115*									
IM3	1.366*									
INPJ3	1.359*									
IM4	1.374*									
INPJ4	1.327*									
IM2	1.369*									
EE1		1.000								
EEQL1		1.081*								
IEQL1		1.163*								
DJ2		1.430*								
DJ1		1.407*								
EE3		1.346*								
IE4		1.301*								
IE1		1.397*								
IEQL2		1.316*								
IE2		1.383*								
IE3		1.670*								
EE4		1.625*								
IEQL3		1.456*								
	1									

Annexure 4.4: CFA (Five factor model)

EQT2	1.609*			
EQT1	1.739*			
EE2	1.405			
AN2		1.000		
FH1		.925*		
AN4		1.059*		
PPJ1		.791*		
AN3		1.034*		
FH3		1.038*		
FH2		.944*		
DE2		.968*		
DE3		1.066*		
DE1		1.131*		
PPJ2		1.053*		
UC1			1.000	
DC2			.876*	
UC3			.882*	
DC3			.932*	
DC1			.991*	
DC4			1.069*	
INFJ2			.990*	
INFJ1			.978*	
UC2			1.068*	
SDM1				1.000
ROA2				1.073*
BS1				.961*
ROA3				1.011*
SDM2				1.161*
SDM3				1.116*
PJ1				1.048*
$\chi^2/df=3.57$, CFI=.7	55, IFI=.756, GFI=.6	04, and RMSE	EA=.094	

	-	Case Number	Value
ATTITUDE Highest	1	199	4.81
	2	19	4.64
	3	189	4.64
	4	49	4.61
	5	4	4.60
Lowest	1	228	2.37
	2	31	2.48
	3	196	2.57
	4	253	2.58
	5	198	2.62

Annexure 4.5: Extreme Values

Annexure 4.6 Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	119	28.8	28.8	28.8
Female	125	30.3	30.3	59.1
Male	169	40.9	40.9	100.0
Total	413	100.0	100.0	

Annexure 4.7 Job Title

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	119	28.8	28.8	28.8
ASSIST P	64	15.5	15.5	44.3
ASSOC PR	19	4.6	4.6	48.9
LECTURER	190	46.0	46.0	94.9
PROFESSO	21	5.1	5.1	100.0
Total	413	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	16.00	132	32.0	44.9	44.9	
	18.00	123	29.8	41.8	86.7	
	21.00	39	9.4	13.3	100.0	
	Total	294	71.2	100.0		
Missing	System	119	28.8			
Total		413	100.0			

Annexure 4.8 Education

Annexure Table 4.9

Direct and Indirect Effect							
Coefficients	DJ	PPJ	RPJ	INPJ	INFJ		
b1	0.038	0.038	0.029	0.091	0.0767		
b ₂	0.354	0.354	0.354	0.354	0.354		
b ₃	0.628	0.628	0.628	0.628	0.628		
$\mathbf{b}_1 \mathbf{b}_2 \mathbf{b}_3$	0.008447	0.0084478	0.006447	0.020230	0.01705		
c"	-0.091	0.003	0.067	0.151			
$c=(c''+b_1 b_2 b_3)$	-0.08255	0.011447	0.07344	0.17123			
Direct Effect (c"/c)	1.110233	0.26205	0.91222	0.881854			
Percentage	-110.23	26.20	91.22	88.18			
Indirect Effect (b ₁ b ₂ b ₃ /c)	0.0987	0.7378	0.08777	0.1181			
Percentage	9.877	73.78	8.777	11.81			

Annexure Table 4.10

Product of the coefficient test/Sobel Test							
	DJ	PPJ	RPJ	INPJ	INFJ		
b ² ₁	0.001444	0.001444	0.000841	0.008281	0.5883		
b^{2}_{2}	0.12531	0.12531	0.12531	0.12531	0.12531		
b ² ₃	0.39438	0.39438	0.39438	0.39438	0.39438		
Sb ₁	0.035	0.031	0.029	0.039	0.050		
Sb ₂	0.107	0.107	0.107	0.107	0.107		
Sb ₃	0.251	0.251	0.251	0.251	0.251		
S^2b_1	0.001225	0.000961	0.000841	0.001521	0.0025		
S^2b_2	0.011449	0.011449	0.011449	0.011449	0.011449		
S ² b ₃	0.063001	0.063001	0.063001	0.063001	0.063001		
$b^{2}_{1} b^{2}_{2} S^{2} b_{3}$	0.000011399	0.00001139	0.000006639	0.000065375	0.0046444		
$b^{2}_{1} b^{2}_{3} S^{2} b_{2}$	0.00000652	0.00000652	0.000003797	0.00003739	0.00265632		
$b^2_2 b^2_3 S^2 b_1$	0.00006053	0.00004749	0.000041562	0.00007517	0.00012352		
S _{b1 b2 b3}	0.0088566	0.011139	0.012079	0.013339	0.086164		
Z b1 b2 b3	0.953384	0.75839	0.53373	1.511660	0.19789		